

# Science and Policy Analysis in the U.S. Office of Information and Regulatory Affairs

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## Abstract

This article focuses on one expression of the relationship between science and policy analysis: the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget. It has used a classic policy analysis technique—cost–benefit analysis—as the way that the White House will review regulations. This discussion highlights the utilization of the cost–benefit method in the OIRA decision-making process, the roles of various actors in the system, and the response to that use by various policy actors. It illustrates the difficulty of utilizing rational analytical methods in an environment of political conflict.

## Keywords

OIRA, cost–benefit analysis, policy, science

For many observers, the role of science and scientists in the policy process has changed in contemporary America. They argue that challenges to science in the 21st century are dramatically different from those raised in earlier times. Although there are clearly changes in the view of science and the context in which this operates, the problems today share common attributes with past attempts to link science and policy.

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This article focuses on one expression of this relationship: the Office of Information and Regulatory Affairs (OIRA) in the White House Office of Management and Budget (OMB). It is not usually viewed as a classic policy organization but as a unit that attempts to exert centralized control on a diffuse, decentralized system. But it is the unit that has consistently used a classic policy analysis technique—cost–benefit analysis—as the way that the White House will review regulations emerging from the Executive Branch.

This discussion highlights the utilization of the cost–benefit method in the OIRA decision-making process, the roles of various actors in the system, and the response to that use by various policy actors. Unlike the experience of other countries, this element in the U.S. process has emphasized a methodology drawn from the economics field and has engendered a conflict between economists and scientists in the process. This case illustrates the difficulty of utilizing rational analytical methods in an environment of political conflict and raises similar problems to those raised in the evidence-based literature (Head, 2010, p. 77)

This article thus begins with a review of experience that began as a result of World War II and summarizes the issues that surfaced during that period. It then discusses different lenses that have been used to examine the relationship between science and scientists and the policy process.<sup>1</sup> Five approaches are utilized to indicate the perspectives of different actors who emerge in this debate: scientists, politicians, lawyers, bureaucrats, and economists. This chronological approach allows one to capture the changes that have occurred in the policy analysis field responding to social, economic, and political changes by following the creation and development of OIRA.

## The World War II Experience

The debate that we are engaged in today has roots in the controversies that emerged as a result of World War II and the activities of the U.S. Office of Scientific Research and Development. That office, headed by Vannevar Bush, became the centerpiece for most of the wartime military R and D including the early work on the Manhattan Project and is often described as one of the key factors in winning the war. Bush himself was a classic American “tinkerer” in the model of Edison and his engineering skills generated a range of inventions that were early work on computers. His optimism about the potential of science influenced the post–World War II White House and led to the expansion of government support for science and the creation of the National Science Foundation.

But while Bush represented the advocacy of the possibilities of science, others had different experiences about its impacts on the society. Perhaps no

one represented that view more clearly than physicist J. Robert Oppenheimer whose experiences in the Manhattan Project reinforced his concern about the development of the atomic bomb and the failure of decision makers to consider its negative potential. Although he became a major adviser to the Atomic Energy Commission after the war, his political views became an issue in the Red Baiting environment of the 1950s. Although publicly rehabilitated during the Kennedy administration, he continued to express his concerns about the role of science and scientists in a government setting.

The differing views of these two individuals represent the classic conflict in this field. Optimism about the future and the use of intelligence to solve problems have deep roots in the American tradition from Jefferson on. But skepticism about deferring to “experts” also is a part of the U.S. culture, particularly if that expert advice was attached to government action. From the beginning, it was not clear how scientists would be involved in the policy process (Pielke, 2007).

These conflicting views were not limited to the United States. British writer C. P. Snow called this a conflict between two very different cultures: the culture of science and the culture of the humanities. Himself a physicist as well as a writer, he wrote,

Between the two a gulf of mutual comprehension—sometimes (particularly among the young) hostility and dislike, but most of all lack of understanding. They have a curious distorted image of each other. Their attitudes are so different that, even on the level of emotion, they can’t find much common ground. (Snow, 1963, p. 3)

American Don K. Price (1967) posed the dilemma somewhat differently in his book, *The Scientific Estate*:

The union of the political and scientific estates is not like a partnership, but a marriage. It will not be improved if the two become like each other, but only if they respect each other’s quite different needs and purposes. No great harm is done if in the meantime they quarrel a bit. Scientists are always likely to complain that politics is based neither on knowledge or principle. Politicians are apt to retort that science is neither democratic nor responsible. These charges are resented on both sides more because of their emotional overtones than their essential meaning. For, stripped of their overtones, they state the fundamental distinctions that enable these two estates to help maintain a balance between the two aspects of freedom in our constitutional system. (p. 171)

Although the issues of the post–World War II period were posed in relatively simple terms, it soon became clear that they masked a set of concerns

that were extremely complex as the topic moved from theoretical and abstract dimensions to a decision world and the field of policy and policy analysis. For example, who has the authority to make (or override) decisions, what issues are appropriately included in the decision process, what analytic methodology should be used in the process, and what time perspective is appropriate (long-term vs. short-term dimensions)?

