

**The Evolution of Cost-Benefit
Analysis in U.S. Regulatory
Decisionmaking**

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Abstract: Cost-benefit analysis (CBA) has been part of the United States regulatory process for more than thirty years. This paper examines how the academic debate over the use of CBA has evolved while at the same time its place in the regulatory process has become increasingly firm. The debate over CBA has moved from a clear dichotomy between supporters of regulation who opposed CBA, and opponents of regulation who supported CBA, to a more nuanced discussion of how CBA can be improved. While this change has clear benefits for the use of CBA and for the quality of regulations, we should not forget that some of the earlier criticisms of CBA focused on the way it was implemented. By coupling CBA with presidential review, CBA often takes a backseat to political concerns. The continued relevance of these criticisms may mean that the next stage in the evolution of the use of CBA may turn to its institutional setting.

The Evolution of Cost-Benefit Analysis in U.S. Regulatory Decisionmaking

The possibility of bias in regulatory analysis threatens its viability as a decision making tool. (McGarity 1987)

It is time for progressive groups as well as ordinary citizens to retake the high ground by embracing and reforming cost-benefit analysis. (Revesz and Livermore 2008)

The use of cost-benefit analysis (CBA) in United States regulatory policy is approaching its fourth decade. Over the past thirty years, CBA has been at the center of intense controversy. Supporters of regulation have blamed CBA for deregulation and for playing an important role in reducing environmental protections and American health and safety. Opponents of regulation have regularly called for greater use of CBA, citing the immense cost that regulation imposes upon American business.

Through all of this fiery rhetoric however, something remarkable is emerging. Cost-benefit analysis is now firmly entrenched in the regulatory process and few predict that this will change in the decades ahead. Agencies that once fought having to conduct analyses now do so regularly. And the academic community, particularly legal scholars, has begun to focus on improving cost-benefit analysis rather than removing it from the regulatory process.

While CBA still has its strident opponents, they are becoming increasingly marginalized in the debate over its use. Now the focus on CBA primarily concerns how to incorporate distributional concerns and insights from behavioral economics into its use. Supporters of regulation are now weighing in on these debates rather than merely arguing that CBA is inherently biased against regulation.

How did we get here and what does this evolution mean for the future of cost-benefit analysis? This paper traces the evolution of cost-benefit analysis in the United

States regulatory process from controversy to something closer to consensus. Particular attention is given to the important role of the new administrator of the Office of Information and Regulatory Affairs (OIRA), Cass Sunstein, because his appointment signals an important new stage in the debate over analysis.

The paper proceeds as follows. Section II covers the rancorous debate over cost-benefit analysis after it was adopted by Ronald Reagan in 1981. It also chronicles the Clinton Administration's acceptance of CBA and pro-regulation advocates' reaction -- an increased stridency in the calls for the CBA's elimination. Section III covers the evolution of a pro-regulation, pro-cost-benefit-analysis argument and its eventual ascendance. Finally, Section IV takes stock of where cost-benefit analysis stands at the onset of the Obama Administration and how it is likely to evolve as its role in the regulatory process approaches middle age.

II The Early History of Cost-Benefit Analysis

While the implementation of CBA is generally associated with the Reagan Administration and Executive Order (E.O.) 12291, it has its genesis in the three presidencies of the 1970s. President Nixon implemented "Quality of Life Reviews," requiring that before agencies adopt regulations, they consider alternatives. President Ford required agencies to produce "Inflation Impact Statements" in limited circumstances. Finally, requirements most closely resembling CBA were instituted under President Carter (Weidenbaum 1997).

Carter created the Regulatory Analysis Review Group (RARG) and for the first time, in Executive Order 12044,¹ required an economic analysis for any regulation with a likely impact of more than \$100 million. Agencies were required to choose 'the least burdensome of acceptable alternatives.' There were no requirements that agencies balance costs and benefits, however; and there was no authority within

¹ Executive Order 12044 43 Fed. Reg. 12661 (24 March, 1978)

the RARG or within the Office of Management and Budget (OMB) to reject rules that failed cost-benefit criteria (Weidenbaum 1997).

