Cass Sunstein's Cost-Benefit Lite: Economics for Liberals

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I. INTRODUCTION

In two recent books, Cass Sunstein has taken on the cause of championing what he calls "the Cost-Benefit State." In this Sunsteinian

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utopia, cost-benefit analysis ("CBA")[1] operates as a kind of ubiquitous background principle of government. CBA offers a value-free, scientific and pragmatic decision-making tool that will finally bring liberals and conservatives to consensus, if not on the ends of government, then at least on the means.[2]

Professor Sunstein's project is both descriptive and normative. On the descriptive side, he seeks to convince us that "American government is becoming a cost-benefit state."[3] In particular, he argues that the federal courts have begun to adopt a series of "cost-benefit default principles,"[4] under which they apply a presumption in favor of CBA to their review of agency decision-making. Much of the first book, *The Cost-Benefit State,* is devoted to this claim, and the argument is repeated in the second book, *Risk and Reason*. But implicit in this descriptive claim there must be a normative claim as well. Surely, Professor Sunstein wishes to convince us not only that the "Cost-Benefit State" is here, but also that it is a good thing.

Curiously, at the outset of *The Cost-Benefit State*, Professor Sunstein purports to brush aside the normative question. The "first generation debate" about whether CBA is desirable is over, he tells us.[5] His side already won that battle and it is time now to move on to the "second generation" questions about how CBA should be implemented.[6] Maybe I am just old-fashioned, but I for one am still stuck on the normative question, wondering whether CBA is a good idea to begin with. And a glance at the recent literature confirms that I'm not alone.[7] As the book

1. Professor Sunstein uses the term "cost-benefit analysis" or "CBA" to refer to a formal economic analysis that expresses both costs and benefits in monetary terms wherever possible. *See infra* notes 47 to 53 and accompanying text.

2. *See* CASS R. SUNSTEIN, THE COST-BENEFIT STATE: THE FUTURE OF REGULATORY PROTECTION 19–20 (2002) [hereinafter THE COST-BENEFIT STATE]; s*ee also* CASS R. SUNSTEIN, RISK & REASON: SAFETY, LAW, AND THE ENVIRONMENT 99 (2002) [hereinafter RISK & REASON] (arguing for an "incompletely theorized agreement" on CBA among people of diverse political viewpoints).

3. THE COST-BENEFIT STATE, *supra* note 1, at ix; accord RISK & REASON, *supra* note 1, at 4.

4. THE COST-BENEFIT STATE, *supra* note 1, at 192; accord RISK & REASON, *supra* note 1, at ix, 31.

5. THE COST-BENEFIT STATE, *supra* note 1, at xi; accord RISK & REASON, *supra* note 1, at 5.

6. THE COST-BENEFIT STATE, *supra* note 1, at xi; accord RISK & REASON, *supra* note 1, at 6.

7. *See, e.g.*, FRANK ACKERMAN & LISA HEINZERLING, PRICELESS: ON KNOWING THE PRICE OF EVERYTHING AND THE VALUE OF NOTHING (2003); SIDNEY A. SHAPIRO & ROBERT L. GLICKSMAN, RISK REGULATION AT RISK: RESTORING A PRAGMATIC APPROACH (2003); Thomas O. McGarity, *A Cost-Benefit State,* 50 ADMIN. L. REV. 7, 42–49 (1998); David M. Driesen, *The Societal Cost of Environmental Regulation: Beyond Administrative Cost-Benefit Analysis*, 24 ECOLOGY L.Q. 545, 568, 573–74 (1997); s*ee also* Matthew D. Adler & Eric Posner, *Introduction: Cost-Benefit Analysis: Legal Economic, and Philosophical Perspectives*, 29 J. LEGAL STUD. 837 (2000) (characterizing the

continues, however, it becomes clear that, notwithstanding his initial bravado, Professor Sunstein is acutely aware that there are lots of us who are nowhere near ready to jump aboard the CBA bandwagon. Thus, while he describes his project as primarily descriptive, the "first generation" normative claim remains evident throughout the book. And in *Risk and Reason*, which expands on the material in *The Cost-Benefit State*, he makes the normative claim even more explicit. Indeed, there are parts of both books that read almost like a direct plea to liberals to please give CBA a second chance.

My project here is to examine and critique both Professor Sunstein's normative and descriptive claims. Both claims, in my view, ultimately fail, and, ironically, evidence of their failure can be found within Professor Sunstein's analysis itself. His normative claim has two strands. First, he claims that CBA is necessary to "rationalize" government decision-making and insulate it from the undue pressure of interest groups. These groups, in his view, tend to push agencies to act irrationally by exploiting cognitive distortions that cause ordinary people to act as "intuitive toxicologists" and irrationally evaluate risks.[8] Second, he claims that by forcing regulators to evaluate and articulate the consequences of proposed regulations, CBA will increase transparency and public accountability.[9]

Both claims must ultimately rest on a faith that CBA will actually deliver meaningful answers. If, on the other hand, CBA is indeterminate—if reasonable people can argue for widely divergent estimates of costs and benefits—then, far from rationalizing government decision-making, it will open the process up to manipulation by monied interests. Rather than promoting the most "rational" outcome, CBA will promote the outcome favored by those who can afford to hire the best-credentialed economist. Moreover, rather than promoting transparency, CBA will obscure the inevitable policy choices and value judgments that underlie government decision-making behind a veil of numbers and render the decision-making process inaccessible to those without a Ph.D. in economics.

To his considerable credit, in Chapter Seven of *Risk and Reason* Professor Sunstein sets out to test his theories with a careful case study of an actual CBA: an analysis by the Environmental Protection Agency

academic literature on CBA as "skeptical").

8. THE COST-BENEFIT STATE, *supra* note 1, at 9, 26–27; RISK & REASON, *supra* note 1, at 107.

9. THE COST-BENEFIT STATE, *supra* note 1, at 9, 27–28; RISK & REASON, *supra* note 1, at 107–108.

("EPA") of arsenic in drinking water.[10] In doing so, however, he stumbles upon the inescapable conclusion that CBA *is* indeterminate. Indeed, in this instance, it is wildly indeterminate. Reasonable minds might peg the benefits of EPA's arsenic regulation as low as $13 million (way below the costs) or as high as $3.4 billion (way above the costs).[11] Remarkably, even as he cogently and painstakingly details the indeterminacy and manipulability of the arsenic CBA, his faith in the efficacy and usefulness of CBA as a tool to increase transparency and counteract the influence of "intuitive toxicology" remains unshaken.

To be sure, indeterminacy itself may not be a fatal indictment. One is hard-pressed to find a decision-making standard anywhere in law that cannot be accused of indeterminacy. The danger of CBA, however, lies in its false promise of determinacy, its pretense of objectivity and scientific accuracy. It is this false promise—the allure of numbers and scientific calculation—that renders CBA so vulnerable to manipulation and so destructive to democratic decision-making, as Professor Sunstein's analysis of the arsenic CBA amply demonstrates. And it is this false promise that therefore moves CBA beyond the realm of the merely ineffectual to the dangerously misleading.

Indeed, it is a recognition of just these flaws and dangers that has led Congress so often to reject CBA in favor of various alternatives. These include what I have elsewhere termed "short-cut" standards—like feasibility standards or qualitative cost-benefit balancing—which provide effective and time-tested methods for setting pollution limits with some sensitivity to costs without entering the dangerous territory of attempting to monetize intangible values like life and death or clean air over the Grand Canyon.[12] In other contexts, particularly where irreversible ecological harm is at stake, absolute standards may provide the best decision-making tool, not because they deliver absolute results, but because they perform a crucial power-shifting function, leveling the political playing field between diffuse and powerless public interests and concentrated monied corporate interests. Professor Sunstein gives little attention to these important alternatives to CBA, however.[13]

10. RISK & REASON, *supra* note 1, at 153–90.

11. RISK & REASON, *supra* note 1, at 175, 177.

12. *See* Amy Sinden, *The Economics of Endangered Species: Why Less is More in the Economic Analysis of Critical Habitat Designations*, 28 HARV. ENVTL. L. REV. 129, 184–92 (2004).

13. Indeed, Professor Sunstein does not include feasibility standards, qualitative cost-benefit balancing, or absolute standards among the alternatives to CBA that he explicitly considers and rejects in the books. See *infra* note 174 and accompanying text.

In light of these doubts about his normative claim, it is a relief to find that Professor Sunstein's descriptive claim is also overstated. A close look at the cases he cites in support of that claim reveals that in many instances, results that he attributes to "cost-benefit default principles" are more easily explained by reference to the specific statutory language at issue or as classic, and not particularly remarkable, applications of traditional administrative law principles. Even more problematic for Professor Sunstein's argument, however, is the fact that on the two occasions on which his "default principles" have been tested in the U.S. Supreme Court, they have been roundly rejected. The Court held in the Cotton Dust Case[14] that ambiguous statutory language did *not* require OSHA[15] to engage in CBA and held in *Whitman v. American Trucking Associations*[16] that ambiguous provisions of the Clean Air Act should be construed to *prohibit* EPA from considering costs. Ultimately, his attempt to explain these holdings as something other than an outright rejection of a "cost-benefit default rule" feels strained and unsatisfying.

In Part II, I offer a brief description of the two books. Part III then describes Professor Sunstein's vision of how CBA should operate. Though he makes a deliberate attempt to package it to be less offensive to liberals, Professor Sunstein's brand of CBA is at bottom quite far-reaching and radical. He emphasizes quantification with the goal of measuring costs and benefits along a single metric and urges that this kind of CBA be used in virtually all government decision-making.[17] Part IV describes Professor Sunstein's normative defenses of CBA and demonstrates why, if CBA turns out to be indeterminate, those defenses collapse. Part V examines Professor Sunstein's arsenic case study, showing how he painstakingly demonstrates the indeterminacy of CBA and yet remains unshaken in his faith in CBA. Finally, Part VI critiques Professor Sunstein's descriptive claim that a set of "cost-benefit default principles" are emerging in the courts.

II. THE BOOKS

The Cost-Benefit State presents material from some of Professor Sunstein's recent law review articles,[18] but in a breezy, highly readable

14. American Textile Manufacturers Inst. v. Donovan, 452 U.S. 490 (1981).

15. OSHA stands for "Occupational Safety and Health Administration."

16. 531 U.S. 457 (2001).

17. Professor Sunstein limits his proposal to regulations costing $50 million per year or more. *See* THE COST-BENEFIT STATE, *supra* note 1, at 20.

18. *See* Cass R. Sunstein, *Cost-Benefit Default Principles*, 99 MICH. L. REV. 1651 (2001); Cass

style. It begins by chronicling the emergence of cost-benefit analysis as an organizing principle for government decision-making over the past two decades.[19] In Professor Sunstein's view, we are currently in transition from the era of "1970s environmentalism" to the Cost-Benefit State. He portrays 1970s environmentalism as a kind of well-intentioned but naive adolescent, reacting impulsively to long-neglected environmental problems with extreme, idealistic, sweeping responses, marked by absolute, cost-blind standards. The emergence of the Cost-Benefit State, in Sunstein's view, represents the maturation process. This process began in the 1980s with an executive order issued by President Reagan requiring agencies to prepare cost-benefit analyses of major rules.[20] In the 1990s, President Clinton continued that mandate in substantially similar form with another executive order.[21] The Clinton order has been carried over into the second Bush administration, where its CBA mandate is being pursued even more aggressively.[22]

Professor Sunstein maintains that Congress has also begun to move in the direction of the Cost-Benefit State in recent years.[23] While a major legislative initiative that would have codified the Reagan executive order creating a super-mandate for cost-benefit analysis and superceding dozens of environmental, health, and safety statutes was narrowly defeated in 1995,[24] Congress has included a cost-benefit mandate in

R. Sunstein, *Is Cost-Benefit Analysis for Everyone?*, 53 ADMIN. L. REV. 299 (2001); Cass R. Sunstein, *Is the Clean Air Act Unconstitutional?*, 98 MICH. L. REV. 303 (1999).

19. THE COST-BENEFIT STATE, *supra* note 1, at 3–12; *see also* RISK & REASON, *supra* note 1, at 10–27.

20. Exec. Order No. 12291, 46 Fed. Reg. 13, 193 (Feb. 17, 1981).

21. Exec. Order No. 12866, 58 Fed. Reg. 51,735 (Sept. 30, 1993); *see* Robert W. Hahn & Cass R. Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis*, 150 U. PA. L. REV. 1489, 1492–93 (2002) (arguing that the executive orders "have had little impact on what agencies actually do" and proposing a new executive order).

22. *See* ACKERMAN & HEINZERLING, *supra* note 7 at 195–201, 207–08 (detailing the aggressively anti-regulatory actions of the Office of Management and Budget under the leadership of Bush appointee John Graham, including sending rules back for inadequate CBAs and systematically devaluing regulatory benefits).

23. THE COST-BENEFIT STATE, *supra* note 1, at 15; *see also* RISK & REASON, *supra* note 1, at 21–22.

24. The Risk Assessment and Cost-Benefit Act of 1995 would have required agencies to perform formal cost-benefit analyses of all proposed "major health, safety, and environmental rules" (those with annual costs of $25 million or more), and prohibited promulgation of any final rule unless the agency "certified" that the benefits justify the costs. H.R. 9, Title II Division D, 104th Cong. (1995). The bill explicitly stated that its provisions were to "supplement and, to the extent there is a conflict, supersede" the decision criteria for rulemaking otherwise applicable under the statute pursuant to which the rule is promulgated. *Id.* After it passed the House by 271 to 141, the Senate counterpart fell just two votes short of overcoming a filibuster.

several individual environmental statutes, most notably in the Safe Drinking Water Amendments of 1996.[25]

The centerpiece of the book is Professor Sunstein's claim that a parallel trend toward the Cost-Benefit State is also emerging in the courts in the form of a series of "cost-benefit default principles."[26] Before tackling that claim, however, he catalogues the variety of standards Congress has historically employed for the treatment of costs and benefits in environmental health and safety regulation.[27] These standards range from flat bans on the consideration of costs to feasibility standards to cost-benefit analysis.[28] He then outlines his version of what CBA should look like, how it should operate and why it is better than alternative principles for environmental decision-making.[29]

In the heart of the book, Professor Sunstein describes the "cost-benefit default principles" that he claims are emerging in the courts, particularly in the D.C. Circuit.[30] Under these principles, courts reviewing agency decision-making apply presumptions in favor of CBA or related standards. In their milder form, these presumptions simply allow agencies to use such standards where a statute is ambiguous. In a more "aggressive" form, they actually *require* agencies to employ CBA or

25. 42 U.S.C. § 300g-1(b)(3) (2003). It is not clear that the congressional trend toward increasing use of CBA in recent years is quite as clear as Professor Sunstein suggests. *See* Thomas O. McGarity, *Professor Sunstein's Fuzzy Math*, 90 GEO.L.J. 2341, 2343 (2002). First, Congress occasionally mandated CBA even back in the 1970s. *See* Toxic Substances Control Act, 15 U.S.C. §§ 2601–2692 (2003); Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136-136y (2003). Second, Congress has recently passed legislation explicitly rejecting CBA. Professor Sunstein fails to mention the Food Quality Protection Act of 1996, Pub. L. No. 104-170, 110 Stat. 1489 (codified in scattered sections of 7 and 21 U.S.C.), which was passed the same year as the Safe Drinking Water Amendments, but precludes the use of CBA in setting pesticide tolerances. Instead, tolerances must be set at a level that ensures a "reasonable certainty [of] no harm." FQPA sec. 405 (codified at 21 U.S.C. § 346a(b)(2)(A)(ii) (2003)). *See generally* Thomas O. McGarity, *Politics by Other Means: Law Science, and Policy in EPA's Implementation of the Food Quality Protection Act*, 53 ADMIN. L. REV. 103, 117–18 (2001).

26. THE COST-BENEFIT STATE, *supra* note 1, at 31–86; *see also* RISK & REASON, *supra* note 1, at 191–228.

27. THE COST-BENEFIT STATE, *supra* note 1, at 12–16.

28. This discussion should serve as an important reminder that CBA is not the only way to make regulatory decisions, but Professor Sunstein fails to treat feasibility standards or absolute standards as credible alternatives to CBA. *See infra* notes 174 to 185 and accompanying text.