The answers to these questions did not seem to follow traditional political responses. There were those who wrapped themselves in the cloak of neutrality and believed that it was possible to separate fact from value. At times, their answers coincided with those of quite strange bedfellows; sometimes, advocates for unfettered science could support the positions of skepticism about governmental action, whereas at other times, neutrality led to enthusiasm about such action. The contemporary debate about global warming illustrates this difficult situation.

## The Policy Analysis Field

One cannot understand these issues without analyzing the other player in the partnership between policy and science: those who defined themselves as policy analysts. The post–World War II environment also spawned the development of the field of policy analysis. Unlike the developments in the broader field involving science, policy analysis developed from the use of the new analytic techniques stimulated by the imperatives of war that attempted to apply principles of rationality to strategic decision making. The fathers of the policy analysis field (especially Yehezkel Dror) saw opportunities to apply the economic approach to decision making. These developments in the social sciences—particularly systems analysis and operations research—largely moved along two pathways: positivism (using the concept of laboratory experiments to differentiate the true from the false) and normative economic reasoning based on the concept of the market (Radin, 2000, pp. 13-14).

The early expressions of policy analysis in the federal government were closely entwined with decision making in areas most like that of wartime. Strong hierarchical systems were assumed, and the client of these efforts was someone as close to the top of the organization as one could hope. The goals of the military were usually understood by those both inside and outside the government. The Planning, Programming, and Budgeting System (PPBS) in the Department of Defense became the model for analytic efforts in other departments (West, 2011). At least three different goals were attached to the PPBS activity: control by top officials, improvement of efficiency in resource allocation, and a belief that increased use of knowledge and information would produce better decisions (Radin, 2000, p. 15). The creation of policy analysis

“shops” was believed to provide analytic activity related to improving budgeting and the allocation of resources within the agency or department.

But modification of the expectations of the early advocates soon developed. By the mid-1970s, there was a movement toward a professional identity with journals and university-based professional schools, and an increase in the number of people who identified themselves as “policy analysts.” But many issues remained unresolved: the relationship between policy analysis and budgeting, clarity about the impact of politics on their activity, what successful analysis looked like, and a confusion about the relationship between analytical neutrality and advocacy of policy positions (Radin, 2000, pp. 27-28).

In 1978, the National Research Council issued a report, *Knowledge and Policy: The Uncertain Connection*, that found that “despite numerous social science studies of policy interventions and steps to increase their relevance to and use for policy making, ‘we lack systematic evidence as to whether these steps are having the results their sponsors hope for’” (National Research Council of the National Academies, 2012, p. 2). In 2012, the Committee on the Use of Social Knowledge in Public Policy issued another report, arguing that “To date, there has not been much success in explaining the use of science in public policy” (National Research Council of the National Academies, 2012, p. 2). This conclusion was based on three findings: First, that typologies have not guided empirical research programs; second, that attention has been placed on challenges of the “two communities” metaphor of researchers and policy makers; and third, that although there has been attention to the production of evidence-based policy and practice, there is little understanding of the use of that knowledge.

The report summarized its findings by noting that

science, when it has something to offer, should be at the policy table. But it shares that table with an array of nonscientific reasons for making a policy choice: personal and political beliefs and values are present, as are lessons from experience, trial and error learning, and reasoning by analogy. Obviously political matters and pressures weigh heavily when policy choices are made. Nevertheless science is a unique voice. (see also National Research Council of the National Academies, 2012, p. 3; see also Acs & Cameron, 2013; Pielke, 2007; Viscusi, 2009)

Lack of clarity about the policy analysis profession continued, indeed probably increased, as the 21st century opened. A number of changes became obvious. The field became globalized, and policy analysts began to be found in a range of countries and political structures. The boundaries of the systems that defined their tasks became murky, overlapping, and interrelated. Traditional

views of hierarchical decision making were replaced by decision making that involves networks and collaborative as well as conflictual processes. The demise of the Soviet Union and concern about economic conditions contributed to increased skepticism about the role of government in almost every policy area. Ideology and contentiousness became common in debates, and issues were increasingly defined by budget limitations. The relationship between analysis and politics became even more complex, and it became more difficult to determine whether analysis belongs to a long-term perspective or whether political realities led one to be satisfied with short-term approaches (Radin, 2013, pp. vii-ix).