All of this changed when President Reagan took office. Reagan had campaigned on a deregulatory platform (Revesz and Livermore 2008) and wasted little time issuing Executive Order 12291 and repealing the Carter Order (E.O. 12044).² The new E.O. vested OIRA with the authority to review agency regulations and required agencies to produce regulatory impact analyses on regulations with a likely annual impact of \$100 million or more.³ Agencies were also required to show that the benefits of their regulations exceeded the costs and provide detailed justifications for the regulations if they did not. If regulations failed to meet the criteria set out in the E.O., OIRA had the authority to return the regulations to the agencies

Initial debates on OIRA focused on the right of the President to oversee agency decisionmaking. Debates over CBA soon followed. Academic supporters of CBA were largely those who had served in the Reagan or Bush administrations. Demuth and Ginsburg (1986) argued that analysis and executive regulatory review were complementary because they both encouraged accountability and a broad, balanced view of regulatory decisions. The academic defenses of CBA were not nearly as numerous as the critiques, which began to emerge in the 1980s and fully flowered in the 1990s. Many of the critiques were institutional in nature, criticizing OIRA for a lack of transparency and for killing regulations by taking years to review them (Friedman 1995). However, there were many criticisms that focused on the nature of CBA itself. These included three types of arguments.

² Exec. Order No. 12291 46 Fed. Reg 13193 (19 February, 1981).

³ OIRA had been created the previous year in the Paperwork Reduction Act.

The first asserted that CBA was merely a cover for political goals. Olson (1984) wrote, 'As one key OMB official notes, "debate on the merits of economic analysis doesn't help resolve the real issues where OMB has budgetary philosophical, or political problems with a rule, the regulatory analysis is used as a key in holding up or changing [Environmental Protection Agency] EPA action.'" McGarity (1987) and Friedman (1995) later provided some evidence for Olson's claim. Friedman wrote, '[t]he analytical legitimacy of cost-benefit analysis appears to have been a charade. [OIRA official Jim] Tozzi⁴ acknowledged [in an interview with the author] that costs and benefits were not actually compared.'

Second, some argued that CBA was inherently anti-regulatory and ethically wrong. Kelman (1981) wrote a widely cited ethical critique of CBA, specifically challenging CBA's monetization of environmental goods and public health. Kelman argued that CBA inevitably supported some policy choices that were not moral including persecuting the innocent and stifling dissent. He also argued that monetization of policy impacts was often impossible and devalued the things being monetized. McGarity (1987) echoed some of Kelman's arguments in an attempt to put together the first comprehensive list of criticisms (and strengths) of CBA. The criticisms included valuing mortality risks, discounting future effects, and ignoring distributional impacts. It is this ethical argument that would become most prominent among CBA opponents in the 1990s and 2000s.

Finally, there were arguments made that CBA delayed the regulatory process. In a 1992 article, McGarity coined the term, 'ossification of the rule-making process.' Referring to stringent judicial review of agency regulations and the preponderance of analytical requirements imposed upon agencies that engage in rulemaking, McGarity contended that the rulemaking process had become so protracted and burdensome that agencies were avoiding rulemaking altogether. Mashaw and Harfst (1990) had made a similar point in examining the movement of the National Highway Traffic and

⁴ Jim Tozzi was the Deputy Administrator of OIRA under Reagan and Bush (41).

Safety Administration (NHTSA) away from rulemaking and toward recalls of automobiles.

The institutional criticisms of OIRA had the largest and most immediate practical impact. In a letter to Congress, OIRA Administrator Wendy Gramm (1986) pledged to increase the transparency at OIRA and to ensure timely reviews of regulations. These changes were cemented in Executive Order under President Clinton in 1993. While the institutional critique would continue to surface occasionally (Bressman and Vandenberg 2006) over the ensuing two decades, much of the legal and academic literature on OIRA review focused on cost-benefit analysis and the specific criticisms listed above.

The criticisms of CBA intensified after Bill Clinton became President. Clinton, contrary to the expectation of supporters of regulation, retained cost-benefit analysis in the regulatory process (Revesz and Livermore 2008). Clinton issued Executive Order 12866⁵ to govern regulatory review. The new E.O. changed some of the language from the Reagan Executive Order (requiring that benefits of a regulation justify the regulation's cost rather than the formulation in the Reagan E.O., which required that benefits exceed the costs) and added "reduction of discrimination or bias" as one of the benefits to be considered as part of a regulatory analysis.

As Friedman (1995) writing early in the Clinton era noted, 'Clinton, a moderate Democrat, may institutionalize regulatory reform far more effectively than the antiregulation Reagan, a conservative Republican.' This institutionalization occurred without the support of the pro-regulation community (Revesz and Livermore 2008). However, with the institutional arguments against OIRA weakening because of efforts to make it more transparent and its reviews more timely, and presidential

⁵ Exec. Order No. 12866, 58 Fed Reg. 51735, Admin Mat 45070 (Sept. 30, 1993).

oversight of agency rulemaking becoming generally accepted,⁶ supporters of regulation trained their fire on the probity of cost-benefit analysis.

The anti-CBA literature that developed during this period focused on the analytical legitimacy of cost-benefit analysis. Criticisms of particular aspects of CBA -- such as the discounting of future values, the treatment of uncertainty, and the techniques for calculating the values of risk reduction (commonly expressed as the 'value of a statistical life (VSL)')⁷ -- were merged together to argue that CBA should play no role in the regulatory process (see e.g. Heinzerling 1997, 1999, and 2000). Dreisen (2006) argued that these aspects inevitably biased CBA against regulation.