29. THE COST-BENEFIT STATE, *supra* note 1, at 19–29. As explained more fully in Section V(F), the "alternatives" to CBA that Professor Sunstein explicitly considers and rejects do not include those that Congress has commonly used in environmental legislation, like feasibility standards, qualitative cost-benefit balancing, or absolute standards.

30. THE COST-BENEFIT STATE, *supra* note 1, at 33–51; *see also* RISK & REASON, *supra* note 1, at 191–205.

related standards when faced with an ambiguous statute.[31] After discussing numerous cases that he construes as applying these "cost-benefit default principles," Sunstein then explores some of the unresolved questions that application of such principles may raise, including when agencies should be allowed to deviate from a CBA's "bottom line" and how courts should review agency decisions about the thorny and controversial issue of discount rates.[32]

Finally, the book concludes in Part III with a case study of the EPA's process for setting National Ambient Air Quality Standards (NAAQS) under the Clean Air Act.[33] There is no CBA involved in setting these standards, of course, because the Supreme Court said so in no uncertain terms in its 2001 *American Trucking* decision.[34] As a result, Part III ends up reading like a case study that belongs at the end of some other book. Professor Sunstein argues that before setting the NAAQS, EPA should conduct not a CBA but a "detailed benefits analysis" that quantifies the benefits of the proposed NAAQS and at least two plausible alternatives.[35] But this discussion provides an unsatisfying conclusion to *The Cost-Benefit State*, since the benefits-only analysis he proposes in the context of the NAAQS does not raise the full range of issues and controversies associated with the kind of full-blown CBA that he argues for throughout the rest of the book.

In *Risk and Reason,* Professor Sunstein restates the arguments set forth in *The Cost-Benefit State*, expanding significantly on certain points. This book is written in the same readable, non-technical style and, with less focus on case law, appears to be aiming for an even wider audience. Much of the added material builds on the point made broadly in *The Cost-Benefit State* that cognitive limitations distort ordinary people's thinking about risk.[36] He develops this argument substantially, drawing

31. THE COST-BENEFIT STATE, *supra* note 1, at 48; *see also* RISK & REASON, *supra* note 1, at 203.

32. THE COST-BENEFIT STATE, *supra* note 1, at 71–89; *see also* RISK & REASON, *supra* note 1, at 219–28. For a discussion of the discount rate issue, see infra.

33. THE COST-BENEFIT STATE, *supra* note 1, at 97–136; *see also* RISK & REASON, *supra* note 1, at 229–50.

34. Whitman v. American Trucking Associations, 531 U.S. 457 (2001).

35. THE COST-BENEFIT STATE, *supra* note 1, at 116–18; *see also* RISK & REASON, *supra* note 1, at 244–46. Professor Sunstein also urges that this benefits analysis should consider and quantify health-health trade-offs, which can simply operate as a way to get CBA in the back door, *see infra* notes 192 to 193 and accompanying text. Additionally, he argues that agencies should perform CBAs for informational purposes even when costs are statutorily irrelevant to their decision. *See* THE COST-BENEFIT STATE, *supra* note 1, at 135.

36. THE COST-BENEFIT STATE, *supra* note 1, at 22, 25–27.

significantly on psychological research to argue that when ordinary people act as "intuitive toxicologists" they both underestimate and overestimate risks, and that government regulation based on such misinformed judgments results in over-regulation of trivial risks and under-regulation of substantial risks.[37] The solution, of course, is for government to engage in cost-benefit analysis in order to make rational, scientifically based decisions about which risks are worth regulating and to what degree.[38]

He also adds a chapter called "the Arithmetic of Arsenic,"[39] in which he closely examines a real-life example of CBA: EPA's analysis of arsenic in drinking water. Ironically, as I explore in more detail in Part V, by painstakingly and convincingly demonstrating the gross indeterminacy of this analysis, Professor Sunstein's arsenic case study actually provides compelling evidence refuting his normative claim about the merits of CBA.

Before turning to my critique of Professor Sunstein's claims, it is important to understand exactly what he is arguing for. The next section describes Professor Sunstein's vision of CBA.

III. PROFESSOR SUNSTEIN'S PROPOSAL: COST-BENEFIT LITE

Despite his talk about having won the debate over whether CBA is a good idea, Professor Sunstein understands liberals and knows that for them, at least, CBA is still a hard sell. He knows that CBA seems cold and inhuman to the bleeding hearts.[40] He also knows that they have good reason to be suspicious of CBA and of the motives of those who promote it. After all, the widespread use of CBA in government decision-making began with Ronald Reagan, whose avowed mission was the dismantling of the regulatory state.[41] Since that time, CBA has been promoted by ideological conservatives who seek to use it as a tool to indiscriminately block regulation.[42] Sunstein is acutely aware of these concerns[43] and

37. RISK & REASON, *supra* note 1, at 28–98.

38. RISK & REASON, *supra* note 1, at ix, 4-8, 107.

39. *Id.* at 153–90. This chapter draws on his recent law review article, Cass R. Sunstein, *The Arithmetic of Arsenic*, 90 GEO. L.J. 2255 (2002).

40. RISK & REASON, *supra* note 1, at ix ("Some people think of CBA as a form of cold, barely human calculation, treating health and life as mere commodities and envisioning government as some kind of huge maximizing machine.").

41. *See* CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION 31 (1990).

42. *See* ACKERMAN & HEINZERLING, *supra* note 7, at 35; LESTER B. LAVE, THE STRATEGY OF SOCIAL REGULATION 24 (1981); William H. Rodgers, Jr., *Benefits, Costs, and Risks: Oversight of Health and Environmental Decision-making*, 4 HARV. ENVTL. L. REV. 191, 192 (1980).

goes to great pains to repeatedly assure the liberal skeptics that CBA is value-neutral and can act as a catalyst for good regulation as well as a check on bad regulation.[44]

Indeed, Professor Sunstein has designed the brand of cost-benefit analysis he is selling to be as palatable as possible to liberals. It's Cost-Benefit Lite, Compassionate Cost-Benefit Analysis, and Professor Sunstein cheerfully assures us it is "for everyone."[45] To be sure, at base it is a radical proposal. Sunstein advocates the use of CBA in all government decision-making, at least for regulations costing $50 million or more per year.[46] Furthermore, by CBA, he means the real thing: a quantified analysis that attempts to express both costs and benefits in monetary terms wherever possible and then weigh them against each other.[47] The bottom line presumption is that regulation should not go forward unless the benefits outweigh the costs.[48] Still, within this framework, Professor Sunstein has tried to soften his version of CBA as much as he can without doing violence to the basic principle.

Thus, he assures us that, even though every attempt must be made to quantify and monetize wherever possible, where that is not possible, effects will be described in qualitative terms and considered on an equal

43. Professor Sunstein himself has elsewhere acknowledged that CBA has at times been used as a "political tool for pursuit of an anti-regulatory agenda." Richard H. Pildes & Cass R. Sunstein, *Reinventing the Regulatory State*, 62 U. CHI. L. REV. 1, 45 (1995). *See also* Cass R. Sunstein, *Legislative Foreword: Congress, Constitutional Moments, and the Cost-Benefit State*, 48 STAN. L. REV. 247 (1996). In *The Cost-Benefit State* he acknowledges an "anti-regulatory strand" in some of the cases establishing the cost-benefit default principles, THE COST-BENEFIT STATE, *supra* note 1, at 57, but ultimately he insists that "cost-benefit analysis has been wrongly associated with dogmatic opposition to regulation as such," *id.* at 7.

44. THE COST-BENEFIT STATE, *supra* note 1, at 6–8, 10, 20; RISK & REASON, *supra* note 1, at 26. This claim that CBA is value-free and neutral as to ends is contested by many of CBA's critics who argue that CBA in fact promotes one particular end—economic efficiency—above all others. *See, e.g.*, Dreisen, *supra* note 7, at 564. Indeed, Professor Sunstein himself acknowledges this point but argues that his brand of CBA is flexible enough to avoid the problem. *See* RISK & REASON, *supra* note 1, at 29. *See also* Cass R. Sunstein, *Legislative Foreword: Congress, Constitutional Moments, and the Cost-Benefit State*, 48 STAN. L. REV. 247, 294 (1996) (noting that "the efficiency criterion is inadequate as a complete guide to the regulatory state" because "regulatory statutes have legitimate and diverse functions, [some of which] do not involve economic efficiency" and arguing therefore that Congress should mandate CBA only for statutes designed to overcome market failure). Many have also made a related argument that in practice CBA is not actually value-neutral, but instead tends to be skewed inevitably against environmental, health, and safety regulation. *See infra* note 159.

45. THE COST-BENEFIT STATE, *supra* note 1, at 20.

46. THE COST-BENEFIT STATE, *supra* note 1, at 20. He even contends that agencies should perform CBAs for informational purposes even when costs are statutorily irrelevant. *See id.* at 135.

47. *Id.* at 20; RISK & REASON, *supra* note 1, at 110–11.

48. THE COST-BENEFIT STATE, *supra* note 1, at 21; RISK & REASON, *supra* note 1, at 112.

footing with monetized values.[49] Moreover, when they have finished their cold calculating and number crunching, the benevolent bureaucrats in Professor Sunstein's utopian Cost-Benefit State will not be "rigidly bound by the bottom line,"[50] nor will they be stuck in an "arithmetic straightjacket."[51] Instead, they will be free to deviate from the bottom line and go forward with a regulation even when CBA shows the costs outweighing the benefits.[52] All they will have to do is give good reasons. And Professor Sunstein gives us examples of such reasons that would make any good liberal proud: if the regulation seeks to reduce a risk faced disproportionately by children, or if the hazards sought to be alleviated are faced mostly by the poor, a regulator in the Cost-Benefit State may, citing those good reasons, exercise discretion to disregard the economic efficiency goals embodied by CBA and issue the regulation anyway.[53]

To his credit, Professor Sunstein does not treat CBA as gospel or as some magic formula for deriving truth. He views it simply as a pragmatic decision-making tool that can help illuminate issues but need not dictate outcomes where there are good reasons to deviate from its results. As the next section explains, this conception of CBA is not necessarily inconsistent with his earlier writings, in which he argued that certain values are incommensurable with money.

IV. NORMATIVE CLAIMS

As Professor Sunstein is well aware, he is writing against the backdrop of a well-established body of literature critiquing CBA.[54] For our

49. THE COST-BENEFIT STATE, *supra* note 1, at 20; RISK & REASON, *supra* note 1, at 110–11. The notion that qualitative effects can and will be considered on an equal footing with quantified effects is controversial. *See infra* note 146.

50. THE COST-BENEFIT STATE, *supra* note 1, at 22.

51. *Id.*

52. *Id.*; RISK & REASON, *supra* note 1, at 112.

53. THE COST-BENEFIT STATE, *supra* note 1, at 22. Professor Sunstein is not alone in promoting this kind of CBA. *See, e.g.,* Kenneth Arrow et al., *Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?,* 272 SCIENCE 221 (1996); ARTHUR P. HURTER ET AL., BENEFIT-COST ANALYSIS AND THE COMMON SENSE OF ENVIRONMENTAL POLICY (1982).

54. *See, e.g.,* Lisa Heinzerling, *Regulatory Costs of Mythic Proportions*, 107 YALE L.J. 1981 (1998); McGarity, *supra* note 7; Driesen, *supra* note 7; Duncan Kennedy, *Cost-Benefit Analysis of Entitlement Problems: A Critique,* 33 STAN. L. REV. 387 (1981); Steven Kelman, *Cost-Benefit Analysis: An Ethical Critique,* Regulation 33 (Jan.Feb. 1981); Lawrence Tribe, *Policy Science: Analysis or Ideology?* 2 PHIL.& PUB. AFF. 66 (1972); Mark Sagoff, *Economic Theory and Environmental Law*, 79 MICH. L. REV. 1393 (1981); ELIZABETH ANDERSON, VALUE IN ETHICS AND ECONOMICS (1993).

purposes, these critiques can be divided roughly into two categories: "external" and "internal."[55] The external critiques primarily converge on the problem of incommensurability, contending that CBA is inherently flawed because it is inappropriate to measure diverse goods along a single monetary metric.[56] At best, such measurement grossly miscalculates human experience, failing to capture its full depth and spectrum: "it denies the reality of, and fails to nurture, the important aspects of our humanity that markets are incapable of expressing."[57] At worst, it leads to morally unjustified outcomes.[58]

The internal critiques, on the other hand, confront CBA on its own terms, arguing that, even if it might be desirable to make decisions by measuring and comparing costs and benefits, such measurement is inevitably impossible to perform.[59] Intractable valuation problems make

55. Baron and Dunoff draw a similar distinction but label the two critiques "moral" and "technical." *See* Jane B. Baron & Jeffrey L. Dunoff, *Against Market Rationality: Moral Critiques of Economic Analysis in Legal Theory*, 17 CARDOZO L. REV. 431 (1996). I prefer to avoid describing the external critiques as "moral" because, as explained below, though I count Sunstein's incommensurability critique among that group, his critique contains no moral dimension. *See* Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 841 (1994).

56. *See, e.g.,* Sagoff, *supra* note 54; Anderson, *supra* note 54; Lawrence H. Tribe, *Ways Not to Think About Plastic Trees: New Foundations for Environmental Law*, 83 YALE L.J. 1315 (1974).

57. Baron & Dunoff, *supra* note 55, at 432.

58. *See, e.g.,* Kelman, *supra* note 54; *See* MARK SAGOFF, THE ECONOMY OF THE EARTH 93–94 (1988); Anderson, *supra* note 54, at 190–216.

A related argument contends that cost-benefit analysis confuses the preferences people have as consumers with the values they hold as citizens. Thus, one might very well, as a citizen, attend a town meeting and vehemently oppose the proposed construction of a shopping mall on the outskirts of town, and yet, as a consumer, choose to shop at the same mall once built. *See* Sagoff, *supra* note 58, at 171–72. Because cost-benefit analysis privileges consumer preferences and ignores citizen values, it is an inappropriate tool for evaluating social regulation. According to this view, social regulation does and should instead "express[] what we believe, what we are, what we stand for as a nation, not simply what we wish to buy as individuals." *Id.* at 16–17; *accord* Anderson, *supra* note 54 at 209–10.

This argument has close parallels to Professor Sunstein's conception of civic republicanism. *See* Baron & Dunoff, *supra* note 55 (describing common themes in Sagoff's environmental ethics and Sunstein's civic republicanism). *See generally* Cass R. Sunstein, *Beyond the Republican Revival*, 97 YALE L. J. 1539 (1988). Professor Sunstein's writings on republicanism clearly reject the pluralist vision of political decisions as reflecting aggregate private preferences. As such, his republicanism would seem to be at odds with CBA. Nonetheless, as described below, he defends CBA as a rough-and-ready, highly pragmatic tool, not as a theoretically perfect description of the world. Indeed, he views it as a valuable tool for invigorating and informing robust democratic deliberation, one of the hallmarks of the republican vision of government he advocates. *See, e.g.*, RISK & REASON, *supra* note 1, at 7 ("[C]ost-benefit balancing is not opposed to democratic self-government, but instead is one of its best allies."). I, like many of his critics, am sympathetic to his concern for enhancing democratic deliberation but skeptical that CBA serves that goal. *See infra* notes 142 to 159 and accompanying text.

59. *See, e.g.,* Kennedy, *supra* note 54, at 387; Heinzerling, *supra* note 54, at 1981; McGarity,

any attempt to derive meaningful quantifications of costs and benefits futile. These valuation problems run the gamut from the theoretical, like the offer-asking problem and the effect of wealth distribution on willingness to pay,[60] to the practical, like inadequate data and scientific uncertainty.[61]

A. External Critiques

Professor Sunstein does not dispute the external critiques of CBA. How could he? After all, he is the one who taught us about the incommensurability problem to begin with. He said back in 1994 that the problem with CBA is that it is "obtuse . . . because it tries to measure diverse social goods along the same metric."[62] He argued that a unitary metric could not possibly provide an accurate description of how human beings actually value goods, things, relationships, and states of affairs because we value such matters in diverse ways. We would never offer a friend a cash payment to "compensate" her for canceling a lunch date because we view friendship as simply incommensurable with money.[63] Similarly, many people balk at the prospect of attaching a dollar figure to the loss of an endangered species, the destruction of a pristine natural area, or the loss of a human life because they view these values as simply incommensurable with money, i.e., not measurable along the same metric.[64]

While Professor Sunstein's incommensurability analysis certainly must be counted as one of the most eloquent statements of the external critique of CBA, he has never viewed the problem of incommensurability as an intractable moral obstacle to CBA, as do many others.[65] At least when it comes to government decision-making, as opposed to individual decision-making, Sunstein has always remained open to the possibility that CBA might be defended on purely "pragmatic" grounds as an imperfect but still useful approximation of

supra note 7, at 50–56, 63–72; SHAPIRO & GLICKSMAN, *supra* note 7 at 92–120; Rodgers, *supra* note 42, at 196–98.