## Analyzing the Policy–Science Relationship

It is often confusing to figure out the appropriate way to analyze the policy–science relationship because it intersects with so many analytical issues. At least five different sets of players are involved in this set of issues: scientists, politicians, lawyers, bureaucrats, and economists. Each of these players also has its own internal analytic disputes. Each of them, for example, defines evidence in a somewhat different way, and it is difficult to escape from a sense that information and data are devised in the eyes of the beholders. The following discussion attempts to provide a sense of the issues that may emerge as a result of the role of a particular player.

### Scientists

This group utilizes the norms of science in determining what is viewed as the appropriate approach to policy issues. For the most part, scientists have been involved in the policy process within the executive branch, not in the Congress (Keller, 2009, p. 176). The debate over the exchange of used hypodermic needles illustrates this approach. When the White House and the Department of Health and Human Services were developing a policy on this issue, they drew on research that was supported and analyzed within the public health agencies in the department that indicated that programs for the exchange of used needles for new needles were able to reduce the incidence of HIV in that population. The position of the scientists in those agencies was supported by what was viewed as neutral information that was generated through data collection that was inclusive and used appropriate methodologies sensitive to diverse populations and collected over time. In that sense, this lens reflects the approach of the evidence-based movement. However, when scientists produce information, the reliance on the scientific methods makes them aware of the likely possibility that new research might provide results that are

different from the original information. The scientific paradigm that informs the assumptions of economists is different from that of bench scientists (Viscusi, 2009) because the way that economics deals with the concept of a market is a normative approach.

### *Political Actors*

This lens focuses on the various positions that are associated with political participants in the decision process. It emerges from a bargaining position and involves trade-offs between the relevant players. Actors can involve players in both the legislative and executive branches (and sometimes the judiciary) and can express very different sets of perspectives (e.g., partisanship, interest group conflict, bureaucratic competition). The needle exchange policy issue provides an illustration of this approach. Although the staff of the US Department of Health and Human Services framed the issue as a public health issue, others in the government did not agree with this characterization. The staff in the Office of National Drug Policy in the White House viewed the issue as a criminal justice issue and believed that providing needles for drug users would encourage illegal drug use. The eventual policy that was determined sought to reconcile the perspectives and emerged from efforts to balance the conflicting policy frames in the decision. Usually, decisions from this lens emphasized short time perspectives, and information that was considered to be relevant was attached to one or another position taken by participants. This lens produces information that is likely to be the type that evidence-based policy has been designed to replace.

### *The Law*

This approach includes two different approaches, which are based on the adversary system.<sup>2</sup> One models itself on a court system that provides decision authority to a judge. The judge is expected to have familiarity with the scientific substance of a disputed situation and usually to be able to evaluate evidence and data. It is assumed that the judge has expertise that allows him or her to participate in detailed substantive and methodological issues. Over the years, there have been proposals for the creation of specialized courts and tribunals. One such proposal advocated creation of specialized environmental courts that “would have the capacity to resolve complicated environmental cases expertly, independently, holistically, rapidly, consistently, and justly” (Pring & Pring, 2009).

The other legal lens focuses on the legal context of the relationship. That involves constitutional arguments as well as attention to specific laws and other formal policies that define the intersection of policy and science.

Evidence to a lawyer means the information that can be used to make a case for a specific client and position. There is thus a difficulty of using the legal lens to argue for an evidence-based approach. However, the two approaches are intertwined because judges' rulings tend to emphasize case law and to defer to agency decisions.

### *Bureaucrats and Executive Branch Decision Makers*

This approach highlights the formal distribution of authority within the governmental structure and tends to accentuate the centralization within the hierarchical structure. If it focuses only on the authority within the executive branch, it is likely to emphasize the relationship between the White House and the programmatic departments and agencies. If it focuses on the constitutional shared power arrangement between the executive branch and the Congress (and sometimes the judiciary), it often leads to conflict between the two branches and a situation in which the department or agency is trapped between the two bodies (Rosenbloom, 1983). In the example of needle exchange, the White House Office of National Drug Policy had the bureaucratic power to force the Department of HHS to initially back away from its position. In addition, this perspective also highlights the administrative processes that might be used in this perspective. These might include issues such as control over deadlines (Balla, Deets, & Maltzman, 2011; Lavertu & Yackee, 2014; Revesz & Livermore, 2008).

### *Economists*

This approach is largely found in the early days of the policy analysis field and reflects the disciplinary background of individual analysts. It is the basis of the cost-benefit methodology that sought to quantify the value of both costs and benefits and to determine whether a proposed option offers the most efficient path for addressing the policy problem. This lens is constructed on efficiency values and is based on the normative economic reasoning that is the centerpiece of the economics profession. Initially posed as an objective methodology for determining whether water projects should be undertaken by the Army Corps of Engineers, its experience over the years has modified the way that it has been viewed. Indeed, when environmental advocates began to do their own adversarial cost-benefit analysis, it became clear that policy choices involved value disputes, not simply technical determinations (Mazmanian & Nienaber, 1979). Applications in areas such as health, education, and welfare further indicated the limitations of the methodology (Vining & Weimer, 2010).<sup>3</sup> However, some economists tended to hold on to the

normative economic paradigm that the cost–benefit technique was viewed as a value-free, neutral, and objective analytic approach. Still other economists argue that there are tools besides cost-benefit analysis that can be useful in the policy-making world and reflect the importance of more than efficiency values.