While supporters of regulation focused on arguing for the elimination of cost-benefit analysis, supporters of CBA worked on suggesting improvements. Elliott (1994) argued that analysis did improve rules and noted that 80% of issues raised by OMB had not been considered by EPA.⁸ This showed, according to Elliott, that OMB (and by extension cost-benefit analysis) could add value, but that the issues were often raised too late in the regulatory process to make a difference. Hahn (2005) argued that CBA was imperfectly applied by federal agencies and OIRA and produced numerous suggestions for strengthening its role in the regulatory process.

One academic⁹ exception to the dichotomy between pro-regulation and anti-regulation voices on cost-benefit analysis was Cass Sunstein. Sunstein, a law

⁶ Blumstein (2001) wrote, "centralized presidential regulatory review has now taken center stage as an institutionalized part of the modern American Presidency."

⁷ Elsewhere in this volume, Robinson and Hammit provide a summary of the issues associated with monetized health and mortality risks. See also Viscusi (2009).

⁸ Elliott had served as General Counsel of EPA.

⁹ Within government, agencies had also started to accept cost-benefit analysis and attempt to reform it rather than replace it. EPA was at the forefront of

professor at the University of Chicago, is a well-known supporter of the idea that government should play a significant role in the regulation of the economy (Sunstein 2004). At the same time, Sunstein is a fervent advocate of cost-benefit analysis. This pro-regulatory argument in favor of cost-benefit analysis subjected Sunstein to criticism from other supporters of regulation (Sinden 2004). However, over the course of the George W. Bush administration, Sunstein would gain adherents and then would be appointed by President Obama as the Administrator of OIRA. This appointment marked the ascendance of a pro-regulatory CBA argument.

III The Development of the Pro-CBA, Pro-Regulation Argument

Sunstein emphasized several aspects of the debate on cost-benefit analysis that had not been discussed by either side. First and most prominently, Sunstein drew on the relatively new field of behavioral economics to justify cost-benefit analysis. Behavioral economics is concerned with the effects of bounded rationality on the decisions made by economic actors. The pioneering work in the field was done by Amos Tversky and Daniel Kahneman.¹⁰ Behavioral economists have shown that individuals often rely on biases and heuristics to assist in decisionmaking. These biases and heuristics often lead individuals to make decisions that are not in their own interest. More importantly, from Sunstein's perspective, these heuristics and biases lead individuals to advocate for policies that are not necessarily in their interests.

Sunstein views CBA as a corrective for this. 'Cost-benefit analysis . . . is most plausibly justified on cognitive grounds -- as a way of counteracting predictable problems in individual and social cognition.' Sunstein outlines six problems 'in the public demand for regulation.' These include what Sunstein terms the "availability heuristic," "informational and reputational cascades," the phenomenon of "dangers

this effort producing their own guidelines on cost-benefit analysis (Revesz and Livermore 2008).

¹⁰ http://en.wikipedia.org/wiki/Behavioral_economics

on-screen and benefits off-screen,” “health-health tradeoffs,” emotions and alarmist bias, and “separate evaluation and incoherence.” He shows how these biases lead to consumer demand for regulations that at best will not improve their welfare and at worst may actually harm it. ‘Cost-benefit analysis is best taken as a pragmatic instrument, agnostic on the deep issues and designed to assist people in making complex judgments where multiple goods are involved.’ (Sunstein 2001a). This argument was echoed by Adler and Posner (2001) in an essay arguing that cost-benefit analysis corrects for ‘distorted preferences’ or preferences that do not enhance the individual’s welfare. Adler and Posner specifically call for agencies ignore or discount such distorted preferences.

In another article, Sunstein (2001b) argues:

The best defense of CBA relies not on controversial claims from neo-classical economics but on a simple appreciation of how we all make mistakes in thinking about risks. . . Properly understood CBA should help us save lives, not only money. . . What is most important here is to see that the case for cost-benefit analysis does not rest only or even mostly on economic grounds and that people of widely divergent views can support a suitably specified form of CBA. The emerging questions involve not whether to do CBA, but how; it is to those questions that we should now be turning.

Sunstein (2002) also argued for CBA as a pro-democratic reform that enhanced the transparency of agency decisionmaking.

There are democratic advantages as well. . . interest groups often manipulate policy in their preferred directions, sometimes by exaggerating risks, sometimes by minimizing them, sometimes by utilizing heuristics and biases strategically so as to mobilize public sentiment in their preferred directions. An effort to produce a fair accounting of actual dangers should help to diminish the danger of interest group manipulation.