60. *See* Kennedy, *supra* note 54, at 401–07.

61. Heinzerling, *supra* note 54, at 1981.

62. Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 841 (1994); *see also* Cass R. Sunstein, *Conflicting Values in Law*, 62 FORDHAM L. REV. 1661 (1994).

63. Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 785–86 (1994).

64. *Id.* at 835–36; *see also* RISK & REASON, *supra* note 1, at 124, 292 (acknowledging the incommensurability problem).

65. *See supra* note 58.

reality. In 1994, he said, "CBA may offer a less than full description of what is really at stake, but perhaps it counteracts the forms of inconsistency and ultimate irrationality that result in the public sector if we proceed without quantitative help."[66]

It is precisely this "pragmatic" justification that he now offers.[67] He makes no effort to defend CBA as an ontologically accurate view of the world and explicitly avoids wading into the morass of welfare economics.[68] Instead, he promotes CBA simply as an imprecise but still useful tool for approximating the consequences of regulation.[69] His pragmatic justification for CBA has two prongs. First, in the face of "cognitive distortions" that cause ordinary people to inaccurately evaluate risk, Sunstein contends that CBA holds out the promise of rationalizing government decision-making and reducing undue influence by interest groups that exploit the irrationality of the public's assessment of risks.[70] Second, by forcing regulators to evaluate and describe the full

66. Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 842 (1994).

67. THE COST-BENEFIT STATE, *supra* note 1, at 6; RISK & REASON, *supra* note 1, at 26 ("[T]he most attractive parts of the movement for cost-benefit analysis have been rooted not in especially controversial judgments about what government ought to be doing, but instead in a more mundane search for pragmatic instruments.").

68. *See* THE COST-BENEFIT STATE, *supra* note 1, at 25–26 ("The strongest arguments for CBA seem to rest not with neoclassical economics but with common sense, informed by behavioral economics and cognitive psychology."); *accord* RISK & REASON, *supra* note 1, at 107. CBA traces its origins to welfare economics and is usually defended on those grounds. *See* E. J. MISHAN, COST-BENEFIT ANALYSIS 1, 382 (1976); *see also* Louis Kaplow & Steven Shavell, *Fairness versus Welfare*, 114 HARV. L. REV. 961 (2001).

By conceding the ontological inaccuracy of CBA, however, Professor Sunstein is arguably ceding a lot of ground. After all, in his view, the problem with alternatives to CBA, like feasibility standards, is presumably that they offer only a rough approximation of the best regulatory approach. But if CBA itself is simply an imprecise tool that promises no more than to approximate regulatory impacts, then it has given up its claim to presumptive superiority over these other commonly used environmental, health, and safety standards.

69. Matthew D. Adler and Eric Posner make a similar argument in *Rethinking Cost-Benefit Analysis*, 109 YALE L. J. 165, 190–92 (1999). They contend that the traditional defense of CBA based on principles of welfare economics is wrong but that CBA can still be defended as an imperfect but still useful "decision procedure."

70. THE COST-BENEFIT STATE, *supra* note 1, at 22, 25–27; RISK & REASON, *supra* note 1, at 107–108; *see also id*. at 31 (CBA "might be defended partly as a corrective to interest-group power"). A similar argument is made in Robert W. Hahn & Patrick M. Dudley, *The Disconnect Between Law and Policy Analysis: A Case Study of Drivers and Cell Phones*, 55 ADMIN. L. REV. 127 (2003). *But see* Jason Scott Johnston, *Paradoxes of the Safe Society: A Rational Actor Approach to the Reconceptualization of Risk and the Reformation of Risk Regulation*, 151 U. PA. L. REV. 747 (2003) ([C]ontemporary American attitudes toward [risk] are precisely what one would expect to observe among rational economic actors" confronted with the long-term improvements in social safety that have occurred in the U.S. and other developed countries.). Professor Sunstein has also developed the idea that well-organized private groups exploit phenomena of behavioral

array of consequences flowing from a proposed regulation, Sunstein claims that CBA will increase transparency and public accountability, thereby serving democratic goals.[71]

Though Professor Sunstein has in effect set aside the external critiques of CBA, the internal critiques remain highly relevant to his analysis. The next section provides a brief overview of these critiques.

B. The Internal Critiques and the Problem of Indeterminacy

The internal critiques of CBA contend that it is plagued by a host of measurement problems that ultimately render the enterprise indeterminate.[72] By "indeterminate," I do not simply mean that a CBA fails to pinpoint costs or benefits with a single number. Certainly, some level of uncertainty or margin of error in the analysis is to be expected and need not render the entire enterprise useless. Nor do I mean a situation in which costs are determined to be roughly equal to benefits so that the analysis yields no clear answer as to whether or not to proceed with the proposed regulation. Even without delivering a clear answer, such an analysis would arguably provide meaningful information that could usefully inform and illuminate the decision-making process. Rather, I use the term "indeterminacy" to refer specifically to the situation in which the ambiguities and uncertainties in measurement are of such a magnitude that it is impossible to calculate the costs and/or benefits of a proposed regulation with sufficient specificity to allow any meaningful comparison. Thus, a CBA that estimates costs around $19 million and benefits between $18 and 20 million might yield a "close call," but would not be "indeterminate" in this sense. On the other hand, a CBA for which reasonable people might peg the costs anywhere between $50 million and $100 million and the benefits anywhere between $10 million and $10 billion would be "indeterminate."

economics that cause ordinary people to irrationally evaluate risks in other writings. *See, e.g.,* Cass R. Sunstein, *What's Available? Social Influences and Behavioral Economics*, 97 NW. U. L. REV. 1295 (2003).

71. THE COST-BENEFIT STATE, *supra* note 1, at 27–28; RISK & REASON, *supra* note 1, at 107–08. Others have also defended CBA on similar grounds. *See, e.g.,* James Krier, *The Irrational National Ambient Air Quality Standards: Macro and Micro Mistakes*, 22 UCLA L. REV. 323, 324–30 (1974). In a related argument, some proponents of CBA contend that government decision-makers are implicitly comparing costs and benefits anyway, and thus argue that CBA, by making that process explicit and formal will increase transparency. *See* Barton H. Thompson, Jr., *People or Prairie Chickens: The Uncertain Search for Optimal Biodiversity*, 51 STAN. L. REV. 1127, 1150–54 (1999).

72. *See supra* note 59.

Some of the measurement problems that the internal critiques identify are simply practical. In many instances, for example, we may simply lack the data and scientific understanding necessary to make definitive, non-controversial estimates of costs and benefits.[73] Other measurement problems are theoretical. That is, they stem from conceptual difficulties inherent in the idea of CBA that no amount of scientific study or data collection can solve. These theoretical internal critiques include the "offer/asking problem," the dependence of willingness to pay on the distribution of wealth, and the problem of discount rates.

CBA values goods according to people's "willingness to pay" for them.[74] For goods traded in markets, this willingness to pay is reflected in market price. For non-market goods, economists employ various methods for assigning shadow prices by trying to determine what people *would* pay for such goods if they had to buy them.[75] One theoretical critique of this aspect of CBA is commonly referred to as the "offer/asking problem."[76] The problem stems from the empirical fact that the price people attach to a particular good varies, sometimes significantly, depending on whether they are asked how much money they would accept to give up an existing entitlement to the good or how much money they would pay to acquire the good. People generally demand more to give up an existing entitlement to something than they would be willing to pay to acquire that entitlement. Yet, no one has been able to come up with a theoretically defensible basis on which to choose one value over the other.

A related problem arises from the fact that any measurement of willingness to pay is necessarily dependent on the distribution of wealth.[77] In other words, since a person's willingness to pay depends in part on her ability to pay, a poor person's willingness to pay for a particular good will generally be lower than a rich person's. This in part explains the offer/asking problem—a person who already possesses an entitlement is "richer" than one who does not. But, more broadly, any

73. *See, e.g.,* Heinzerling, *supra* note 54, at 1981.

74. *See* ANTHONY E. BOARDMAN ET AL., COST-BENEFIT ANALYSIS: CONCEPTS AND PRACTICE 76 (1997).

75. I. PEARCE & R. TURNER, ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT 141–58 (1990).

76. *See* Kennedy, *supra* note 54, at 387; Mark Kelman, *Consumption Theory, Production Theory, and Ideology in the Coase Theorem,* 52 S. CAL. L. REV. 669, 678–82 (1979).

77. *See* Kennedy, *supra* note 54, at 401–07; C. Edwin Baker, *The Ideology of the Economic Analysis of Law*, 5 PHIL. & PUB. AFF. 3 (1975); RICHARD POSNER, ECONOMIC ANALYSIS OF LAW 13 (5th ed. 1998); Arthur Leff, *Economic Analysis of Law: Some Realism About Nominalism*, 60 VA. L. REV. 451, 478–79 (1974).

estimate of willingness to pay must necessarily assume some particular distribution of wealth as a starting point. There is, however, no reasoned basis on which to choose one distribution of wealth over another. Indeed, the particular regulatory measure being considered may itself have some effect on the distribution of wealth. This renders willingness-to-pay a moving target, an inevitably indeterminate value.

These are aspects of a broader problem with the concept of willingness to pay that Professor Sunstein has extensively explicated in his earlier work. The concept of willingness to pay as it is used in economic analysis mistakenly assumes that preferences are fixed and exogenous. In fact, however, as Professor Sunstein has persuasively argued, preferences are highly malleable and contingent on a host of factors, including available information, existing consumption patterns, social pressures, legal rules, and wealth. Given that preferences are created in part by legal rules and other social conditions that legal rules affect, attempting—as CBA does—to craft legal rules by reference to preferences as expressed through willingness to pay presents an intractable circularity problem and renders the enterprise indeterminate.[78]

The problem of discounting presents yet another can of worms that contributes to the indeterminacy of CBA. Economists typically apply a discount rate to monetary costs or benefits that will not be realized until some future date.[79] This reflects the time value of money, or the fact that $100 tomorrow is worth less than $100 today, both because of inflation rates and the investment value of money. With a five percent discount rate, for example, a $100 cost to be incurred a year from now is converted into $95 "present value."

There is certainly room for considerable debate over what discount rate to apply to market goods because reasonable people can obviously disagree about inflation and interest rates. The discount rate becomes even more controversial, however, when it is applied to non-market goods, like the value of a human life or a pristine natural area. It is hard to argue that interest and inflation rates are relevant to such valuations, but discount rates may still be justified on other grounds. For example,

78. *See* CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION 40–42 (1990); Cass R. Sunstein, *Republicanism and the Preference Problem*, 66 CHI.-KENT L. REV. 181, 184 (1990); Cass R. Sunstein, *Legal Interference with Private Preferences*, 53 U. CHI. L. REV. 1129, 1135 (1986). Thus, Professor Sunstein has argued that the legal system should do more than simply promote the satisfaction of private preferences (the goal of CBA). Rather it should also, through the deliberative process of civic republicanism, promote autonomy in the process of preference formation. *See* CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION 40 (1990).

79. MISHAN, *supra* note 68, at 175–82.

there is some logic to applying a discount rate to latent harms, like exposures to toxics, which will manifest themselves later in a given person's lifetime. Most people would probably prefer to die or contract a chronic disease ten years from now than today.[80] Thus, in such circumstances some discount rate that takes account of this preference may be appropriate, though the exact amount is obviously controversial. On the other hand, it is not clear that any discount rate is appropriate when harm to future generations is at issue.[81] Indeed, using a discount rate in such situations can yield absurd results. Applying a discount rate of five percent to the death of a billion people 500 years from now, for example, yields the conclusion that such an event is less harmful (or costly) than the death of one person today.[82] Since even small differences in the rate can yield dramatically different results,[83] the problem of discount rates is a significant source of indeterminacy for CBA.[84]

Finally, economists' attempts to value non-market goods introduce a host of controversial methodological and theoretical problems that further exacerbate the indeterminacy of CBA. Economists use several methods to assign "shadow prices" to non-market goods. Hedonic surveys attempt to infer a dollar value for things not directly traded in markets by observing things that *are* traded in markets and are thought to reflect the unpriced, intangible values.[85] For example, economists have attempted to measure the negative value people attach to living near a landfill by comparing the prices of properties located near landfills to comparable properties not near landfills.[86]

80. Richard Revesz, *Environmental Regulation, Cost-Benefit Analysis, and the Discounting of Human Lives*, 99 COLUM. L. REV. 941, 955–86 (1999); THE COST-BENEFIT STATE, *supra* note 1, at 84; RISK & REASON, *supra* note 1, at 226.

81. Revesz, *supra* note 80, at 988–1006.

82. DEREK PARFIT, REASONS AND PERSONS 357 (1984).

83. *See* THE COST-BENEFIT STATE, *supra* note 1, at 83; RISK & REASON, *supra* note 1, at 224–25. Professor Sunstein's analysis of EPA's CBA regarding arsenic in drinking water reveals, for example, that application of a 7% discount rate reduces the value of a statistical life dramatically from $6.1 million to $1.1 million. *See* RISK & REASON, *supra* note 1, at 167.

84. *See* Robert W. Hahn, *The Economic Analysis of Regulation: A Response to the Critics*, AEI-Brookings Joint Center for Regulatory Studies, Working Paper 04-03 at 4 (Jan. 2004) (forthcoming in U. Chi. L. Rev.) ("[T]here is no general agreement on the correct choice for a discount rate.").

85. *See* DAVID W. PEARCE & R. KERRY TURNER, ECONOMICS OF NATURAL RESOURCES AND THE ENVIRONMENT 141–58 (1990); W. KIP VISCUSI, RATIONAL RISK POLICY 46–47 (1998); David S. Brookshire et al., *Valuing Public Goods: A Comparison of Survey and Hedonic Approaches,* 72 AMERICAN ECONOMIC R. 165 (1982); BOARDMAN ET AL, *supra* note 75, at 318–24.

86. *See, e.g.,* Richard Ready & Charles Abdalla, *The Impact of Open Space and Potential for Local Disamenities on Residential Property Values in Berks County, Pennsylvania*, Staff Paper 363, Dep't of Agricultural Economics & Rural Sociology, The Pennsylvania State University (June 2003)

Alternatively, the "contingent valuation method" attempts to determine people's willingness to pay for non-market goods by simply asking them.[87] In what is essentially a sophisticated public opinion poll, respondents are given information about a particular natural resource or medical condition and then asked how much they would be willing to pay to preserve the natural resource or to avoid the particular disease. One such "willingness-to-pay survey," for example, concludes that the average American household is willing to pay $216 to prevent the extinction of bald eagles.[88] Another concludes that the average person is willing to pay $607,000 to avoid contracting chronic bronchitis.[89]

Any such study is likely to be vulnerable to challenge on a variety of methodological grounds. Samples may be insufficiently large or insufficiently representative to produce meaningful results. In hedonic surveys, it may be difficult to control for all variables other than the presence or absence of the non-market good being valued.[90] Willingness-to-pay surveys may be criticized for the amount or objectivity of the background information provided to respondents, the way questions are phrased, and so on.[91]

But there are intractable theoretical problems as well. Respondents in willingness-to-pay studies are not subject to actual budget constraints

(*available at* http://landuse.aers.psu.edu).

87. *See* Thomas H. Stevens et. al., *Measuring the Existence Value of Wildlife: What Do CVM Estimates Really Show?* 67 LAND ECONOMICS 390 (1991); D.W. PEARCE & A. MARKANDYA, ENVIRONMENTAL POLICY BENEFITS: MONETARY VALUATION (1989); Christopher Stone, *What to do about Biodiversity: Property Rights, Public Goods, and the Earth's Biological Riches*, 68 S. CAL. L. REV. 577, 580–88 (1995).

88. John B. Loomis & Douglas S. White, *Economic Benefits of Rare and Endangered Species: Summary and Meta-analysis*, 18 ECOLOGICAL ECON. 197, 199 tbl.1 (1996).