## The OIRA

All five player groups have been a part of the determination of appropriate ways to link policy and science. This analysis focuses on one significant effort—the OIRA in the OMB within the Executive Office of the President—and examines its approach to this complex set of issues. This office was originally created through the enactment of the 1980 Paperwork Reduction Act, a law supported by the Carter administration that was designed to reduce the amount of paperwork burden imposed by the federal government on private businesses and citizens. OIRA was placed inside the OMB and given authority to oversee the collection of information by federal agencies and establish information policies that federal agencies were required to observe. This oversight role would join the budget authority found in OMB to impose a presidential perspective on the departments and agencies (Bolton, Potter, & Thrower, 2014; Driesen, 2005).

OIRA became operational in the Reagan administration when it expanded from implementing the statutory obligation to deal with the management of information resources to include regulatory review. Soon after taking office, Reagan issued Executive Order 12291, which centralized the review of all agency regulations in OIRA.

Thus, the official creation of this office seemed to indicate that the White House was serious about imposing requirements on the departments and agencies that would constrain their ability to define and implement policy. As early as 1971, President Nixon developed a review process that required agencies to consider various regulatory alternatives and costs when developing what were viewed as “significant” regulations, that is, important or major regulations. According to former White House official Murray Weidenbaum (1991), “Many agencies ignored the process and the OMB’s authority was very limited” (p. 1). Similar efforts were devised during both the Ford and Carter administrations. Carter established the Regulatory Analysis Review Group that was a cabinet-level body granted review authority over important regulations. Imposed through an Executive Order, the Carter effort called on agencies to develop a Regulatory Analysis that would be available to the public. Weidenbaum (1991) termed that effort a “rudimentary cost-effective test” that determined that the least burdensome of acceptable alternatives had

been chosen (p. 3). According to Weidenbaum (1991), "By the end of the 1970s, some agencies appeared to be warming up to the concepts advocated by regulatory reformers" (p. 3).

Reagan's Executive Order 12291 formalized the inchoate OMB review process. The regulatory review process during the Reagan years had a substantial impact based on the number of proposed regulations that were returned, changed, or withdrawn, and was the subject of numerous congressional hearings where Democrats argued that OIRA was usurping agency authority, violating statutory requirements that agencies must follow, and inappropriately imposing presidential policies and priorities on rules. The *New York Times* reporter Philip Shabecoff commented on its impact: Reagan "transformed with a stroke of his pen what had been a useful economic tool into an imperative of Federal decisionmaking" (Quoted in Zerbe, 2010, p. 17).

Others, however, interpreted the authority granted by the Executive Order differently. Before the Executive Order was released, it was reviewed by the Office of Legal Counsel for legal soundness. According to former Environmental Protection Agency staffer Lisa Heinzerling (2014) now a law professor at Georgetown, the opinion "confirming the order's legality rested on the premise that the centralized reviewers (OMB and a newly created Task Force on Regulatory Relief) would only supervise, and not displace, the exercise of discretion given to the agencies by statute" (p. 3).

According to Weideman, from 1980 to 1989, the Department of Labor was especially affected by the decisions within OIRA, with more than 40% of its regulations failing, at least initially, to obtain approval from the OIRA. During the Reagan and Bush years, all rules were subject to OIRA review, whereas the Clinton administration narrowed the scope of review to major or significant rules. Most recently, Mark Sagoff (2009) estimates that each year OIRA reviews about 500 rulemakings (p. 21).

The influence of economists on the policy process was clear during the Clinton administration when the president issued a new Executive Order on Regulatory Planning and Review (Balla et al., 2011). The preamble to the Executive Order noted that "with this Executive order, the Federal Government begins a program to reform and make more efficient the regulatory process" (Clinton, 1993). While reliance on cost-benefit methodology was pushed during the Reagan years, Clinton tried to narrow the scope and open the process to non-quantitative factors. The reliance on the cost-benefit approach was clearly stated in the document:

(5) When an agency determines that a regulation is the best available method of achieving the regulatory objective, it shall design its regulations in the most cost-effective manner to achieve the regulatory objective. . . .