This transparency argument had been made occasionally in the past by advocates of cost-benefit analysis (Arrow et. al. 1996), but it had never been made by a supporter

of government regulation, nor had the argument been explicitly based on the findings of behavioral economics.

Finally, Sunstein (2002) synthesized the growing acceptance of cost-benefit analysis by Congress and by the courts. Employing what he called 'cost-benefit default principles,' courts had evinced some growing acceptance of cost-benefit analysis as a technique for agency decisionmaking. These principles can certainly be interpreted as allowing agencies to ignore de minimis risks, consider costs of their actions, decline to over-regulate, and balance benefits and costs. Indeed, Sunstein postulates that the principles may even require agencies to conduct CBA.

While Sunstein was developing a pro-regulation argument for cost-benefit analysis,¹¹ the George W. Bush administration was provoking a strong reaction from many of the same advocates who had fought CBA during the previous several administrations. Heinzerling along with Frank Ackerman produced a frequently cited book (2004) decrying CBA in its entirety, and pro-regulatory organizations like OMB Watch and the Center for Progressive Reform echoed many of the arguments made by Heinzerling and Ackerman. Sinden et. al. (2009), responding to Adler and Posner's call for "New Foundations of Cost-Benefit Analysis", argue that the theoretical and practical weaknesses of CBA are too great to be mended and that CBA should be replaced by feasibility analysis.

Bush's first OIRA Administrator was the controversial John Graham, who was often the subject of considerable vitriol from OMB Watch and the Center for Progressive Reform. Graham, however, echoed some of Sunstein's arguments about the potential for cost-benefit analysis to serve a pro-regulatory aim. He pioneered the "prompt letter" from OIRA, which used analysis to push agencies to pursue regulatory initiatives. After leaving OIRA, he cited several instances during his

¹¹ Other prominent economists in the Clinton Administration such as Alan Blinder and Joseph Stiglitz also voiced cautious support for CBA (Wiener 2006).

tenure when OIRA argued in favor of regulation because of the results of cost-benefit analysis. Graham also argued that there was a need for cost-benefit analysis to take greater account of distributional concerns, particularly the impact of regulations on the poorest members of society (Graham 2008).

In this last point, Graham found support from other academic voices that could not be easily characterized as anti-regulation. Adler (2006) argued that equity is a distinct consideration that should be added to considerations of efficiency and that the currency for equity should be well being. Equity analysis should inform all natural hazards policy and choices about how to structure preparedness, response, and recovery. He believes that equity analysis should be focused on avoiding poverty (reducing death, physical injury, etc.)

Farrow (2009) put forward another way to incorporate equity into CBA. He argues that since redistribution is often seen as the central issue in government policy, analysis of regulatory impact must include it. He calls on OIRA to improve its guidance on distributional analysis and provides several suggestions, including analysis of impact on particularly disadvantaged groups and that OIRA conduct sensitivity analysis on the current assumption that the marginal utility of income is constant across income levels.¹² Any such analysis would add support for regulations that distribute income from wealthier individuals to poorer ones.

Sunstein echoed these calls, saying that ' [i]n addition to knowing the benefits and costs of regulation, it is necessary to know who bears those costs and enjoys those benefits (2002b).' Sunstein recommended that "[e]xisting executive orders calling for CBA ... be amended to require a distributional analysis as well.' (2002a). Since one of the chief criticisms of the nature of CBA had been its reliance on willingness to pay measures of welfare and the bias that these measures had against those with lower

¹² Farrow notes that all RIAs currently assume a constant marginal utility (MU) of income. If, instead of a constant, MU was y^{-e} , where e is the elasticity of marginal social welfare with respect to the income of a particular income class, analysis would better incorporate equity concerns.

incomes, a change in CBA to incorporate distributional equity would go a long way to answering these critics.

While the academic debate was slowly evolving, the 'facts on the ground' were changing more rapidly. Agencies throughout the federal government were conducting cost-benefit analyses of their regulations and the techniques they were using were rapidly becoming more sophisticated. EPA alone spent millions of dollars on CBAs (Adler and Posner 1999) and created its own guidelines for analysis (Revesz and Livermore 2008).

Outside of the United States, cost-benefit analysis has had a growing role in the regulatory process emerging in the European Union. Weiner (2006) writes,

Europe and America now appear to be converging on the analytic basis for regulation. In a process of hybridization, European institutions are borrowing 'Better Regulation' reforms from both the US approach to regulatory review using benefit-cost analysis and from European member states' initiatives on administrative costs and simplification; in turn the European Commission is helping to spread these reforms among the member states.

This movement of CBA to Europe is a further indication of the growing breadth of support for it and its likely permanence in the United States.