89. W. Kip Viscusi, et al., *Pricing Environmental Health Risks: Survey Assessments of Risk-Risk and Risk-Dollar Trade-offs for Chronic Bronchitis*, 21 J. ENVTL. ECON. MGMT. 41 (1991).

90. *See* Kelman, *supra* note 54 at 37.

91. *See, e.g.,* Stevens, *supra* note 87, at 399 (reporting that majority of respondents registered protest votes, refusing to pay for preservation of wildlife despite stating that the species were important to them, that contingent valuation may not provide a valid measure of existence value, and arguing that CBA should not be used to make decisions about wildlife); CASS R. SUNSTEIN, FREE MARKETS AND SOCIAL JUSTICE 143 (1997) ("[S]ome answers are implausibly high. Consider the fact that there is an asserted willingness to pay $32 billion per year to save the whooping crane, an amount that is over ten times what was given to all nonprofit environmental organizations in 1991."); Cass R. Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 835, n. 213 (1994) (Willingness-to-pay-studies "frequently experience protest rates of 50 percent or more."); John Heyde, *Is Contingent Valuation Worth the Trouble?* 62 U.CHI. L. REV. 331 (1995) (Respondents "might tell the surveyor what they think she wants to hear or inflate their answer to effect a public policy for which they will not have to pay . . . . [A]nswers vary greatly with the wording of the survey question or with the information the surveyor provides about the resource being measured.").

and so may well over-estimate their willingness to pay.[92] There is also no obviously "right" geographic scope to apply in aggregating "society's" overall willingness to pay for a natural resource. For example, in calculating the value of the Arctic National Wildlife Refuge, should we count the willingness to pay of all households in Alaska, all households in the United States, or all households in the world? Outcomes may vary wildly depending on how these issues are resolved, and yet no consensus exists on how to handle them. The result is that any particular number generated by such studies is vulnerable to reasonable arguments that it should be adjusted significantly up or down and is therefore indeterminate.

In sum, the internal critiques of CBA identify a whole host of measurement problems that render the enterprise indeterminate. The next section explores the implications of this indeterminacy for Professor Sunstein's normative claim. I argue that if one takes these critiques seriously and thus views the indeterminacy of CBA as inevitable or even just significantly likely, both of Professor Sunstein's "pragmatic" justifications fall apart.

C. Indeterminacy Undermines the Pragmatic Justifications for CBA

Recall that Professor Sunstein's first "pragmatic" justification for CBA is rooted in a concern that government decision-making is too vulnerable to pressure from interest groups. He argues that these groups exploit the cognitive distortions of uninformed and uneducated citizens who tend to assess risks irrationally. According to Professor Sunstein, CBA will help counteract this problem by providing an alternative rational basis for decision, thus reducing the scope of agency discretion and thereby insulating agencies from misguided interest group pressure.[93] This argument, of course, assumes that CBA will provide some basis for decision. If it is indeterminate, however, it will not. Instead of providing a check on agency discretion, an indeterminate CBA will actually expand agency discretion. And rather than counteracting the problem of undue interest group influence, it will only exacerbate the problem as each side

92. *See* CASS R. SUNSTEIN, FREE MARKETS AND SOCIAL JUSTICE 142 (1997).

93. THE COST-BENEFIT STATE, *supra* note 1, at 26–27; RISK & REASON, *supra* note 1, at 107–08. Professor Sunstein has a longstanding record of concern regarding the undue influence of powerful private groups on agency decision-making. *See, e.g.,* Cass R. Sunstein, *Reviewing Agency Inaction After* Heckler, 52 U. CHI. L. REV. 653, 656 (1995); SUNSTEIN, AFTER THE RIGHTS REVOLUTION 14, 98–100 (1990).

exploits indeterminacy by manipulating the numbers to support its own preferred outcome.[94]

Professor Sunstein's second justification for CBA is that by providing specific information about the consequences of proposed regulations it will increase transparency and public accountability.[95] Certainly, as a general matter, any attempt to analyze the consequences of proposed regulations ought to contribute to transparency. But if a CBA is indeterminate—if it ultimately fails to provide an answer—then we will likely have to resort to an evaluation of underlying value choices to make a decision. And CBA is a particularly bad tool for communicating value choices. It tends instead to obscure value choices behind a veil of seemingly scientific and objective numbers.[96] I develop both of these points further in Parts VC and VD, but for now it suffices to say that the indeterminacy of CBA, as brought to light by the internal critiques, casts substantial doubt on both of Professor Sunstein's "pragmatic" justifications for CBA.

Professor Sunstein does not ignore these internal critiques entirely. At isolated points throughout both books, he makes reference to most of them. In particular instances he even appears to make minor concessions to the difficulties inherent in accurately measuring costs and benefits, though he stops short of conceding any systemic flaw in CBA as a whole.[97] Thus, at various points he acknowledges "some problems" with the concept of willingness to pay, even suggesting that it should not be used as the basis for measuring regulatory benefits, though he never offers an alternative.[98] He also devotes considerable attention to the problem of discount rates and acknowledges that where harm to future generations is at issue, reasonable arguments may be made for setting the discount rate anywhere between zero and seven.[99] And he offers a

94. *See infra* notes 152 to 155 and accompanying text.

95. THE COST-BENEFIT STATE, *supra* note 1, at 26–27; RISK & REASON, *supra* note 1, at 107–08.

96. *See infra* notes 142 to 151 and accompanying text.

97. *See, e.g.,* RISK & REASON, *supra* note 1, at 121–24, 292–93 (addressing critiques of CBA advanced by Lisa Heinzerling and others).

98. THE COST-BENEFIT STATE, *supra* note 1, at 25; *accord id.* at 8–9; RISK & REASON, *supra* note 1, at 29 ("Certainly I do not mean to embrace the controversial and implausible proposition that all regulatory decisions should be made by aggregating private willingness to pay."); *but see id.* at 293 (calling willingness to pay "a good start").

99. THE COST-BENEFIT STATE, *supra* note 1, at 83–86 ("[A]gencies asked to engage in CBA have no clear path to an appropriate choice of discount rate for future generations."); *accord* Risk and Reason, *supra* note 1, at 224–28.

periodic nod to the problem of scientific uncertainty.[100] Ultimately, however, he views these issues as technical problems to be tackled as part of the "second generation" discussion about how CBA can best be implemented rather than systemic or fundamental flaws in the method itself. Thus, aside from these minor concessions, he never directly confronts the problem of indeterminacy. As a result, his unwavering enthusiasm for CBA can at times seem less than fully convincing.

For example, Professor Sunstein repeatedly tries to demonstrate the virtue of CBA by offering hypothetical examples that simply assume away the indeterminacy problem. He says things like: If we knew that regulation X was going to cost us $6 billion but only deliver $2 billion in benefits, wouldn't it be a stupid thing to do? And isn't CBA valuable for showing us just how stupid it would be?[101] Well, yes, but the hypothetical, of course, begs the most important question: How did we figure out how much regulation X was going to cost us and benefit us in dollars and cents to begin with? It is the distilling down of complicated social phenomena into stark numbers and the conversion of seemingly unquantifiable values into monetary terms that tends to irk people. And the problem is that attempts to do that often yield numbers that are so "soft" and so vulnerable to challenge by reasonable people that CBA fails to deliver on its promise of providing a rational and non-controversial decision-making tool. But by presenting hypothetical examples in which these problematic calculations have already been magically performed, Professor Sunstein sanitizes the text of all such troublesome details and effectively masks the problem of indeterminacy.

In Chapter Seven of *Risk and Reason*, however, Professor Sunstein moves from these hypotheticals to the real-world example of the arsenic CBA. As the next section describes, when that CBA turns out to be indeterminate, he is finally forced to confront these issues head-on.

V. THE ARSENIC CASE STUDY

Although the debate about the virtues and vices of CBA has raged for decades and the scholarly literature on the subject is vast,[102] many of

100. *See* THE COST-BENEFIT STATE, *supra* note 1, at 66, 77, 118 (noting that estimates of costs and benefits "are bound to contain serious errors" due to scientific uncertainty and acknowledging that sometimes science may not be able to tell us whether risks are small or large); RISK & REASON, *supra* note 1, at 245 ("[I]n many cases, scientific uncertainty will confound any attempt to quantify [the benefits of the NAAQS] with anything like precision.").

101. *See, e.g.,* THE COST-BENEFIT STATE, *supra* note 1, at 21, 25.

102. For a recent overview, see MATTHEW ADLER & ERIC POSNER, EDS., COST-BENEFIT

those who have opined on the subject have confined their investigations to the realm of theory.[103] Professor Sunstein's cogent and exhaustively researched case study on the arsenic CBA therefore represents an important and valuable contribution to the debate. The central irony of Professor Sunstein's work on CBA, however, is that when he finally tests his ideas in practice by looking at a real-world example, the evidence he finds undercuts his claims. Rather than demonstrating how CBA operates in practice to rationalize and constrain agency decision-making and "actually produce[] . . . policy improvements,"[104] he finds instead a CBA that was simply indeterminate. After all the hand-wringing, computer modeling, and calculating—in the end, CBA did not actually help EPA make a decision at all.[105] Indeed, even Professor Sunstein admits that it did little more than demonstrate "exactly why" the decision was "genuinely difficult."[106]

A. Arbitrary Assumptions and Gross Indeterminacy

The Safe Drinking Water Amendments of 1996 mandate a kind of cost-benefit analysis that looks very much like what Professor Sunstein is advocating. It calls for a determination of both the "quantifiable and nonquantifiable benefits and costs of the proposed standard as well as of alternatives."[107] Pursuant to this provision, EPA conducted a CBA in 2000 assessing the costs and benefits of four potential standards for arsenic in drinking water, ranging from three to twenty micrograms per liter. On January 22, 2001, just as Bill Clinton was leaving office, his EPA issued a final regulation setting the standard at ten micrograms per liter and pointing to its CBA to justify this decision.[108] This outcome represented a significant tightening of the standard, which had previously been set at fifty micrograms per liter.[109] Two months later, in one of the most controversial environmental decisions of the Bush Administration,

ANALYSIS: LEGAL, ECONOMIC, AND PHILOSOPHICAL PERSPECTIVES (2001). S*ee also supra* note 7.

103. There are important exceptions to this generalization. *See, e.g.,* Heinzerling, *supra* note 54; Robert W. Hahn & Patrick Dudley, *How Well Does the Government Do Cost-Benefit Analysis?*, AEI-Brookings Joint Center for Regulatory Studies, Working Paper 04-01 (Jan. 2004); RICHARD D. MORGENSTERN, ED., ECONOMIC ANALYSIS AT EPA: ASSESSING REGULATORY IMPACT (1997).

104. THE COST-BENEFIT STATE, *supra* note 1, at 8.

105. RISK & REASON, *supra* note 1, at 178, 181 (noting that "[a]n analysis of benefits and costs cannot resolve the ultimate judgment" and "there was no obviously best choice for EPA").

106. *Id.* at 190.

107. 42 U.S.C. 300g-1(3)(C)(1)(VI) (2003).

108. National Primary Drinking Water Regulations, 66 Fed. Reg. 6976, 6981 (Jan. 22, 2001) (to be codified at 40 C.F.R. pts. 9, 141 and 142).

109. *Id.* at 6977–79.

the EPA suspended the rule and called for further study.[110] The suspension was ultimately short-lived, however. After considerable public outcry, the Bush EPA relented seven months later, reinstating the Clinton administration's ten micrograms-per-liter standard.[111]

Professor Sunstein's case study examines the CBA performed by the Clinton EPA in setting the new arsenic standard. The CBA calculated the costs of the ten-micrograms-per-liter standard at $210 million[112] and the benefits at $140 to $198 million.[113] A widely-reported study by Jason Burnett and Robert Hahn of the AEI-Brookings Joint Center for Regulatory Studies critiqued EPA's analysis, and by challenging a number of the assumptions underlying EPA's data, came up with an alternative estimate of just $23 million in benefits.[114] After reviewing both EPA's and Burnett and Hahn's calculations, Professor Sunstein conducts his own careful analysis of the various assumptions underlying the data and ultimately arrives at the astonishing conclusion that by employing reasonable assumptions, one could come up with benefits as low as $13 million or as high as $3.4 billion.[115]

This wide divergence in estimates arises from a number of the practical and methodological measurement problems that the internal critiques of CBA frequently identify. First, conflicting, inconclusive and inadequate data as to the extent of the health risk posed by arsenic plague the analysis. The best studies are those connecting arsenic to bladder and lung cancer, but even these can be challenged on a host of methodological grounds.[116] The studies linking arsenic to other kinds of cancer and other health effects do not provide data in a form that allowed

110. *See* 66 Fed. Reg. 16,134 (Mar. 23, 2001) (to be codified at C.F.R. pts. 9, 141 and 142) (temporarily delaying rule for 60 days); 66 Fed. Reg. 20,580 (April 23, 2001) (to be codified at C.F.R. pts. 9, 141 and 142) (delaying rule an additional 9 months for further review).

111. *See* EPA Press Release, *EPA Announces Arsenic Standard for Drinking Water of 10 Parts per Billion* (Oct. 31, 2001) (*available at* www.epa.gov /epahome/headline_110101.htm).

112. RISK & REASON, *supra* note 1, at 162; 66 Fed. Reg. at 7010; EPA, Arsenic in Drinking Water Rule: Economic Analysis 6-28, Exhibit 6-10 (Dec. 2000), *available at* http://www.epa.gov/safewater/ars/econ_analysis.pdf [hereinafter EPA, Arsenic CBA].

113. RISK & REASON, *supra* note 1, at 166; 66 Fed. Reg. at 7012; EPA, Arsenic CBA *supra* note 112, at 5-26, Exhibit 5-11.

114. RISK & REASON, *supra* note 1, at 168; Jason K. Burnett & Robert W. Hahn, *EPA's Arsenic Rule: The Benefits of the Standard Do Not Justify the Costs*, AEI-Brookings Joint Center for Regulatory Studies (Jan. 2001), Appendix, tbl. 1.

115. RISK & REASON, *supra* note 1, at 175, 177. The indeterminacy of this CBA is further highlighted by the fact that, even in the few years since EPA first issued the new regulation, new data have come to light suggesting that the benefits of the 10-microgram-per-liter standard may be even higher. *See id.* at 178 n.59.

116. *Id.* at 161–62, 173.

EPA to quantify those effects.[117] Even with respect to bladder and lung cancer, there are no hard data for the effects of arsenic at low doses, forcing toxicologists to extrapolate the dose-response curve at low exposure levels.[118] As Professor Sunstein explains, reasonable arguments can be made for assuming that this dose-response curve takes a variety of different shapes, producing widely differing estimates of cancer risk at the low exposure levels that EPA seeks to regulate.[119]

Second, the hedonic studies of workplace risk that EPA used to set the value of a statistical life at $6.1 million can be challenged on a variety of methodological grounds.[120] EPA failed to account for real income growth during the time that had elapsed since the studies were performed.[121] The workplace risk studies also involved risks that were, at least arguably, voluntarily assumed and therefore less dreaded than the kind of involuntary risk posed by arsenic in drinking water.[122] Moreover, the workers in these studies were significantly poorer than average and thus could be expected to exhibit a lower-than-average willingness to pay for the avoidance of risk.[123] In addition, EPA's valuation of nonfatal cancers at $607,000 based on a shopping mall survey of people's willingness to pay to avoid bronchitis is also vulnerable on methodological grounds, including the fact that "chronic bronchitis is simply not nonfatal cancer."[124]

Finally, Professor Sunstein points to the perennial problem of discount rates. EPA applied no discount rate, Burnett and Hahn applied a seven-percent discount rate,[125] and Professor Sunstein suggests that a rate of two or three percent might be reasonable.[126] Such differences have a profound effect on the overall estimation of benefits. Burnett and Hahn's

117. *Id.* at 165, 172–73.

118. *Id.* at 164.

119. *Id.* at 169–72.

120. Professor Sunstein notes that the "sheer variety" of results from different workplace risk studies raises questions about their reliability. They range from a low of $0.7 million per statistical life to a high of $16.3 million. *Id.* at 174. *See infra* notes 144 to 145 and accompanying text.