(6) Each agency shall assess both the costs and the benefits of the intended regulation, and recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs. (Clinton, 1993)

Although there had been concern about OIRA's role in earlier years, the advent of the Bush II administration brought increased criticism about its actions. Soon after Bush's election, Harvard Professor John D. Graham was asked to consider the job of directing OIRA. For 17 years, he had taught benefit–cost analysis at Harvard and “called for a more rigorous approach to selecting regulatory priorities, weighing risks, and devising cost-effective solutions” (Graham, 2007, p. 171).<sup>4</sup>

According to Graham (2007, p. 172), “Since the early Reagan years, critics have argued that benefit-cost analysis is used by the OMB as a one-sided tool of deregulation to advance the interests of business.” But the critics of his activity leading OIRA argued that he went much further than did his predecessors (Union of Concerned Scientists, 2008). A report issued by the Union of Concerned Scientists argued that the activity in OIRA challenged the ability to devise a “robust federal scientific enterprise.” They noted,

President Bush's first OIRA head, John Graham, invited corporate special interests to create a list of 76 regulatory protections they wanted weakened or eliminated. Even more insidious were the policies he crafted to change the way that all federal agencies conduct scientific peer review and risk assessments. Graham's methodology for conducting cost-benefit analysis was widely criticized for weighting the scales against protective regulations. (Union of Concerned Scientists, 2008).

The Union of Concerned Scientists also was concerned about the CBA approach that was utilized when assessing the impact of proposed regulations. The organization noted,

This form of CBA has been proven highly susceptible to political manipulation. For example, OIRA distorted both the costs and the benefits when assessing the EPA's 2007 ozone standard. . . . Such incidents have degraded the credibility of cost-benefit analysis as a regulatory decision making tool.

Furthermore, the report noted that Graham did hire a handful of scientists to create in-house scientific expertise; however, this small number

does not provide adequate scientific expertise to credibly review scientific findings across multiple agencies. It is inappropriate for the White House to

*When asked how to improve scientific integrity  
EPA and NOAA scientists responded:*

“The unprecedented and unwarranted influence of the EPA’s scientific work and findings by the White House and OMB must end.”

“OMB should stay out of NOAA decisionmaking on scientific and policy issues – they should stick to budget.”

“[OMB] is a true source of frustration. ... They have hired their own scientists and play the ‘my scientist is better than yours’ game.”

“Get the OMB out of the business of reviewing science—they do not have adequate staff or adequately skilled staff to provide a scientific review of everything EPA does.”

“All communications between EPA and OMB during the development of agency technical products and actions should be preserved for the public record.”

“OMB is increasingly interfering in earlier stages of projects... sometimes insisting on methodologies that are less credible than those selected by EPA scientists.”<sup>1</sup>

Union of Concerned Scientists, 2008

**Figure 1.** Quotes from Scientists.

second-guess the consensus of agency specialists with decades of experience, and of advisory committees composed of internationally respected experts.) (Union of Concerned Scientists, 2008).

Figure 1 captures several comments from EPA and National Oceanic and Atmospheric Administration scientists included in the report. Others observed that agency scientists had difficulty in their agencies, not only in the White House, reporting that their expertise was ignored within the agency. This suggested that the conflict between politics and science was more generic.

Similar arguments had been advanced by the Center for Progressive Reform.<sup>5</sup> The Center argued that “retrospective examinations of regulatory decisionmaking shows that the primary impact of such analyses is to weaken the protection of health, safety, and the environment, not strengthen it” (Steinzor, 2009, p. 3).

Members of Congress who opposed the Bush-era OIRA efforts noted that proposals that emerged from OMB

represented a significant departure from approaches contained in the many statutes governing health, safety and the environment, and from statutory direction to federal agencies to protect human health, safety, and the environment. . . . [A]lthough there have been legislative proposals in several Congresses to mandate government-wide criteria for the use of risk assessment and cost-benefit analyses, these bills have never been enacted. (Gordon et al., 2005).

The Center had also opposed an effort within OIRA to require peer review of regulatory information and to specify the procedures under which that review would take place. Writing to a staff member in OIRA, the Center commented,

OMB’s assumption that scientists who receive public funding are more likely to be biased than scientists who receive industry funding is simply wrong, and its plan for appointing scientists with offsetting biases is unworkable. . . . OMB should make explicit its intent to leave in place federal laws and regulations that bar the participation of scientists with demonstrable financial “conflicts of interest,” and should encourage agencies to disclose any waivers granted such reviewers. (Shapiro, 2003).

The work of legal scholars on these issues began to surface during this period. Wendy E. Wagner (2003, p. 64) published an article in the *Duke Law Journal* titled “The ‘Bad Science’ Fiction: Reclaiming the Debate Over the Role of Science in Public Health and Environmental Regulation,” arguing that “the information that most scientific research provides to health and environmental regulation is incomplete and inconclusive, both in identifying and in quantifying the risks that these hazards pose. She noted that three problems could be identified in the process of incorporating science into regulation: poor quality studies, lack of transparency, and the available production of scientific research. Other legal scholars focused on issues related to presidential authority. Peter L. Strauss testified before the House Committee on Science and Technology about the 2007 proposed Executive Order to be issued by President Bush that he described as taking “a decisive step from President as overseer to President as decider.”<sup>6</sup>

The election of Barack Obama in 2008 provided both opponents and defenders of OIRA an opportunity to raise their concerns about the decision processes and role of the agency. Lisa Heinzerling characterized the initial environment as hopeful:

The assertiveness and opacity of OIRA during the George W. Bush, administration led many to hope that when Barack Obama came into office, things would change for the better. And indeed, one of President Obama's first acts was [a promise] to issue an executive order revoking the Bush-era executive orders on regulatory review. (p. 11)

However, this policy approach did not surface as she had expected.