The European Union formally began impact assessments in 2002. European Commission directorates conduct impact assessments. Starting in 2006, these assessments were reviewed by an Impact Assessment Board in the office of the Secretariat General. This system means that legislation (in addition to administrative action) in the E.U. is subject to impact assessment (Wiener and Alemanno (2010)).¹³

¹³ While "Impact Assessment" is slightly different than CBA, in practice, it is likely to be quite similar. CBAs conducted in the United States fall short of

In 2008, two important works were published that signaled an important landmark in the debate over cost-benefit analysis. In *Retaking Rationality*, Revesz and Livermore (2008) issued a rebuke to pro-regulation forces who had argued against cost-benefit analysis. They said, 'Now is a good time for liberals to enter the conversation. . . [I]t was more politically expedient for progressives to issue blanket criticisms than develop more nuanced positions. But entrenchment in that position cost proregulatory groups.'

Revesz and Livermore argued that by adopting a strict anti-CBA position, pro-regulation forces had allowed opponents of regulation to paint them as anti-rational. They go on to explain, 'Yet cost-benefit analysis is only inherently antiregulatory if proregulatory groups are gulled into passivity by that belief. Proregulatory groups must shake off their torpor. Their opposition to cost-benefit analysis, even if it was understandable at the outset[,] has become very counterproductive.' Revesz and Livermore argued that there are many ways to reform cost-benefit analysis to ensure that it leads to fairer (pro-regulation) outcomes and urged liberals to make these arguments.

The second work was in many ways even more groundbreaking. Lisa Heinzerling, who had been a leader of the critics of cost-benefit analysis, cooperated with two economists and supporters of cost benefit analysis, Winston Harrington and Richard Morgenstern, to edit the volume, 'Reforming Regulatory Impact Analysis.' The introductory chapter acknowledges the seeming permanence of cost-benefit analysis on the regulatory landscape. After a series of case studies, Heinzerling and her two co-authors offer a number of recommendations. These recommendations overlap considerably with the recommendations of Revesz and Livermore and more importantly (since he is the new administrator of OIRA) with those that Sunstein had made in various works.

economic definitions of CBA (Hahn and Litan 2005) and therefore the impact assessments in Europe will likely resemble the regulatory analyses in the U.S.

Then in February 2009, President Obama appointed Cass Sunstein as OIRA Administrator. After a contentious confirmation process, Sunstein was confirmed by the Senate in September 2009.¹⁴ The appointment of Sunstein signals a commitment by President Obama to cost-benefit analysis. While a new executive order governing regulatory review is still pending as of this writing, Sunstein's appointment ensures that any such order will preserve a prominent role for cost-benefit analysis in the Obama Administration.

Much of this direction is evident in the 2009 Report to Congress from OMB on the costs and benefits of federal regulations. This report is the first of the annual reports to Congress issued since Sunstein was confirmed as Administrator of OIRA. The report carefully catalogs the ways in which behavior systematically deviates from rationality and calls for reforms in regulation to account for these deviations. Such reforms include an emphasis on disclosure as a regulatory tool, the use of default rules and simplification, making costs of social harms more salient, and influencing social norms.

**Table I Historical Developments in the Use of CBA in the United States
Regulatory Process**

Date	Development
1970s	Presidents Nixon, Ford, Carter begin use of CBA.
1981	President Reagan issues Executive Order 12291 and requires CBA for certain rules.
1993	President Clinton rescinds E.O. 12291 and replaces it with E.O. 12866, reaffirming the use of CBA but modifying the requirement.
2001	President Bush appoints John Graham as OIRA Administrator.
2006	President Bush, issues E.O. 13422 modifying E.O. 12866
2009	President Obama repeals E.O. 13422, appoints Cass Sunstein as

¹⁴ Oddly the controversy centered on Sunstein's positions on animal rights, not on anything he had written about cost-benefit analysis.

	OIRA Administrator
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IV The Future of CBA in the Regulatory Process

It has been said that President Clinton's issuance of Executive Order 12866 cemented the role of presidential review in the regulatory process (Blumstein 2001). Throughout Clinton's presidency and the presidency of George W. Bush, however, the debate on the other crucial piece of E.O. 12866, cost-benefit analysis grew in its intensity. President Obama's appointment of Sunstein and probable issuance of a new executive order with cost-benefit analysis contained in it,¹⁵ will in all likelihood do for cost-benefit analysis what President Clinton did for executive review, render it a part of the regulatory process that is taken for granted.

What does this mean for the future of cost-benefit analysis and for the future of the regulatory process? For the early proponents of CBA who had hoped that CBA would lead to deregulatory outcomes, the permanent ascendance of CBA is hardly an unmitigated victory. In order to ensure that CBA stayed in the regulatory process, both the technique and its application required and will continue to require modification. Part of this modification occurred when President Clinton changed the requirement that regulations have benefits that 'exceed' their costs to a requirement that benefit 'justify' their costs.