The current debate raging at OMB about how to value the lives of senior citizens further illustrates the inevitable indeterminacy of efforts to specify a dollar value for a "statistical life." EPA's initial evaluation of its Clear Skies Initiative set the value of life at $2.3 million for those over 70 and at $3.7 million for those younger. John Tierney, *Life: The Cost-Benefit Analysis*, N. Y. TIMES, May 18, 2003, § 4, at 14.

121. RISK & REASON, *supra* note 1, at 174.

122. *Id.* at 174–75.

123. *Id.* at 175.

124. *Id.* at 176.

125. Burnett & Hahn, *supra* note 114 at 1; RISK & REASON, *supra* note 1, at 167.

126. RISK & REASON, *supra* note 1, at 176–77.

application of a seven-percent discount rate, for example, reduced the value of each statistical life from $6.1 to $1.1 million.[127]

Professor Sunstein's close analysis is particularly startling in revealing just how arbitrary the assumptions underlying the seemingly scientific numbers in a CBA can be. For example, part of Burnett and Hahn's analysis involved an attempt to quantify the benefits that EPA had designated as "nonquantifiable."[128] These nonquantifiable benefits were significant to EPA's analysis because they provided the basis for EPA to "fill the gap" between their estimated $140 to $198 million in benefits and the $210 million in costs.[129] EPA had reason to believe that arsenic could cause a number of different kinds of cancer, including cancer of the bladder, lung, skin, kidney, liver, prostate, and nasal passages.[130] However, as already mentioned, the agency only had data that allowed it to quantify the risks from two of these—bladder and lung cancers.[131] Accordingly, EPA simply accounted for the risk of the other types of cancer as "nonquantifiable benefits."[132] In order to attach a number to these "nonquantifiable benefits," Burnett and Hahn looked at a study by the National Research Council suggesting that the risk of death from all types of cancer together might be eight times the risk of death from bladder cancer alone.[133] Cutting that number in half, since EPA had accounted for two types of cancer, Burnett and Hahn concluded that a multiple of four would produce a reasonable upper bound estimate for the risk from all cancers.[134] This upper bound was not the number they chose to use in their analysis, however. Reasoning that "including 'nonquantifiable risks' would increase the lives-saved estimate by some factor between one and four,"[135] they chose a factor of two, for no particular reason other than it "seemed reasonable."[136] Even Professor Sunstein observes that this assumption "seems arbitrary" rather than reasonable.[137]

127. Burnett & Hahn, *supra* note 114 at 6; RISK & REASON, *supra* note 1, at 165, 167.
128. Burnett & Hahn, *supra* note 114 at 7; RISK & REASON, *supra* note 1, at 167.
129. RISK & REASON, *supra* note 1, at 165–66.
130. *Id.* at 165.
131. *Id.* at 165–66.
132. *Id.* at 165.
133. Burnett & Hahn, *supra* note 114 at 3, 7; RISK & REASON, *supra* note 1, at 167.
134. Burnett & Hahn, *supra* note 115, at 7; RISK & REASON, *supra* note 1, at 167.
135. Burnett & Hahn, *supra* note 115, at 12; RISK & REASON, *supra* note 1, at 167.
136. Burnett & Hahn, *supra* note 114, at 7; RISK & REASON, *supra* note 1, at 167.
137. RISK & REASON, *supra* note 1, at 172.

B. Resuscitating CBA

Examples like this must make even the most sympathetic reader wonder whether there is substance behind the numbers CBA produces, or just smoke and mirrors. If even the cost-benefit analyses performed by "highly respected," "especially able and influential"[138] analysts like Burnett and Hahn can be built upon such admittedly arbitrary assumptions and if reasonable people can produce such wildly varying estimates, the entire enterprise begins to look as if it's teetering atop a house of cards. Nonetheless, Professor Sunstein remains unwavering in his faith in CBA. This time, though, he confronts the skeptics head-on, acknowledging that there may be those in his audience who are beginning to think that CBA is just plain "unhelpful." Such skeptics are "not exactly wrong," Professor Sunstein tells us, they are just not "convincing":

> Does all this suggest that CBA is, in cases of this sort, unhelpful? An affirmative answer to that question is imaginable. A skeptic might conclude that because the range of uncertainty is so large, any number at all could be justified, and the ultimate decision is essentially "political" or based on "values." This view is not exactly wrong, but it should not be taken as a convincing challenge to CBA.
>
> An analysis of benefits and costs cannot resolve the ultimate judgment, but it can certainly inform it. Once we understand the potential effects of different arsenic regulations, and see where the uncertainties come from, we are in a much better position to know what to do. Of course a decision on that count will be a product of "values." How could it be otherwise? The point is that the values should be identified as such, so that when government acts, its reasons are transparent and explicable.[139]

Thus, Professor Sunstein frankly acknowledges that the CBA for the arsenic rule was indeterminate, that it could not "resolve the ultimate

138. *Id.* at 167. *But see* McGarity, *supra* note 25, at 2356–57 (characterizing Burnett and Hahn's study as "unbalanced and reflecting a clear ideological bias against health and safety regulation" and "a hatchet job," and criticizing Professor Sunstein for treating it as a "legitimate expert assessment").

139. RISK & REASON, *supra* note 1, at 178.

judgment," and that the decision was instead inevitably "a product of 'values.'"[140] Nonetheless, he remains staunchly committed to the notion that even if CBA cannot "actually produc[e] decisions in hard cases,"[141] it can still be useful in "informing" those decisions. But how much useful information have we gained by finding out that the monetized benefits of the 10-micrograms-per-liter standard may be anywhere between $13 million and $3 billion? Has that really helped us to "understand the potential effects of different arsenic regulations" in any meaningful way? After the substantial resources that went into producing this CBA, was EPA really "in a much better position to know what to do"?

C. Why CBA is a Poor Tool for Illuminating Underlying Value Choices and Increasing Transparency

While Professor Sunstein's critique of EPA's arsenic CBA certainly helps us to "see where the uncertainties come from" and illuminates the underlying value choices, the same cannot be said of the EPA's CBA itself. Indeed, if Professor Sunstein's analysis is right, the EPA's CBA, which estimated the benefits at $140 to $198 million, did not even begin to reveal the full magnitude of the uncertainties involved. Surely anyone perusing the Federal Register notice that accompanied the arsenic rule would not have understood all the value choices lurking behind the numbers in the way the Professor Sunstein illuminates them in his analysis.[142] Admittedly, the fact that one CBA may have been implemented poorly should not be taken as an indictment of the whole method. It is conceivable that all future CBAs might be implemented in the thorough and sophisticated manner of Professor Sunstein's analysis of the arsenic rule. But it seems far more likely that most CBAs will look more like EPA's analysis than like Professor Sunstein's.[143]

Indeed, if value choices are what we are concerned about, then CBA seems like exactly the wrong tool for illuminating them. Is it realistic to suppose, as Professor Sunstein does, that cost-benefit analysts will actually choose to express costs and benefits in ranges that reflect the full

140. *Id.* at 178; *accord id.* at 190 (ultimate decision involves a "judgment of value").

141. *Id.* at 190.

142. *See* National Primary Drinking Water Regulations, 66 Fed. Reg. 6976 (Jan. 22, 2001) (to be codified at C.F.R. pts. 9, 141 and 142); *see also* Lisa Heinzerling, *Markets for Arsenic*, 90 GEO. L.J. 2311, 2335–36 (2002).

143. *See* Hahn & Dudley, *supra* note 103, at 16 (finding "considerable variation in quality" of CBAs of federal regulations and that "EPA . . . has not done a very good job of complying with executive orders or OMB guidelines" in conducting CBAs).

extent of the uncertainties behind their calculations? The cost-benefit analyst, after all, has a job to do, and that job involves assigning values to costs and benefits in a way that will allow for some meaningful comparison. Her incentive is to make every effort to narrow the range, not to widen it. Indeed, the EPA's arsenic CBA provides a perfect example of this phenomenon. As discussed above, part of the CBA involved estimating the value of a statistical life based on a series of hedonic studies measuring people's willingness to pay to avoid workplace risk. There were over two dozen such studies, and the range of outcomes produced by them was strikingly wide: with some estimating the value of a life at $0.7 million and others putting it as high as $16.3 million.[144] Rather than using that range or some reasonable fraction of that range to value statistical lives, however, EPA calculated the average and then used that precise figure, $6.1 million, as its value for a statistical life. This number—calculated out to the first decimal place—conveys an illusion of accuracy and authority that belies the vast uncertainty from which it was produced.[145]

CBA is also a poor tool for illuminating value choices because value choices simply cannot compete with numbers. Numbers are powerful.[146] They command attention in a way that qualitative descriptions do not. No matter how many qualifiers and disclaimers accompany them, numbers inevitably carry with them an aura of scientific accuracy and objectivity that is difficult, if not impossible, to dispel.[147] Moreover, for those not scientifically or technically trained, numeric calculations seem intimidating and incomprehensible. Lacking the skills or confidence to

144. RISK & REASON, *supra* note 1, at 174; EPA, Arsenic CBA, *supra* note 112, at 5-23; EPA, Guidelines for Preparing Economic Analyses 89 (2000), *available at* http://yosemite.epa.gov/ee/epa/eed.nsf/webpages/Guidelines.html/$file/Guidelines.pdf.

145. Even among federal agencies, there is a wide divergence in the values assigned to statistical lives, with some agencies setting the value as low as $1.5 million. *See* Adler & Posner, *supra* note 69, at 1056.

146. *See* Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. Penn. L. Rev. 1553, 1579–80 (2002) (noting that unquantifiable benefits are often given lip service in CBA but ultimately ignored and citing arsenic CBA as example where "[s]ubsequent public discussion [of the CBA] inevitably referred only to the EPA's numerical analysis and forgot about the cases of avoided illness that could not be quantified"); Richard Parker, *Grading the Government*, 70 U. Chi. L. Rev. 1345, 1348–49, 1404–06 (2003) (observing the increasingly prevalent phenomenon of regulatory score cards," which "reduce . . . hundreds of pages [in a CBA] to a few summary statistics," ignoring qualitative descriptions and qualifiers).

147. *See* Heinzerling, *supra* note 54, at 2064–65, 2068 (discussing "the power of numbers" and the fact that quantification of costs and benefits obscures underlying value choices, producing a "more dishonest debate about regulation").

delve into mathematical calculations, nonscientific people may often simply accept the end result on faith.[148]

Ironically, the same kind of attention to human cognitive processes and distortions that Professor Sunstein admonishes us to apply to thinking about risk assessment, leads in this context to the conclusion that CBA is far more likely to distort and obscure underlying value choices than to illuminate them. Given what we know about people's biases and perceptions with respect to numbers, should we not expect that most people, including those who perform cost-benefit analyses, are far more likely to be seduced by the power of numbers than to doggedly look behind the numbers to uncover underlying value choices? Just as "ordinary people" employ "mental shortcuts" that lead them to irrationally evaluate risks,[149] should we not also expect CBA to create an irresistible temptation for regulators to use numbers as "mental shortcuts" to make regulatory decisions look easy and definitive rather than "genuinely difficult"[150] and ambiguous?

If, as the arsenic example appears to show, CBA really may in some instances be indeterminate so that regulatory decisions must turn instead on value choices, then we simply need a different decision-making tool. CBA cannot simply be retooled to perform the function of illuminating value choices once it has failed its original mission of comparing costs and benefits. CBA is far more likely to obscure underlying value choices behind a veil of seemingly scientific and accurate numbers. Rather than make government decision-making more transparent, CBA is far likelier to make it more opaque and inaccessible to ordinary citizens and thus to disserve democratic goals by transferring power from the citizenry at large and their democratically elected representatives to an elite group of economists.[151]

D. Why CBA is a Poor Tool for Insulating Agencies from Undue Interest Group Pressure

As I argued in Part IVC, the other consequence of an indeterminate CBA is that it is easily manipulated by interest groups on either side of the debate.[152] Professor Sunstein candidly acknowledges this point in

148. *Id.* at 2068.

149. RISK & REASON, *supra* note 1, at 35.

150. *Id.* at 190.

151. McGarity, *supra* note 7, at 59.

152. RISK & REASON, *supra* note 1, at 154 ("If literate in some basic science and economics, an adroit lawyer, on either side, might mount apparently reasonable challenges to any EPA decision

his discussion of the arsenic CBA. Indeed, he seems almost to celebrate it: "We are now in a position to see the multiple possible challenges to any agency decision that involves cost-benefit balancing. . . . We can see how creative citizens and lawyers, representing water systems or environmentalists, might be able to mount reasonable challenges to EPA's decisions, regardless (almost) of the content of those decisions."[153] He even provides a kind of How-To Manual for lawyers wishing to challenge CBAs.[154]

It is, of course, only a small step from here to recognizing the fallacy of Professor Sunstein's first pragmatic justification for CBA—his idea that by providing a rational standard of decision, CBA will reduce the undue influence of private interest groups. A decision standard that leaves the agency vulnerable to "reasonable challenges" whichever way it rules hardly seems to impose much of a rational constraint on agency decision-making. Indeed, such a standard seems likely only to increase the influence of private interest groups.[155] Again, however, Professor Sunstein seems to disregard the clear implications of his insights.

Another consequence of the manipulability of the CBA standard is the increased litigation and transaction costs that must inevitably arise from a decision standard that gives each side "plausible challenges to whatever the agency does."[156] Professor Sunstein is fully aware of this problem and warns that excessive litigation over rules will have the undesirable effect of "essentially freez[ing] whatever rule is currently in place."[157] His solution is to call for a deferential standard of review from the courts. It seems likely, however, that even with such safeguards in place, the

about whether and how to regulate arsenic in drinking water."). Professor Sunstein is not the only proponent of CBA to recognize this problem. *See* Robert H. Frank, *Why is CB Analysis so Controversial?,* 29 J. LEGAL STUD. 913, 929–30 (2000) (acknowledging that CBA may be susceptible to manipulation for people's self-serving ends); Jason Johnston, *A Game Theoretic Analysis of Alternative Institutions for Regulatory Cost-Benefit Analysis*, 150 U. PA. L. REV. 1343, 1401 (2002) ("Under a cost-benefit statute . . . regulatory targets . . . can cause virtually interminable regulatory delay merely by contesting the agency's own cost-benefit calculation."). Indeed, the indeterminacy and manipulability of CBA has long been recognized. *See* Richard B. Stewart, *The Reformation of American Administrative Law*, 88 Harv. L. Rev. 1667, 1703 (1975) ("Because applied economics is an art that requires discretionary judgments . . . no single policy solution will generally be indicated to be clearly correct. More frequently there will be respectable economic arguments for a number of quite different alternatives.").

153. RISK & REASON, *supra* note 1, at 179.

154. *Id.* at 179–81.

155. McGarity, *supra* note 25, at 2364–65 ("[A] cost-benefit decision criterion gives lawyers for regulated entities much ammunition with which to attack agency decisions.").

156. RISK & REASON, *supra* note 1, at 181.

157. *Id.* at 181.

manipulability of the cost-benefit standard will increase challenges to rules, whether in judicial proceedings, administrative proceedings, or in "the court of public opinion." All such challenges can have substantial "ossifying" effects on regulations. As the arsenic controversy demonstrates, it does not always take a lawsuit to delay a rule.[158]

This ossification effect refutes Professor Sunstein's claim that CBA is value-neutral—i.e. that it is just as likely to spur regulation as to check it. On the contrary, by giving each side in the political fight a "reasonable challenge" and thereby facilitating disputes over rule-making, CBA is likely on balance to delay more regulation than it spurs, favoring the status quo and stymieing regulatory innovation. In this sense, CBA is decidedly anti-regulatory.[159]

E. Resuscitating CBA: Reprise

Having demonstrated that CBA cannot perform the function for which it was intended—providing a reasoned basis for an ultimate decision—Professor Sunstein searches for some new solution or new perspective he can say CBA brings to the table. In one such attempt, for example, he

158. The Clinton Administration promulgated the 10-micrograms-per-liter standard just before leaving office in January 2001. *See supra* note 108 and accompanying text. The AEI-Brookings Joint Center for Regulatory Studies published the Burnett and Hahn study attacking that standard the same month. *See* Burnett & Hahn, *supra* note 114. Two months later, the Bush EPA suspended the rule for further study. *See supra* note 110.