A year before the election, the non-profit organization OMB Watch (now called the Center for Effective Government) organized a committee of 17 individuals who were concerned about the federal regulatory process. Three factors were used to identify participants: They brought expertise either about specific aspects of the rulemaking system or about specific policy areas; they agreed that the current system needed major reform; and they could not be anti-regulatory ideologues (OMB Watch, 2008). The group focused on a broad set of issues:

In light of the negative image of government regulations, Congress and the executive branch have imposed a number of requirements on federal agencies that direct them how and when to regulate. Some hurdles were proposed by those intent on stifling regulatory government, while others came from those hoping to create a process that results in "smarter" regulation. Regardless of the reason, with the addition of each requirement, agencies have had to spend more time and resources to justify and complete rulemakings. For some agencies, it now takes more than a decade to implement a major rule. (OMB Watch., p. 1)

The OMB Watch group identified six principles that they believed should be embraced by the new government:

1. Regulatory decisions should be timely and responsive to public need.
2. The regulatory process must be transparent and improve public participation.
3. Regulatory decisions should be based on well informed, flexible decision making.
4. Authority to make decisions about regulations should reflect the statutory delegation granted by Congress.
5. Agencies must have the resources to meet their statutory obligations and organizational missions.

6. Government must do a better job of encouraging compliance with existing regulations and fairly enforce them. (OMB Watch 2)

Despite the hope that the Obama administration would adopt a different approach, many of OIRA's observers were disappointed. Lisa Heinzerling (2013) described the situation that she saw:

In a little-noticed memorandum issued less than two months later, [OMB] Director Peter Orszag essentially revoked President Obama's [promised] revocation of the executive order on guidance. Orszag announced that OIRA would, despite Obama's order, continue to review agency guidance,<sup>7</sup> since it had done so for many years. The President's revocation of the Bush-era executive orders had received enthusiastic attention from progressive groups. Perhaps not surprisingly, the OMB Director's memorandum revoking the major substantive part of the President's executive order—issued quietly, without a press release—received almost no attention. In fact, so stealthy was the replacement of Obama's order with Orszag's memorandum that, even months later, I found myself having to explain to EPA personnel why they still needed to send agency guidance to OIRA for review. Quite understandably, they had read Barack Obama's executive order rather than Peter Orszag's memo. (p. 11)

Part of the concern about Obama's OIRA stemmed from the appointment of Cass Sunstein as the OIRA Administrator. Sunstein was a close friend of the President's from their days at the University of Chicago and was known as a strong advocate of CBA through his writings. His book, *Simpler: The Future of Government*, provides a personal view of his 4 years as the head of OIRA (Sunstein, 2013). He notes,

Before entering government, I believed in the immense importance of careful analysis of costs and benefits. That belief has not wavered for an instant. . . . Before entering government, I believed in the importance of careful inspection of rules on the books, to see what is working and what is not, and to streamline, simplify, or fix what is not working. That belief became far stronger while I was a public official.

The picture that Sunstein provided of his experience seems to indicate that his view of OIRA was much like that of Graham and earlier administrators. One gets a sense of an individual who did not differentiate between individual actions and what government can do. His assumptions about his authority highlighted centralization of authority within the Executive Branch, ignoring the role of Congress and shared powers in the U.S. system, and ignoring

federalism. The book does not suggest that he was particularly sensitive to possible limits of OIRA's authority. In many ways, his arguments are those of a classic economist who has failed to acknowledge the experience utilizing CBA for more than 50 years. There is nothing that suggests he focused on the reality of uncertainty, the role of government in the 21st century, and that public programs have multiple and often conflicting goals. He clearly believes in the separation of facts and values and seems to ignore situations in which values are built into information and data systems. Sunstein views OIRA as "the cockpit of the regulatory state" (the title of one of his chapters). He believes that his role allowed him "to say no to members of the president's Cabinet" (Sunstein, 2013, p. 3) and to effectively transform CBA from an analytical tool into a rule of decision.