The recent work by Revesz and Livermore (2008) and by Harrington, et. al. (2008) signal the other adaptations that we are likely to see in the application of CBA. Among these suggestions are the listing of benefits and costs in a non-monetized manner, greater and more transparent consideration of alternative policy options (Harrington et. al. 2008), greater accounting of ancillary benefits, decreased use of

¹⁵ OIRA requested comment on a potential new executive order in February 2009.

intergenerational discounting (Revesz and Livermore 2008), and analyses of deregulatory options with the same rigor as regulatory ones (both). All of these changes will lead to analyses that are at least as likely to favor regulation than deregulation, and few of them (if any) would be opposed by economists.

The result predicted by Revesz and Livermore, which I find entirely reasonable, will be a CBA that is used to argue for regulation as often as it is used to argue against it. An interesting question is whether CBA will lose some of its original supporters once it is seen as a tool that can be used to defend regulation as easily as attack it. In any case, the policy battles over cost-benefit analysis in the next decade are likely to be fights over techniques and specifics rather than over the merit of CBA itself. Indeed, one might see CBA used by agencies not previously required by law to use it if a consensus emerges that CBA is a valuable tool.¹⁶

However, there are still two criticisms of CBA and its use that have not been effectively answered by those who support it (either those pro-regulation supporters of CBA or those anti-regulation supporters of CBA). The first of these, mentioned above, is that CBA, as currently utilized, is merely a cover for political goals. Olson (1984) first made this point but several other scholars have recently emphasized it.

Shapiro (2005) argued that the coupling of the enforcement of CBA with executive review inevitably forced CBA to take a backseat when the results of analysis conflicted with political priorities. Wagner, writing in the Morgenstern et. al. volume (2009), writes, 'RIAs may serve primarily as a mechanism for promoting agency decisions rather than scrutinizing them.' She contends '[t]hat the RIA offers nothing to policy analysis is in fact, precisely the point; in other words the point is protect the rulemaking, not to open it up to attack.' These recent arguments echo the concerns that Olson (1984) raised a generation earlier that CBA was used primarily to provide cover for political goals.

¹⁶ These include regulations issued by independent agencies and regulations with an impact that is less than \$100 million/year.

If there is general agreement regarding the worthiness of CBA, focus may turn to this issue of whether CBA can achieve its potential in its current institutional structure or whether as constructed, it is inevitable that CBA will be intertwined with and subverted by politics. Some have argued that only if responsibility for conducting and/or overseeing regulatory analysis is removed from the executive branch, which also has responsibility for issuing regulations, will analysis play a role in guiding regulatory decisions. This argument leads naturally to calls for a Congressional office akin to the Government Accountability Office (GAO) to play a role in supervising the conduct of CBA (Niskanen 2003). I expect the institutional location and setting of cost-benefit analysis to be a primary debate in U.S. regulatory politics in the decade to come.

This debate will also surround the growth of CBA in Europe. Elsewhere in this volume, Wegrich (2010) describes how analysis is not as wedded to issues of political control of agencies in Europe as in the United States. However, there have been calls for greater centralized regulatory oversight in Europe and the EC has also implemented the Impact Assessment Board described above. These developments will force the EU to grapple with many of the same institutional issues described here. Radaelli and Meuwese (2010) argue that these developments have already had the effect of strengthening the Secretariat General.

The second issue that supporters of cost-benefit analysis have failed to address is the length of time it adds to the rulemaking process. As mentioned above, this was first raised by McGarity (1992) and Mashaw and Harfst (1990). Sunstein recognizes this problem and notes that if the impact of CBA is to delay beneficial regulations, then CBA itself would fail a cost-benefit test. If, as is shown in the numerous reports to Congress by OIRA, regulations on average have net benefits, then delaying regulations to conduct cost-benefit analysis has a social cost.

Although the question of whether CBA, in its current or future forms, adds sufficient social benefits to regulations to justify these costs is an open one, there is scant evidence to date that rulemaking is decreasing or moving slowly. Coglianese

(2007) has cast doubt on Mashaw and Harfst's conclusions about NHTSA. Similarly, Johnson (2008) has cast doubt on the ossification hypothesis at EPA. Informal studies of the numbers of rules and the number of pages annually in the Federal Register show no pattern of decline (Crews 2007). Finally, Yackee and Yackee (2010) use the Unified Agenda¹⁷ to examine the factors that affect the time between proposal and finalization of a regulation. They find that rules that are subject to procedural controls, such as cost-benefit analysis, are actually promulgated faster. This implies that the costs of CBA are low.