159. There are also other practical grounds on which Professor Sunstein's claim that CBA is value-neutral may be disputed. First, because the benefits of regulation are generally harder to quantify than the costs, the benefits tend to be under-counted. *See* Ackerman & Heinzerling, *supra* note 146, at 1579; *see also* Frank, *supra* note 152, at 928 (calling this effect "status quo bias"). Indeed, a recent study of 55 CBAs of federal regulations found that while all CBAs monetized at least some costs, half failed to monetize any benefits. *See* Hahn & Dudley, *supra* note 103, at 10. In a particularly stark example of undercounting benefits, the U.S. Fish & Wildlife Service recently removed all discussion of benefits from the public version of a CBA evaluating the impacts of designating 18,000 miles of streams as critical habitat for a threatened fish species. That portion of the analysis estimating the costs at $230 million to $300 million was released to the public and widely reported in the media. But an additional 55 pages prepared by the consultant and detailing benefits of $215 million were omitted from the published version on the ground that these findings were unreliable. Blaine Harden, *Trout Protection Data Questioned: Costs But No Benefits Published*, Wash. Post, April 17, 2004 at A3.

Second, because CBA demands a showing that benefits exceed costs before regulation can go forward, it effectively puts the burden of the considerable scientific uncertainty frequently associated with estimating regulatory benefits on those seeking to promote regulation. Additionally, as Professor Sunstein acknowledges, , because estimates of the costs of regulations are often provided by the industry facing regulation, they are often artificially, self-servingly high. *See* RISK & REASON, *supra* note 1, at 130, 253; Ackerman & Heinzerling, *supra* note 146, at 1580; Thomas O. McGarity, *Regulatory Analysis and Regulatory Reform*, 65 TEX. L. REV. 1243,1285 (1987).

tells us: "A real virtue of CBA is that it helps to explain exactly why the choice of regulation, in the case of arsenic, is genuinely difficult."[160]

Perhaps aware that an appreciation for the difficulty of the task may not be enough to carry the day, Professor Sunstein also comes up with some other reasons to rescue CBA from the dustbin. He describes several new more flexible and creative approaches to drinking water regulation that he contends CBA helps to illuminate. These include: 1) targeting regulations to particular localities so that the arsenic standard is stricter in localities where pollution control is cheap and more lenient in localities where pollution control is expensive; 2) a system of tradeable arsenic emissions permits; 3) a system of arsenic subsidies, under which the government subsidizes communities where the costs of reducing arsenic levels is high; and 4) an information disclosure requirement mandating the publication of arsenic levels by water companies.[161] While all of these suggestions may have merit, they have nothing to do with CBA. That is, one need not have conducted a CBA to think of them.

In attributing these ideas to CBA, Professor Sunstein is eliding two distinct aspects of environmental regulation: ends and means. On the one hand, environmental regulation must grapple with the thorny question of ends: How much pollution is too much, and therefore at what level should pollution control standards be set? This is the question that CBA is designed to address, and the question that EPA sought to answer in setting the standard for arsenic under the Safe Drinking Water Act. A separate question concerns means: What regulatory mechanisms should we employ to achieve a given amount of pollution reduction?[162] It is the latter question, not the former, to which Professor Sunstein's flexible and creative approaches to drinking water regulation are directed.[163] These approaches are generally aimed at achieving a pre-determined level of pollution reduction at a lower cost. To the extent that CBA might be said to heighten an agency's concern for the costs of regulation, perhaps it could spur regulators to look for such creative cost-saving approaches.

160. RISK & REASON, *supra* note 1, at 190.

161. *Id.* at 184–89. Professor Sunstein also discusses these alternative methods of regulation more generally in the final chapter of *Risk and Reason*, entitled "Tools." *Id.* at 251–88.

162. *See* Driesen, *supra* note 7, at 565; DANIEL A. FARBER, ECO-PRAGMATISM 7 (1999).

163. While tradeable emissions permits or targeted regulation might help to achieve a particular level of pollution reduction at a lower cost, these mechanisms do not help to determine the level of pollution reduction that regulation should aim for. Under an emissions trading system, for example, the government must still determine the number of permits to be issued, which will determine the overall amount of pollution reduction achieved.

But this connection is tenuous at best. One certainly need not have used CBA to answer the ends question in order to look for flexible and cost-saving means for achieving a particular level of pollution reduction.[164] Moreover, the approaches that Professor Sunstein identifies are all sufficiently recognized and accepted in the regulatory community that one could confidently expect them to be part of any discussion of regulatory innovations regardless of whether that discussion began with CBA.[165]

Finally, Professor Sunstein closes his discussion of the arsenic rule with the suggestion that when EPA is done performing a CBA and fending off all the ensuing challenges from lawyers and interest groups, it should also conduct an analysis of distributional impacts.[166] This merely serves to point out another major weakness of CBA: its failure to address how costs and benefits are distributed among different groups in society.[167] This limitation of CBA is well-recognized; indeed CBA does not purport to address distributional issues, which are clearly outside welfare economics' concern with aggregate social welfare.[168] But in practice, distributional issues are often at the heart of the most heated controversies over environmental regulation.[169] Property owners affected by land use restrictions, for example, often argue that they have been unfairly singled out to bear a disproportionate share of the burden of environmental laws intended to protect the public at large.[170] Opposition to the arsenic rule also seems to be rooted, at least in part, in such

164. *See* Driesen, *supra* note 7, at 565 ("CBA should not be confused with a cost-effectiveness analysis"—if one "wants to determine the most cost-effective method of achieving [a particular regulatory] goal, there is no need to compare costs with benefits.").

165. *See, e.g.,* Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law*, 37 STAN. L. REV. 1333 (1985); Robert N. Stavins & Bradley W. Whitehead, *Dealing with Pollution: Market-Based Incentives for Environmental Protection*, ENVIRONMENT (Sept., 1992); Cass R. Sunstein, *Informational Regulation and Informational Standing: Akins and Beyond*, 147 U. PA. L. REV. 613 (1999); Mark A. Cohen, *Information as a Policy Instrument in Protecting the Environment: What Have We Learned?,* 31 ENVTL. L. REP. 10425 (2001).

166. RISK & REASON, *supra* note 1, at 189.

167. *See* David M. Driesen, *Distributing the Costs of Environmental, Health, and Safety Protection: The Feasibility Principle, Cost-Benefit Analysis, and Regulatory Reform,* 32 B.C. ENVTL. AFF. L. REV.1 (2004); *see also* Parker, *supra* note 146, at 1407 (CBAs capable in principle of considering distributional concerns but rarely, if ever, do in practice).

168. *See, e.g.,* MISHAN, supra note 68, at 392–93 (1976); LESTER LAVE, THE STRATEGY OF SOCIAL REGULATION 25 (1981).

169. *See* LEIGH RAYMOND, PRIVATE RIGHTS IN PUBLIC RESOURCES: EQUITY AND PROPERTY ALLOCATION IN MARKET-BASED ENVIRONMENTAL POLICY 1 (2003) ("Environmental issues are distributive issues.").

170. *See, e.g.,* NANCIE AND ROGER MARZULLA, PROPERTY RIGHTS: UNDERSTANDING GOVERNMENT, TAKINGS, AND ENVIRONMENTAL REGULATION (1997).

concerns. While the average per-family cost of the new standard is "low"—less than $30 per year[171]—those opposed to it aim their criticism at the disproportionate burden it imposes on certain small rural (and likely low income) communities, which might end up paying as much as $325 per year under the new rule.[172] Yet CBA itself does nothing to illuminate this distributional impact.[173] Accordingly, at least for those regulatory decisions that spark controversy rooted in distributional concerns, one has to wonder whether CBA is the right decision-making tool.

F. Picking up the Pieces

Decades of debate about CBA have produced a set of well-established critiques. While one obviously need not agree with these critiques, any attempt to provide a normative justification for CBA must at least answer them. Professor Sunstein's "pragmatic" defense of CBA quite plausibly declines to take on the external critiques, for which he himself has been such an eloquent spokesperson in the past. His analysis ultimately suffers, however, from a failure to adequately respond to the internal critiques, particularly their concern with indeterminacy. Throughout much of both books, Professor Sunstein avoids the issue of indeterminacy by reasoning from hypotheticals that conveniently assume away the problem. Ironically, however, when he tests his theories against a real-world example of CBA, he finds indeterminacy of a startling magnitude. With the benefits of the arsenic regulation ranging anywhere from $13 million to $3.4 billion, meaningful comparison against costs of $210 million is utterly impossible.

Undaunted, Professor Sunstein tries to resuscitate CBA by assigning it a new function. Even if it cannot provide a meaningful comparison of costs and benefits, it can inform the decision-making process by illuminating underlying value choices. Upon reflection, however, Professor Sunstein's attempt at resuscitation seems unlikely to carry the day. CBA is a terrible tool for illuminating value choices. No matter how many qualifiers or disclaimers are attached, numbers create a false impression of scientific accuracy and objectivity and inevitably divert attention away from underlying assumptions and value choices. Moreover, numbers have a tendency to express concepts in a rarified and technical language inaccessible to lay people. Accordingly, the second

171. RISK & REASON, *supra* note 1, at 183.

172. *Id.* at 162.

173. *See id.* at 189 (calling the distributional question a "significant gap" in the arsenic CBA).

prong of Professor Sunstein's "pragmatic" defense of CBA—that it will promote transparency—fails in the face of the indeterminacy he has discovered.

The first prong of Professor Sunstein's "pragmatic" defense follows suit. An indeterminate CBA will not rationalize government decision-making and insulate it from the pressures of interest groups that exploit the public's inability to rationally evaluate risks. Instead, an indeterminate CBA will broaden, rather than constrain, agency discretion and will be highly manipulable by both sides, thus exacerbating the problems of irrational government decision-making and undue interest group pressure.

Where does this leave us? How should we decide how stringent to make our environmental, health and safety standards if not by comparing costs and benefits? Professor Sunstein creates the impression that even if CBA is imperfect, there are no viable alternatives. He purports to consider the alternatives to CBA, but those he selects—"pollution prevention," "the precautionary principle," and "sustainable development"—are straw men that he handily knocks down.[174] These are not so much decision-making standards as broad background principles, which may be wisely brought to bear on particular controversies but which do not purport to answer the standard setting question: How much environmental degradation should we allow? As such, they cannot, in themselves, perform the task that CBA sets out to accomplish.

Viable alternatives to CBA do exist, however. Feasibility standards, qualitative cost-benefit balancing, and absolute standards have long, proven track records in environmental, health, and safety legislation. Indeed, in crafting our environmental laws, Congress in almost every instance[175] rejected CBA in favor of one of these alternatives, based on exactly the same kinds of concerns described above.[176] Members of

174. THE COST-BENEFIT STATE, *supra* note 1, at 22–25; RISK & REASON, *supra* note 1, at 100–06.

175. The Federal Insecticide, Fungicide and Rodenticide Act Amendments of 1972 (FIFRA), 7 U.S.C. §§ 136-136y (2003), the 1976 Toxic Substances Control Act (TSCA), 15 U.S.C. §§ 2601-92 (2003), and the Safe Drinking Water Amendments of 1996, 42 U.S.C.§ 300g-1(b)(3) (2003), are the only prominent exceptions. FIFRA and TSCA have been called "two of the least successful statutes of the environmental decade." McGarity *supra* note 25, at 2343. The cost-benefit criterion has arguably made them unwieldy and difficult to administer, producing exactly the kind of regulatory paralysis that Congress worried about in other contexts. *Id.*

176. *See* SHAPIRO & GLICKSMAN, *supra* note 7, at 46–72 (drawing on American philosophical tradition of pragmatism and concept of "bounded rationality" to defend Congress' frequent rejection of CBA).

Congress worried about the indeterminacy problem—that pervasive scientific uncertainties and the difficulties inherent in attempting to monetize intangible values would make any meaningful quantification and comparison of costs and benefits impossible.[177] They worried that agencies would spin their wheels and spend vast resources chasing the holy grail of the accurate, uncontestable, and determinate CBA, and produce instead only regulatory paralysis.[178] Yet, despite their long pedigree, Professor Sunstein gives these other standards no credence as credible alternatives to CBA. Instead, he brushes them off as quaint but outmoded relics of "1970s environmentalism."

But bell-bottoms are back in style and, as I have argued elsewhere, 1970s environmentalism should not be so quickly dismissed.[179] "Short-cut" standards—like feasibility standards and qualitative cost-benefit balancing—ensure that regulations are not unreasonably costly. But, recognizing that a rough approximation of such matters is the best we can hope for,[180] they do so without engaging in the dangerously misleading, highly resource-intensive, and ultimately futile enterprise of quantifying and monetizing all relevant values.[181] Thus, "feasibility" or "technology-based" standards focus only on the costs side of the cost-benefit equation, setting pollution limits at the lowest level technologically and economically feasible (or conversely, setting the costs at the upper limit of what we can "afford") without attempting to monetize regulatory benefits.[182] Qualitative cost-benefit tests simply call for a rough apples-to-oranges balancing aimed not at a precise

177. *See* Sinden, *supra* note 12, at 184–85.

178. *See* Howard Latin, *Ideal Versus Real Regulatory Efficiency: Implementation of Uniform Standards and "Fine-Tuning" Regulatory Reforms*, 37 STAN. L. REV. 1267, 1283–84 (1985) ("Congress recognized the existence of pervasive scientific uncertainty when it enacted the principal regulatory statutes, and nonetheless chose to emphasize the need for prompt injury prevention over the need for an optimal balance between regulatory benefits and costs.").

179. *See* Sinden, *supra* note 12, at 184–92.

180. Many advocates of CBA, including Professor Sunstein, admit that CBA itself is no more than an imperfect tool, providing at best a rough approximation of the optimally efficient outcome it purports to identify. *See supra* notes 67 to 69 and accompanying text; Adler & Posner, *supra* note 69.

181. For a more extensive discussion of the pervasive use of "short-cut" standards in American environmental law, see Sinden, *supra* note 12 at 184–92.

182. *See* Driesen, *supra* note 7; Wendy A. Wagner, *Innovations in Environmental Policies: The Triumph of Technology-Based Standards,* 2000 U.ILL. L. REV. 83; Sidney A. Shapiro & Thomas O. McGarity, *Not So Paradoxical: The Rationale for Technology-Based Regulation,* 1991 DUKE L. J. 729.

calculation of net social cost, but at simply ensuring that costs and benefits are not grossly disproportionate.[183]

In other instances, Congress has opted for absolute standards, which look only at impacts on human or ecological health and prohibit any consideration of costs.[184] Such standards are inevitably tempered by the political process and thus rarely deliver results that are actually absolute. Nonetheless, by providing legal leverage to the otherwise often powerless and diffuse interests favoring environmental protection, they perform a crucial power-shifting function in the political arena. By providing diffuse public interests a seat at the negotiating table, they begin to level a playing field that is otherwise often skewed in favor of concentrated monied corporate interests.[185] This dynamic leads to politically negotiated outcomes that, while far from perfect, are closer to those that an ideally functioning democratic process would produce. Such standards are particularly appropriate where large-scale, irreversible ecological harm is at stake, because the inadequacies of the political process are especially acute where poorly understood ecological processes and harm to future generations are implicated.[186]

Thus, the dangers posed by the indeterminacy of CBA—as vividly illustrated by Professor Sunstein's analysis of the arsenic rule—cast significant doubt on the vision he offers of CBA as a panacea for irrational government decision-making and suggest that alternatives may be well worth exploring. But what about Professor Sunstein's

183. *See, e.g.,* Weyerhauser v. Costle, 590 F.2d 1011, 1045 n.52 (D.C. Cir. 1978). As Professor Sunstein admits, such standards have been wildly successful, even by cost-benefit standards. *See* THE COST-BENEFIT STATE, *supra* note 1, at 3–4. A recent OMB report estimated the total benefits of federal regulations promulgated over the past ten years at $146 billion to $230 billion and total costs at $36 billion to $42 billion. Office of Management and Budget, Office of Information and Regulatory Affairs, *Informing Regulatory Decisions: 2003 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* 3 (2003), *available at* http://www. whitehouse.gov/omb/inforeg/2003_cost-ben_final_rpt.pdf.

184. Two prominent examples are the Endangered Species Act, 16 U.S.C. §§1531–44 (2003), and the provision for the establishment of National Ambient Air Quality Standards under the Clean Air Act, 42 U.S.C. § 7409 (2003).

185. CBA, as I argue above, not only fails to address this power imbalance, but tends to exacerbate it by rendering the decision-making process particularly vulnerable to manipulation by powerful monied interests and inaccessible to the general public.