### *OIRA Experience and Its Problems*

Although there are a number of issues that can be drawn from the activities of OIRA from the Nixon era to Obama, two problem areas appeared over the years that are particularly important: controversy about the use of cost benefit analysis and the extent of authority of the office. These concerns have surfaced in both Republican and Democratic administrations and have received extensive attention in the academic literature (Driesen, 2005; Revesz & Livermore, 2008).<sup>8</sup>

*The debate over methodology: Cost Benefit or Benefit Cost.* The issues related to the use of CBA can be interpreted in several ways. One focuses on the way that CBA is used and whether it is actually a neutral policy analysis instrument that can deal with policy uncertainties (Keller, 2009). The second focuses on whether it should be used in the decision-making process dealing with rules and regulations. Different sets of players view the technique quite differently, and conflict between scientists, economists, and lawyers is not unusual. In 2010, the Society for Benefit–Cost Analysis sponsored an analysis of the technique's experience and issued a report that focused on principles and standards for the effort (Zerbe, 2010). It is interesting that this group of economists has chosen to reverse the order of the title of the effort, putting benefit before cost in its title (hence benefit-cost analysis instead of cost-benefit analysis). Some have suggested that this reflected the values of economists who emphasize the difference between public- and private-sector approaches; those who focus on the public sector emphasize the benefits of public action. Others note that most economists involved in the process called it benefit-cost analysis, whereas the lawyers call it cost-benefit analysis.

Although this report did not highlight the OIRA experience, it provides a useful overview of the effort as a governmental decision-making tool. It noted,

Much of the criticism directed towards the use of BCA tackles a strawman: BCA as a mechanistic decision-making criterion. Conversely, its best proponents present and defend a method by which to provide knowledge and inform possible outcomes. This dichotomy is by no means unique to the discipline of BCA; rather, it is one example of the debate surrounding science in many forms and across many disciplines. . . . The decision to use BCA is itself an ethical decision. The way in which it is used, however, can rest in considerable part on science. (p. 25)

Other analysts, however, were more skeptical about the use of the technique. A review of a new book on CBA commented,

The traditional defense of CBA under economic theory casts it as a direct measure of efficiency. Under this view, a regulation that meets a CBA test is efficient in the economic sense; that is, it maximizes overall welfare. This defense offers all of the appeal of economic theory more generally. Perhaps most importantly, it seems to offer a neat mathematical equation for solving messy social problems. At the same time, it is vulnerable to most of the major criticisms that plague economic theory, like the inadequacy of willingness to pay as a measure of value. (Sinden, Kysar, & Driesen, 2009, p. 49)

Similar arguments have been made that the technique does not take the distribution of benefits and costs into account, something that is key in politics (Wilson, 1980).

Economist Robert Frank (200) wrote,

Even the most ardent proponents of cost-benefit analysis concede that comparing disparate categories is extremely difficult in practice. But many critics insist that such comparisons cannot be made even in principle. In their view, the problem is not that we do not know how big a reduction in energy costs would be required to compensate for a given reduction in air quality. Rather, it is that the two categories are simply incommensurable. (p. 914)

Efforts to explore questions of value seemed to end up in a similar place:

Two expert-based approaches are commonly advocated for incorporating ethical values into environmental decision-making. One is an “economic capture” approach, according to which existing economic methods can be

successfully extended to include ethical concerns . . . The other is a “more expert” approach which confines economic methods to the analysis of welfare gains, and assumes committees of ethical experts will complement economic expertise. (O’Neill & Spash, 2000, p. 521)

It is interesting that the actual experience of utilizing cost–benefit (or benefit–cost) analysis since the 1960s seems to have played a minimal role in the way that the technique was viewed inside OIRA.<sup>9</sup>

*The debate over authority.* The extent of control and authority found in OIRA is the second set of issues that appears throughout the organization’s lifetime. These concerns involve both constitutional and bureaucratic relationships in the government. Participants involve politicians and interest groups as well as executive branch and congressional actors. It includes relationships that flow from the constitutional establishment of shared powers between the executive, legislature, and the judiciary. Peter L. Strauss (2007) was concerned about concentrated power within OIRA:

What might Congress do about this? This looks like a simple affront to two of Congress’s responsibilities—to confer organization and authority on elements of government by enacting statutes, and to approve (in the Senate) all appointments to high office (thus creating one of the Constitution’s many checks on unilateral authority in any branch). (pp. 10–11)<sup>10</sup>

Others have raised issues about potential conflicts between OIRA action and judicial decisions.

Observers of OIRA decision making have also pointed to the conflict between OIRA and agencies when OIRA disagrees with the agency’s interpretation of the statute the agency is charged with administering (Heinzerling, 2013, p. 20). At times, this disagreement involves individual career staff members not only at a programmatic level in the agency or department, but it can also reach levels of disagreement between OIRA and cabinet officials. Lisa Heinzerling (2013) described the situation:

One might imagine that a career civil servant operating out of an obscure White House office would give a great measure of deference to rules forwarded by the heads of agencies, who were nominated by the President and confirmed by the Senate. But, it appears, one would be wrong.