By contrast, the benefits of CBA, especially if reformed in the ways hoped for by pro-regulation advocates, are likely to be significant. CBA is designed to increase the net benefits of regulation and if it is correctly and faithfully implemented, it is certainly likely that it will do so in at least some circumstances. This would lead to CBA having potentially large benefits, making any small delays in the promulgation of rules worthwhile.

In the early years of the George W. Bush administration, Sunstein described regulatory policymaking as evolving from '1970s environmentalism' to 'the cost-benefit state' (Sunstein 2002b). This conclusion was likely premature. Cost-benefit analysis was still the subject of considerable controversy at that point. Now however, with Sunstein's own ascension as 'regulatory czar' and the publication of works from liberals suggesting reform of cost-benefit analysis rather than repeal, the cost-benefit state may actually be upon us.

Economists inside and outside the government are enhancing the techniques used for CBA. Cost-benefit analysis is being exported to the EU and to the Organization of Economic Cooperation and Development (OECD) countries rather than having its use restricted here in the United States. Reforms to include findings from behavioral economics and to incorporate distributional concerns will likely

¹⁷ The Unified Agenda is issued every six months and lists all regulations planned by all federal agencies.

broaden the support for CBA across the ideological spectrum. If other reforms suggested by Revesz and Livermore (2008) and Harrington et. al. (2009) are adopted this support will only increase.

At this point, the primary remaining concern will be whether CBA as implemented can actually achieve the goals voiced for it by those on both sides of regulatory debate. Examination of CBA will turn to its institutional setting within the regulatory process. Questions about the independence of those conducting the analyses will dominate the debate and the resolution of these questions may result in institutional structures that further cement cost-benefit analysis as part of the regulatory process.

Bibliography

Ackerman, Frank. and Lisa Heinzerling (2004), *Priceless: On Knowing the Price of Everything and the Value of Nothing*, The New Press.

Adler, Matthew. (2006), 'Equity Analysis and Natural Hazards Policy' in Ronald Daniels, Howard Kunreuther, Donald Kettl, (eds), *On Risk And Disaster: Lessons From Hurricane Katrina*, Philadelphia: University of Pennsylvania Press, pp 129-152.

Matthew Adler and Eric Posner (2001), 'Implementing Cost-Benefit Analysis When Preferences are Distorted.' in Matthew Adler and Eric Posner (eds), *Cost Benefit Analysis Legal, Economic, and Philosophical Perspectives*, Chicago: University of Chicago Press pp. 269-312.

Adler, M. and E. Posner (1999), 'Rethinking Cost-Benefit Analysis', *Yale Law Journal* 109, 165-230.

Arrow, Kenneth J. Maureen L. Cropper, George C. Eads, Robert W. Hahn, Lester B. Lave, Roger G. Noll, Paul R. Portney, Milton Russell, Richard Schmalensee, V. Kerry Smith, and Robert N. Stavins. (1996) *Benefit Cost Analysis in Health and Safety Regulation: A Statement of Principles* American Enterprise Institute, The Annapolis Center and Resources for the Future.

Blumstein, J. (2001), 'Regulatory Review by the Executive Office of the President: An Overview and Policy Analysis of Current Issues', *Duke Law Journal* 51,851-900.

Bressman, L. S. and M. Vandenberg (2006), 'Inside the Administrative State: A Critical Look at the Practice of Presidential Control', *Michigan Law Review* 105, 47-100.

Coglianesi, C. (2008), 'Has Judicial Review Caused a Rulemaking Retreat?', *Paper presented at the annual meeting of the The Law and Society, J.W. Marriott Resort, Las Vegas, NV* May 5, 2008.

Crews, C. (2007), 'Ten Thousand Commandments: An Annual Snapshot of the Regulatory State', *Competitive Enterprise Institute*.

Demuth, C. and D. Ginsburg (1986), 'White House Review of Agency Rulemaking', *Harvard Law Review* 99, 1075-1112.

Dreisen, D. (2006), 'Is Cost Benefit Analysis Neutral', *University of Colorado Law Review* 77, 335-404.

Elliott, D. (1994), 'TQMing OMB: or why Executive Review Under Executive Order 12291 Works Poorly and what President Clinton Should Do About It.', *Law and Contemporary Problems* 57, 167-184.

Farrow, S. (2009), 'Incorporating Equity in Regulatory and Benefit-Cost Analysis Using Risk Based Preferences.', Working paper on file with author.

Friedman, Barry (1995), *Regulation in the Reagan Bush Era*, Pittsburgh:University of Pittsburgh Press.

Graham, J. (2008), 'Saving Lives through *Administrative Law and Economics*' *University of Pennsylvania Law Review*, 157, 395-540.