186. Professor Sunstein actually concedes that absolute standards rather than CBA may be appropriate where "genuinely irreversible losses" are at stake. THE COST-BENEFIT STATE, *supra* note 1, at 68. But he appears to view this as a narrow exception to the general rule of CBA, probably not extending beyond the special case of the Endangered Species Act. I suspect, on the other hand, that "genuinely irreversible" ecological loss is actually implicated by a far broader range of environmental legislation.

descriptive claim? Is he right that the Cost-Benefit State is here, whether we like it or not? The next section addresses this question.

VI. DESCRIPTIVE CLAIMS

Are we witnessing the emergence of a new "Cost-Benefit State" as Professor Sunstein claims? There is no question that since President Reagan codified CBA in an executive order in 1981, there has been increasing reliance on this decision-making tool by the executive branch.[187] The case that Congress has been sold on the idea, however, is much weaker, and Professor Sunstein does not spend a lot of time trying to convince us of that fact, other than to point out how close Congress came to passing a CBA super-mandate in 1995 and to cite its recent inclusion of a CBA mandate in the Safe Drinking Water Amendments of 1996.[188] Professor Sunstein's central project is to convince us that the federal courts are developing a set of cost-benefit default principles that favor the use of CBA by federal agencies. In this section, I take a close look at the cases he cites in support of this claim and conclude that those of us who remain skeptical of CBA can breath a sigh of relief: the Cost-Benefit State is not nearly as close as Professor Sunstein contends.[189] Particularly in light of the Supreme Court's 2001 decision in *Whitman v. American Trucking*, his descriptive claim has lost much of its force.[190]

A. De Minimis Exceptions and Health-Health Trade-offs

Professor Sunstein's "cost-benefit default principles" cover a range of decision-making standards besides CBA itself. He begins by describing presumptions favoring two decision-making standards that are far less

187. *See* Regulatory Working Group, Office of Management and Budget, *Economic Analysis of Federal Regulations under Executive Order 12866* § III(B)(4) (Jan. 11, 1996), *available at* http://www.whitehouse.gov/omb/inforeg/riaguide .html#iii; MORGENSTERN, *supra* note 103.

188. In fact, Congress has rarely adopted CBA. The Safe Drinking Water Amendments are perhaps more accurately viewed as an anomaly. Professor Sunstein fails to mention the fact that another major piece of environmental legislation passed the same year, the Food Quality Protection Act, eschewed CBA. *See supra* note 25. The weakness of Professor Sunstein's assertion that Congress has embraced CBA undermines to some extent his claim that the courts should adopt a default principle in favor of CBA.

189. For another sceptical view of Professor Sunstein's default principles, see David M. Driesen, *Loose Canons: Statutory Construction and the New Nondelegation Doctrine,* 64 U. PITT. L. REV. 1, 31–33 (2002).

190. The article in which Professor Sunstein first made this argument, and on which much of The Cost-Benefit State is based, was published just before the Supreme Court issued its decision in *American Trucking*. *See* Cass R. Sunstein, *Cost-Benefit Default Principles*, 99 MICH. L. REV. 1651 (2001).

demanding and controversial than CBA but that he views as related. He refers to these as the "de minimis risk exception" and the idea of "health-health trade-offs."[191] He then works his way up to the more ambitious claim that courts are actually employing default principles that favor agency use of CBA itself.

The decision-making standard that Professor Sunstein refers to as the "de minimis risk exception" requires agencies to regulate only significant risks, or conversely, to exempt de minimis risks from regulation.[192] This standard, according to Professor Sunstein, arises from a cost-benefit sensibility—a concern that where the risks to be controlled and therefore the benefits of regulation are extremely small, chances are high that the costs outweigh those benefits. The second standard, which he refers to as "health-health trade-offs" or "substitute risks," requires agencies to consider whether a regulation controlling one risk creates a substitute risk, and, if so, to discount the benefits of controlling the first risk by the magnitude of the substitute risk.[193] This standard shares CBA's concern with trade-offs and balancing countervailing effects, and, in its extreme form, can actually be used to bring CBA itself in the back door.[194]

Professor Sunstein begins with several cases from the D.C. Circuit that seem to authorize agencies to make de minimis exceptions to regulatory requirements even when no language in the statute authorizes such exceptions. In *Monsanto Co. v. Kennedy*,[195] the court rejected an FDA rule banning as a "food additive" a chemical thought to migrate from plastic bottles into drinks in minute amounts below the threshold of detectability, despite statutory language that under a literal reading would

191. *See* THE COST-BENEFIT STATE, *supra* note 1, at 33–40; RISK & REASON, *supra* note 1, 193–99.

192. *See* THE COST-BENEFIT STATE, *supra* note 1, at 13, 33–37; RISK & REASON, *supra* note 1, at 193–94.

193. *See* RISK & REASON, *supra* note 1, at 133–52.

194. This is accomplished by the introduction of two postulates: 1) poverty causes health risk, and 2) the costs of regulation increase poverty by depressing wages and increasing prices. Then, the costs of regulation can be translated into a "substitute risk" and weighed against the benefits. Since, under the "health-health trade-off" rule, these health risks must be traded off or balanced against the health gains associated with a regulation, these postulates lead to quantifying the costs of a regulation and balancing them against the benefits, i.e. CBA. *See* RISK & REASON, *supra* note 1, at 136–41; Ralph L. Keeney, *Mortality Risks Induced by the Costs of Regulations*, 8 J. RISK & UNCERTAINTY 95 (1994); ROBERT HAHN ET AL., DO FEDERAL REGULATIONS REDUCE MORTALITY? (2000). The D.C. Circuit has rejected this theory, however. *See infra* note 214. *See also* Thomas O. McGarity, *A Cost-Benefit State,* 50 ADMIN. L. REV. 7, 42–49 (1998). For a critique of the idea that consumers and employees pay the price of pollution control, see Driesen, *supra* note 7, at 568, 573–74.

195. 613 F.2d 947 (D.C. Cir. 1979).

appear to require such regulation. The court held that there was "latitude inherent in the statutory scheme to avoid literal application of the statutory definition of 'food additive' in those de minimis situations that . . . clearly present no public health or safety concerns."[196] In *Alabama Power Co. v. Costle*,[197] a decision upholding EPA's authority to create categorical exemptions from the Prevention of Significant Deterioration Program under the Clean Air Act, the court recognized an "agency power, inherent in most statutory schemes, to overlook circumstances that in context may fairly be considered de minimis."[198]

Thus, Professor Sunstein's claim that the D.C. Circuit at least has adopted a "default principle" allowing agencies to apply de minimis risk exceptions, even when not explicitly authorized to do so by statute, seems credible.[199] His next claim is less convincing, however. He contends that the Supreme Court's Benzene decision[200] employed a default principle actually *requiring* agencies to employ de minimis exceptions. Here, Professor Sunstein runs into a problem that plagues much of the rest of his analysis. While the *Monsanto* and *Alabama Power* courts did seem to be applying a general canon of construction to go beyond what the particular statute at issue appeared to authorize, the plurality in the Benzene case at least ostensibly grounded its decision quite firmly in the particular statutory language before the Court. Thus, it may be untenable to read the case as anything more than a particular reading of a particular statute.

The Benzene plurality read the statutory requirement that OSHA promulgate standards "reasonably necessary or appropriate to provide safe or healthful employment,"[201] as requiring the agency to make a threshold determination that a particular substance rendered the workplace not "safe" within the meaning of the statute. Reasoning that "safe" does not mean "risk free," the Court concluded that in order for a workplace to be not "safe" there must be some "significant risk" present.[202] Therefore, the Court held, unless OSHA made a threshold

196. *Id.* at 954.

197. 636 F.2d 323 (D.C. Cir. 1979).

198. *Id.* at 360.

199. Professor Sunstein explains the courts' refusal to allow agencies to create a de minimis exception to the Delaney Clause as an example of a situation in which Congress had unambiguously banned such exceptions in the statute so that the default principle would not apply. THE COST-BENEFIT STATE, *supra* note 1, at 34; RISK & REASON, *supra* note 1, at 194. *See* Les v. Reilly, 968 F.2d 985 (9th Cir. 1992); Public Citizen v. Young, 831 F.2d 1108 (D.C. Cir. 1987).

200. Indus. Union Dep't, AFL-CIO v. Am. Petrol. Inst., 448 U.S. 607 (1980).

201. 29 U.S.C. § 652(8) (2003).

202. 448 U.S. at 642.

finding of "significant risk" (indicating that the workplace was not "safe" within the meaning of the statute), it was not authorized to regulate the substance at issue.[203] Thus, the plurality's holding can easily be read as grounded squarely in the particular statutory language at issue, specifically the meaning of the term "safe," and not on some general rule of interpretation or "default principle."

Admittedly, only the plurality signed onto this statutory interpretation argument. Justice Rehnquist, who provided the fifth vote, did not buy it. He agreed with the four dissenters that the statute was ambiguous but voted with the plurality to remand OSHA's benzene rule on nondelegation grounds.[204]

Perhaps Professor Sunstein's argument is best understood as taking the dissent's view that the plurality's ostensible reliance on the statutory language is specious.[205] It would follow from that position that the holding makes more sense as an application of a general default principle. Certainly there is language in the Court's opinion that supports Professor Sunstein's view that the plurality actually was motivated in part by a belief that, as a matter of general principle, regulations should achieve a rough proportionality between costs and benefits. The plurality opinion, for example, expressed concern that in the absence of a significant risk requirement, OSHA would have "power to impose enormous costs that might produce little, if any, discernable benefit."[206]

Even if we might read the Benzene Case as evidencing an emerging cost-benefit sensibility on the Supreme Court, however, any such trend appears to have hit a brick wall the following term with the Cotton Dust Case.[207] There, the Supreme Court revisited the Occupational Safety and Health Act ("OSH Act") and, taking up the question left open the year before in the Benzene case, decided that the arguably ambiguous language of the Act did *not* require the agency to engage in CBA. In sweeping language that seems to cut directly against Professor Sunstein's theory, the Supreme Court said: "When Congress has intended that an agency engage in cost-benefit analysis, it has clearly indicated such intent on the face of the statute."[208] This looks suspiciously like the reverse of a cost-benefit default principle. Strangely, however, Professor

203. *Id.*
204. *Id.* at 672 (Rehnquist, J., concurring).
205. *See id.* at 688 (Marshall, J., dissenting).
206. *Id*. at 645.
207. Am. Textile Mfrs. Inst. v. Donovan, 452 U.S. 490 (1981).
208. 452 U.S. at 510.

Sunstein barely discusses this seemingly important case. He makes brief reference to it following his discussion of the Benzene case, but essentially shrugs it off. "This holding raises many questions," he tells us, but "[f]or the moment, the key point is that the [Court reiterated its holding in the Benzene Case] that insignificant risks may not be regulated at all."[209] Though seeming to imply that he will return to this case later, he never mentions it again.

Professor Sunstein then moves on to discuss cases he views as employing default principles by precluding regulation where the agency cannot show some benefit, and authorizing (or even requiring) agencies to employ health-health trade-offs. Several of the D.C. Circuit cases he identifies, however, actually seem on closer inspection to be better explained as simple, straightforward applications of traditional principles of statutory construction and administrative law.

The D.C. Circuit's opinion in *American Trucking,*[210] for example, upheld an industry challenge to EPA's ozone standard under the Clean Air Act on the ground that EPA had failed to consider the fact that ground level ozone can produce certain health benefits (protection from skin cancer and cataracts) as well as health risks. The Clean Air Act directs EPA, in setting ambient standards, to look at "all identifiable effects on public health or welfare which may be expected from the presence of [the] pollutant in the ambient air."[211] The Court unsurprisingly held that a "straightforward reading" of this language unambiguously directed EPA to consider all of the "effects" of a pollutant on public health, both positive and negative.[212] Professor Sunstein somehow finds this explanation implausible, however, contending that the statutory reference to "effects" is more naturally read to refer only to negative effects and that the court's decision therefore must be construed as applying a general default principle in favor of health-health trade-offs.[213] But it is just as plausible, if not more so, to view this holding as a simple, "straightforward reading" of the statutory language at issue.[214]

209. THE COST-BENEFIT STATE, *supra* note 1, at 36.

210. American Trucking Ass'ns v. EPA, 175 F.3d 1027, 1051–52 (D.C. Cir. 1999), *reversed on other grounds sub nom.* Whitman v. Am. Trucking Ass'ns, 531 U.S. 457 (2001).

211. 42 U.S.C. § 7408(a)(2) (2003); *see also* 42 U.S.C. § 7409(b)(1) (2003).

212. 175 F.3d at 1051–52.

213. *See* THE COST-BENEFIT STATE, *supra* note 1, at 38; RISK & REASON, *supra* note 1, at 196–97.

214. Nine years earlier, in a case challenging EPA's ambient standard for particulate matter under the Clean Air Act, an industry group tried to make the far more ambitious claim that the principle of health-health trade-offs required EPA in setting the standard to consider the health

Chemical Manufacturers Ass'n v. EPA,[215] reviewed an EPA regulation that would have required hazardous waste combustors to either install expensive new pollution control equipment or stop burning hazardous wastes altogether.[216] EPA anticipated that professional hazardous waste disposal companies that operated large commercial incinerators would comply by installing new equipment, while other facilities that burned small amounts of hazardous waste incidental to some manufacturing processes would choose instead to stop burning the waste themselves and pay to send it to one of the commercial incinerators.[217] Pursuant to a provision in the Clean Air Act requiring EPA to set compliance dates for such regulations "which shall provide for compliance as expeditiously as practicable,"[218] EPA created a bifurcated schedule under which combustors electing to install the new equipment would have three years to comply, while those choosing to simply cease burning hazardous waste would have to do so within two years.[219] This bifurcated schedule seemed consistent with the statutory language, since it would be practicable for those electing to cease combustion to comply more quickly than those electing to install expensive new equipment. An industry association sued, however, pointing out that the bifurcated schedule would produce no air quality benefit, since those who adhered to the earlier deadline would simply send their hazardous waste to the commercial incinerators, which would still be subject to the more lenient standards for another year anyway. The D.C. Circuit vacated the compliance schedule on that basis, even though nothing in the statute explicitly required the schedule to produce some discernable benefit.[220]

It is possible to read this decision—as Professor Sunstein does—as applying a general "default principle" that regulations must produce some benefit. But it is also easily explainable as a garden-variety arbitrary-and-capricious case, applying well-established and not particularly interesting principles of administrative law. The court seemed to rest its holding in large part upon the fact that the agency had

effects of the unemployment that would be caused by the economic costs of the regulation. NRDC v. EPA, 902 F.2d 962 (D.C. Cir. 1990); *see supra* note 194. The three judges on the D.C. Circuit panel hearing the case unanimously rejected the argument, calling it "entirely without merit" and identifying it as an attempt to make an end-run around the circuit's earlier holding prohibiting EPA from considering costs in setting National Ambient Air Quality Standards. 902 F.2d at 973.

215. 217 F.3d 861 (D.C. Cir. 2000).

216. *Id*. at 863.

217. *Id.*

218. 42 U.S.C. § 7412(i)(3)(A) (2003).

219. 217 F.3d at 863.

220. *Id.* at 867.

actually made a finding that the regulation would produce benefits but then had provided no evidence to back that finding up.[221] Indeed, the court made special note of the fact that counsel for the agency had apparently conceded at oral argument that there would be no benefit from the regulation.[222] Accordingly, this is a classic case of arbitrary and capricious agency action under the well-worn standard set out in the *Motor Vehicle* case:[223] an agency failing to provide a reasoned basis for decision in the record, failing to provide "a rational connection between the facts found and the choice made," and "offer[ing] an explanation for its decision that runs counter to the evidence."[224] No "cost-benefit default principle" is necessary to explain this ruling.

In a similar vein, Professor Sunstein holds up the decision in *Competitive Enterprise Institute v. NHTSA*[225] as an example of a court applying a default principle in favor of health-health trade-offs.[226] In that case, the D.C. Circuit remanded a CAFE[227] standard set by the National Highway Traffic Safety Administration (NHTSA) for the agency's failure to adequately consider the adverse health effects that would be imposed by a stricter fuel efficiency standard that resulted in the manufacture of smaller, less safe cars. But this case does not stand for the proposition that, in the face of an ambiguous statute, an agency must consider health-health trade-offs. There was no problem of statutory ambiguity here. No one argued that the agency did not have to consider safety trade-offs in setting CAFE standards. The agency itself acknowledged that safety concerns should be part of its analysis of whether the standard was "feasible" within the meaning of the statute.[228] The court's concern was not with the agency's failure to consider health-health trade-offs, but rather with the manner in which it conducted that analysis. Again, the case is best read as a straightforward application of the arbitrary-and-capricious test. The court remanded the rule because the agency stated that there would be no safety impacts but then failed to produce evidence to support that assertion—i.e, it failed to provide a

221. *Id*. at 865.