Gramm, W. (1986), 'Additional Procedures Concerning OIRA Review Under Executive Orders Nos. 12291 and 12498 [Revised]'. Reprinted in Appendix III of Regulatory Program of the United States Government. Office of Management and Budget 1992.

Hahn, R. and R. Litan (2005), 'Counting Regulatory Benefits and Costs: Lessons for the US and Europe', *Journal of International Economic Law* 8, 473-508.

Harrington, Winston, Lisa Heinzerling, and Richard Morgenstern (eds). (2009), *Reforming Regulatory Impact Analysis*, Washington D.C.,Resources for the Future Press.

Heinzerling, L. (1997), 'Reductionist Regulatory Reform', *Fordham Environmental Law Review*, 8, 459-496.

Heinzerling, L. (1999), 'Discounting Life', *Yale Law Journal*, 108, 1911-1916.

Heinzerling, L. (2000), 'The Rights of Statistical People', *Harvard Environmental Law Review* 24, 189-208.

Johnson, S. (2008), 'Ossification's Demise: An Empirical Analysis of EPA Rulemaking From 2001-2005' *Environmental Law* 38, 767-792.

Kelman, S. (1981), 'Cost-Benefit Analysis: An Ethical Critique', *AEI Journal on Government and Society Regulation* March/April 1981, pp. 33-38.

Mashaw, Jerry. and David Harfst (1990), *The Struggle for Auto Safety* Cambridge:Basic Books.

McGarity, T. (1992), 'Some Thoughts on Deossifying the Rulemaking Process.', *Duke Law Journal* 41,1385-1462.

McGarity, T. (1987), 'Regulatory Analysis and Regulatory Reform', *Texas Law Review* 65,1243-1334.

Niskanen, W. (2003), 'More Lonely Numbers', *Regulation* 26, 22-27.

Olson, E. (1984), 'The Quiet Shift of Power: Office of Management and Budget Supervision of Environmental Protection Agency Rulemaking under Executive Order 12291' *Virginia Journal of Natural Resource Law* 4, 1-80.

Radaelli, C.M. and Meuwese, A.C.M. (2010) 'Hard Questions, Hard Solutions: Proceduralisation through Impact Assessment in the EU' *West European Politics* 33, 136-153

Revesz, Richard and Michael Livermore (2008), *Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health*, Oxford:Oxford University Press.

Robinson, Lisa and James Hammitt (2010), 'Valuing Health and Longevity in Regulatory Analysis: Current Issues and Challenges', in David Levi-Faur (ed) *The Handbook on Regulation* Edward Elgar Publishing.

Shapiro, S. (2005), '*Unequal Partners: Cost Benefit Analysis and Executive Review of Regulations*', *Environmental Law Reporter* 35, 10433-10444.

Sinden, A. (2004), 'Cass Sunstein's Cost-Benefit Lite: Economics for Liberals', *Columbia Journal of Environmental Law* 29, 191-242.

Sunstein, Cass (2004), *The Second Bill of Rights: FDR'S Unfinished Revolution and Why We Need It More than Ever*, Basic Books.

Sunstein, Cass (2001), 'Cognition and cost-benefit analysis.', in Matthew Adler and Eric Posner (eds), *Cost Benefit Analysis Legal, Economic, and Philosophical Perspectives*. Chicago:University of Chicago Press, pp. 223-268

Jerusalem Papers in Regulation & Governance

Sunstein, C. (2001b), 'Is Cost-Benefit Analysis for Everyone', *Administrative Law Review* 53, 299-314.

Sunstein, Cass (2002a), *Risk and Reason* Cambridge:Cambridge University Press.

Sunstein, Cass (2002b), *The Cost-Benefit State* Washington DC:American Bar Association.

Viscusi, W.K. (2009), 'The devaluation of life,' *Regulation & Governance*, **3**, 103-127.

Wegrich, Paul (2010), 'Regulatory Impact Assessment: Ambition, Policy Model and Politics', in David Levi-Faur (ed) *The Handbook on Regulation* Edward Elgar Publishing.

Weidenbaum, M. (1997), 'Regulatory Process Reform: From Ford to Clinton.' *Regulation*.

Wiener, J. (2006), 'Better Regulation in Europe', *Current Legal Problems* 59, 447-518.

Wiener, J. and A. Alemanno (2010), 'Comparing Regulatory Oversight Bodies Across the Atlantic: The Office of Information and Regulatory Affairs in the US and the Impact Assessment Board in the EU', working paper available at ssrn.com.

Yackee, J. and S. Yackee (2010), 'Administrative Procedures and Bureaucratic Performance: Is Federal Rule-Making Ossified?', *Journal of Public Administration Research and Theory* 20, 261-282.