222. *Id.*

223. Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto Ins. Co., 463 U.S. 29 (1983).

224. 463 U.S. at 43. *See* Chemical Mfrs., 217 F.3d at 866 (quoting *Motor Vehicle*).

225. 956 F.2d 321 (D.C. Cir. 1992).

226. THE COST-BENEFIT STATE, *supra* note 1, at 38–39; RISK & REASON, *supra* note 1, at 197.

227. "CAFE" stands for "corporate average fuel economy." The Energy Policy and Conservation Act, 15 U.S.C. § 2001, *et seq*. (2003), requires the NHTSA to set such standards for each model year and requires car manufacturers to keep the average fuel economy of its fleet at or above that standard.

228. 956 F.2d at 322.

"rational connection between the facts found and the choice made."[229] In other words, in a classic case of arbitrary and capricious rulemaking, the agency "fudged the analysis."[230]

In sum, while Professor Sunstein makes a plausible claim that the D.C. Circuit, at least, has adopted a default principle *allowing* an agency to adopt a de minimis risk exception where the statute is ambiguous, his claim that the Supreme Court adopted an aggressive version of this rule *requiring* a de minimis risk exception in the face of statutory ambiguity is less convincing. Additionally, his contention that similar default principles authorize or require agencies to refrain from regulating in the absence of some discernable benefit and to employ health-health trade-offs seems to misconstrue decisions that are more plausibly read as simply applying straightforward and uncontroversial principles of statutory construction and administrative law. The next section explores his claim of an emerging default principle favoring the consideration of costs or full-blown CBA—a claim that has lost considerable force since the Supreme Court's decision in *American Trucking*.

B. Consideration of Costs and Cost-Benefit Analysis: The Problem of *American Trucking*

Professor Sunstein is able to identify several cases from the D.C. Circuit that do seem to employ a default principle favoring agency consideration of costs or use of CBA in the face of ambiguous statutory directives. *Michigan v. EPA*[231] and the 1987 *NRDC v. EPA* case[232] both interpreted provisions of the Clean Air Act that make no mention of costs and held that EPA could nonetheless take costs into account. The 1991

229. Motor Vehicle, 463 U.S. at 43.

230. 956 F.2d at 324. Similarly, Professor Sunstein's analysis of American Water Works Association v. EPA, 40 F.3d 1266 (D.C. Cir. 1994), reads more into the case than is there. *See* THE COST-BENEFIT STATE, *supra* note 1, at 39–40; RISK & REASON, *supra* note 1, at 198–99. This case involved an unusual situation under the Safe Drinking Water Act. Because of the special nature of lead contamination in drinking water, a literal application of the Act to lead would have required public water systems to undertake aggressive corrosion control techniques that might have reduced lead levels but would also have increased the levels of other contaminants in drinking water. *See* 40 F.3d at 1270. Rather than applying a new "cost-benefit default rule," however, this case simply involved a straightforward application of a traditional rule of statutory construction: "where a literal reading of a statutory term would lead to absurd results, the term simply has no plain meaning" and may be disregarded by the court. *Id*. at 1271.

231. 213 F.3d 663 (D.C. Cir. 2000).

232. 824 F.2d 1146 (D.C. Cir. 1987). I reference the year of this case to distinguish it from the 1991 case of the same name discussed below. *See infra* note 233. *See also* Johnston, *supra* note 152, at 1395–96 (arguing in favor of Sunstein's default rule favoring agency consideration of costs on the basis of a game-theoretic model of agency decisionmaking).

NRDC v. EPA case[233] and *International Union, UAW v. OSHA*[234] upheld agency use of CBA in the face of ambiguous statutory mandates.[235] Yet, this discussion inevitably proceeds under the considerable shadow cast by the Supreme Court's recent decision in *American Trucking*.[236] In that case, the Court roundly rejected an invitation to apply a cost-benefit default principle to the Clean Air Act, holding that, absent a clear statutory directive, it would *not* read an authorization to consider costs into the Clean Air Act's provision directing the EPA to establish National Ambient Air Quality Standards (NAAQS).[237]

Professor Sunstein finally gets around to the nagging question of *American Trucking* near the end of his exposition of the cost-benefit default principles with a section entitled "A Note on *American Trucking*."[238] He acknowledges that "[i]n a sense, the cost-benefit default principles were tested before the Supreme Court in . . .*[American*

233. 937 F.2d 641 (D.C. Cir. 1991). This case arguably provides only limited support for Professor Sunstein's "cost-benefit default principle" since the statute left resolution of the question at issue entirely to EPA's discretion, providing no guidance, let alone constraint. The question was whether EPA should count "fugitive emissions" from surface coal mines (dust kicked up from mining roads) in deciding whether to classify them as "major emitting facilities" under the Clean Air Act. The statute states simply that this question is to be determined "by rule by the Administrator." 42 U.S.C. § 7602(j) (2003).

234. 938 F.2d 1310 (D.C. Cir. 1991).

235. Not surprisingly, Professor Sunstein also cites Corrosion Proof Fittings v. EPA, 947 F.2d 1201 (5th Cir. 1991), as an example of a particularly "aggressive" application of a cost-benefit default rule. THE COST-BENEFIT STATE, *supra* note 1, at 48; RISK & REASON, *supra* note 1, at 203. This case certainly provides a remarkable example of a court taking up the cause of CBA and is probably unique as a case overturning a regulation for failure to conduct an adequately quantified CBA. But it hardly represents a trend. Moreover, it does not constitute a good example of a cost-benefit default principle for the simple reason that it interprets the Toxic Substances Control Act, 15 U.S.C. § 2601–2692 (2003), which clearly requires CBA. Indeed, this statute is often held up as the quintessential example of a CBA statute. *See, e.g.,* PERCIVAL ET AL., ENVIRONMENTAL REGULATION: LAW, SCIENCE AND POLICY 456 (3rd ed. 2000).

Professor Sunstein makes no mention of the Supreme Court's opinion in the Cotton Dust case in this context, *see supra* notes 207 to 209 and accompanying text, nor of the several circuit court decisions that have followed the high Court's lead, refusing to read a CBA mandate into ambiguous statutory language. *See* Central Arizona Water Conservation District v. EPA, 990 F.2d 1531 (9th Cir. 1993) (declining petitioners' invitation to read requirement that EPA perform CBA into Clean Air Act's PSD program); Southeast Queens Concerned Neighbors, Inc. v. EPA, 990 F.2d 1531, 1542 n.10 (9th Cir. 1993) (declining to read CBA mandate into statute requiring that Federal Aviation Administration's approval of airport transit project have "adequate justification").

236. 531 U.S. 457.

237. *Id.* at 468. This was not the first time the Supreme Court had read a provision of the Clean Air Act to preclude the consideration of costs. *See* Union Electric Co. v. EPA, 427 U.S. 246, 256 (1976) ("Congress intended claims of economic . . . infeasibility to be wholly foreign to the [EPA's] consideration of a state implementation plan.").

238. THE COST-BENEFIT STATE, *supra* note 1, at 49; RISK & REASON, *supra* note 1, at 204.

Trucking]."[239] And while he doesn't say so in so many words, the inescapable conclusion is that they failed the test. Nonetheless, he insists that *American Trucking* does not "throw the cost-benefit default principles into doubt,"[240] though he later acknowledges that, at least under a "broad" reading of the opinion, the default principles "are in some trouble."[241]

In an attempt to dampen the impact of *American Trucking*, Professor Sunstein reads the Court's holding as narrowly tied to the statutory language—a stark contrast to the broad reading he gives to the cases he views as endorsing the default principles. Thus, he contends that the statutory language at issue in *American Trucking* is particularly clear in disallowing consideration of costs by the EPA.[242] But this characterization is a little difficult to swallow in light of the fact that this language is virtually identical to the language at issue in the 1987 *NRDC v. EPA*[243] case, which he holds up as endorsing a default principle favoring the consideration of costs.[244] *American Trucking* construed a section of the Clean Air Act directing EPA to set NAAQS at a level "requisite to protect the public health with an adequate margin of safety."[245] *NRDC v. EPA* involved a section of the Clean Air Act directing EPA to set standards for hazardous air pollutants that "provide[] an ample margin of safety to protect the public health."[246] *NRDC v. EPA*'s reading of this language as ambiguous enough to *allow* consideration of costs is, to Professor Sunstein, evidence of a broad cost-benefit default principle, while the Supreme Court's opposite reading in *American Trucking* is simply a product of the specific statutory language.

There is considerable evidence in the *American Trucking* opinion, however, that the Supreme Court based its holding not on a narrow reading of the particular statutory language at issue, but on a presumption, at least with respect to the Clean Air Act, that is effectively the direct opposite of Professor Sunstein's cost-benefit default principle. That is, where the statutory language is ambiguous, the court should presume that Congress has *not* authorized the agency to consider costs.

239. *Id.*

240. THE COST-BENEFIT STATE, *supra* note 1, at 49; RISK & REASON, *supra* note 1, at 205.

241. THE COST-BENEFIT STATE, *supra* note 1, at 50.

242. THE COST-BENEFIT STATE, *supra* note 1, at 49; RISK & REASON, *supra* note 1, at 205.

243. 824 F.2d 1146.

244. *See* THE COST-BENEFIT STATE, *supra* note 1, at 46–47; RISK & REASON, *supra* note 1, at 201–02.

245. 42 U.S.C. § 7409(b)(1) (2003).

246. 42 U.S.C. § 7412(b)(1)(B) (2003).

Thus, Justice Scalia, writing for the majority said: "We have . . . refused to find implicit in ambiguous sections of the [Clean Air Act] an authorization to consider costs that has elsewhere, and so often, been expressly granted."[247]

In fact, Justice Breyer, who is probably the member of court most sympathetic to Professor Sunstein's ideas,[248] read the majority opinion this way—as applying a presumption that any authority to consider costs "must flow from a 'textual commitment' that is 'clear.'"[249] Indeed, he wrote separately specifically in order to express his contrasting position, which essentially endorsed Professor Sunstein's cost-benefit default principle: "I believe that, other things being equal, we should read silences or ambiguities in the language of regulatory statutes as permitting, not forbidding, [consideration of costs]."[250]

After a strained attempt to convince us that Justice Breyer was wrong—that the majority opinion in *American Trucking* did not actually reject his "cost-benefit default principle"—Professor Sunstein abruptly switches gears. Remember that his project in this section is supposed to be descriptive—to convince us that the courts are actually adopting the cost-benefit default principles. But when that claim flounders in the face of *American Trucking*, he switches back to a normative mode, arguing that the Supreme Court's rejection of a cost-benefit default principle in this case was wrong.[251]

Why it was wrong is not entirely clear. One reason seems to be the tautological contention that it would amount to a rejection of the cost-benefit default principle.[252] He also asserts that where Congress has left the cost question unresolved through ambiguous statutory language, agencies should be given discretion to fill the gap by considering costs if they choose.[253] But this, of course, begs the question of why the gap should be filled with a presumption in favor of considering costs rather than a presumption against it. At another point, he argues that *American Trucking* was wrong because agencies should be allowed to seek "rational regulation."[254] But again, this argument begs the central question of whether CBA actually promotes more rational regulation.

247. 531 U.S. at 467.
248. *See* STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE (1993).
249. 531 U.S. at 490 (Breyer, J. concurring) (quoting majority opinion 531 U.S. at 468).
250. *Id.*
251. THE COST-BENEFIT STATE, *supra* note 1, at 50.
252. *Id*.
253. *Id*. at 50–51.
254. *Id*. at 51.

Finally returning to his descriptive project, Professor Sunstein concludes with the startling and utterly unsupportable assertion that "the most reasonable reading of the [Supreme Court's] opinion [in *American Trucking*] is that the Court has explicitly embraced [cost-benefit default] principles."[255]

In sum, Professor Sunstein's claim of an emerging set of "cost-benefit default principles" heralding the arrival of the Cost-Benefit State in which all government actions are evaluated under the standard of CBA, seems, on closer inspection to be exaggerated. Many of the circuit court cases he cites either support a far more "modest"[256] default principle, such as the one allowing de minimis exceptions to risk regulation, or are easily explainable on other grounds as based on specific statutory language or on straightforward applications of classic principles of administrative law. But most startling is the fact that on two occasions, the so-called "cost-benefit default principles" have been explicitly tested in the Supreme Court, and on both occasions the high Court has roundly rejected them. The Court's holding in the Cotton Dust Case that Congress must use clear and explicit language if it intends an agency to engage in CBA and its holding in *American Trucking* that authorization for EPA to consider costs under the Clean Air Act must "flow from a textual commitment that is clear" seem to endorse, if anything, a default principle *disfavoring* CBA. Nonetheless, Professor Sunstein asks us to accept that the courts are moving inexorably toward adoption of a cost-benefit default principle. I, for one, am not holding my breath.

VII. CONCLUSION

If anyone could convince the liberal skeptics to jump aboard the cost-benefit bandwagon, surely it would be Cass Sunstein. By eloquently articulating the problem of incommensurability, he has already demonstrated that he understands what's wrong with CBA conceptually—why it is not an infallible scientific formula on which we can blindly depend to deliver the "correct" answer to every regulatory problem. For those of us who worry about incommensurability, his "pragmatic" defense of CBA is certainly more credible than the traditional economic defense of CBA as a method for ensuring social

255. *Id*.

256. *Id*. at 33 (referring to default rules allowing agencies to exempt de minimis risks from regulation or perform health-health trade-offs as "modest rules because they fall far short of calling for full-fledged cost-benefit analysis").

welfare maximization. Professor Sunstein does not try to argue that CBA will always deliver the right answer. Rather, he views it as a useful tool for invigorating and informing democratic deliberation. Indeed, Professor Sunstein shares with some of CBA's harshest critics the view that democratic deliberation, not welfare economics, is ultimately the appropriate source of authority for regulatory decision-making. Thus, unlike many other proponents of CBA, Professor Sunstein views it as a means to a more robust and intelligent democratic debate, not as an end in itself.

Despite his initial success at thoughtfully and credibly removing from the debate some of the most controversial elements of the traditional defense of CBA, however, Professor Sunstein's normative defense ultimately fails. It fails because he does not take seriously the central concern of the internal critiques—that is, the inevitable indeterminacy of CBA. Certainly, Professor Sunstein's brand of CBA can tolerate a little indeterminacy, since the point is not to deliver answers but to inform debate. But when his case study of the arsenic CBA reveals indeterminacy of such an astonishing magnitude that we cannot say whether the benefits are $13 million or $3.4 billion, one has to wonder whether CBA can provide any meaningful information at all. Indeed, it seems more likely to obscure relevant information than to illuminate it. As analysts respond to the inevitable incentive to produce meaningful numbers, the real issues and value choices behind regulatory decisions are far more likely to be obscured behind a seductive veil of seemingly scientific and accurate numbers. Thus, instead of showing how CBA increases transparency and rationalizes government decision-making by insulating it from irrational public perceptions of risk, Professor Sunstein's analysis ultimately demonstrates the opposite. CBA is more likely to create a false impression of accuracy that obscures the real issues and value choices behind regulatory decisions and far more likely to expand agency discretion so as to render agencies even more vulnerable to undue pressure from interest groups willing and able to exploit the indeterminacy and manipulability of CBA.

Thus, Professor Sunstein's innovative vision of CBA as a pragmatic tool that promotes rational government decision-making grounded in robust and well-informed democratic deliberation ultimately fails. It is a relief then to discover that his descriptive claim that the Cost-Benefit State is actually dawning, also fails. The federal courts have not unambiguously embraced the "cost-benefit default principles." Indeed, the Supreme Court has on two occasions specifically declined invitations

to adopt them. Accordingly, while the prophecies of a thinker of the depth and stature of Professor Sunstein might some day conceivably prove self-fulfilling, there is at least still time to re-consider before the Cost-Benefit State arrives.