These rules not only deal with the substance of the policy but issues related to the regulatory processes and levels of bureaucratic discretion (e.g., timing, delays, and choice of what policies to highlight).

In addition, the bureaucratic conflict that has occurred also involved disagreement between generalists (often political appointees) and specialists in the field under dispute. This clearly was an issue raised during the Graham era and continued through the Obama administration. Heinzerling noted,

By pressing agencies to adopt cost-benefit analysis as a decision-making framework wherever the law allows it, Sunstein's OIRA has, by executive fiat rather than legislative enactment imposed a cost-benefit supermandate wherever the law is ambiguous (which, of course, it often is). (Heinzerling, 2014, p. 22)

Donald Arbuckle, a career OIRA staffer for 25 years, expressed a different view of the potential of CBA. He acknowledged,

OIRA serves the President by performing two equally important yet potentially contradictory functions. OIRA is the proponent of good analysis and the keeper of analytic integrity throughout the Executive Branch and across the EOP as well. OIRA is also, like every office and individual in the EOP, an agent of the President. How it accommodates these two roles provides a window to the success of analysis in a political world. (Arbuckle, 2009, p. 7)

However, Arbuckle's definition of that political world essentially stayed inside the boundaries of the White House and the Executive Branch and effectively ignored the perspectives of those in Congress, the judiciary, and—where appropriate—states and localities.

## Conclusion

The OIRA experience provides an example of ways in which the imperatives of science and policy analysis intersect. As this account indicates, there are many ways to approach that experience. I have noted that there are multiple players involved in the activity of this organization. A summary of this experience illustrates the complexity of the science–policy relationship and the changing role of policy analysis in that relationship. The two issues that have been emphasized—use of CBA and the debate over authority—are closely intertwined and play an important role in the conflict about the level of centralization in the government (within the executive branch and between the government and the private sector).

## Science

Although the norms of science provide a rhetorical framework that suggests that the scientific method produces neutral information and differentiates

between truth and falsehood, one does need to look beyond the rhetoric. Although one might have thought that scientists would be drawn to CBA, the experience of nearly 50 years indicates that such an assumption can be misleading. It has become clear that scientists are required to pay attention to the limited resources available to support research and must acknowledge the ways that those resources are allocated. We have learned that scientists often disagree both on methodologies and on interpretation of results. The current emphasis on information as evidence masks real differences in the way that data contains assessments of value. In addition, although the society exhibits ambivalence about relying on experts, scientists are likely to argue that their work deserves deference, and thus, they require professional control.

### *Politics*

Any activity in the public sector must be attentive to the presence of multiple actors with very different perspectives and constraints. It is very rare when the citizens of the United States are willing to accept the perspective of a single player in this decision-making environment. The structure of the U.S. system commands acceptance of different institutional actors at the federal level and the reality that a federal system minimizes the authority of the multiple national actors. The prevalence of decision-making networks provides evidence that players also include private-sector players as well as players across the globe. It is not surprising that contemporary decision making focuses on players with often rigid ideologies, generating contentious exchange. The result of these factors works against long-term solutions and, instead, encourages short time frame perspectives. Although other countries differ from the decision-making structure in the United States, there is clear evidence that networks and other public-private relationships are present in those systems.

### *Legal Approaches*

The constitutional constraints in the United States impose a shared power strategy that works against the centralization of authority. Despite this, efforts to rationalize the system push toward centralization. This is despite the structural inevitability of fragmented and conflicting power sources. These sources generate separate definitions of policies and processes that rarely move in a coherent direction. The legal definition of evidence is quite different from that used by scientists (Majone, 1989). Fragmentation is also found in systems beyond that of the U.S. structure.

## *Bureaucratic Behavior*

The context of decision making in the United States makes it inevitable that relationships between scientists and policy analysts are full of conflicts and, at best, call out for bargaining relationships. Conflict between Congress and the White House comes into the picture both directly and indirectly through difficult relationships between the White House and agencies and departments. Bureaucratic tendencies to control information sources make it extremely important to focus on transparency policies that provide access to information by all players. Again, these behaviors are found in other systems as well. Most importantly, the OIRA experience illustrates the power of the bureaucratic actors to use delay tactics to keep a decision from being made.

## *Efficiency Values and the Market*

It is difficult to find an analogue to the market in most public organization settings. Yet, the approach taken by economists starts with that set of assumptions and is embedded in the CBA approach. That approach is constructed on efficiency values that provide the setting for a belief in a fact–value dichotomy and an argument that economic analysis provides a way to separate fact and value. It searches for a clear answer based on quantification. It is quite comfortable imposing a government-wide approach to decision making. The logic of the cost–benefit approach often collides with the logic of science, creating tension between the two players.

## *Reaching Beyond the United States*

Although the U.S. experience with OIRA reflects some unique attributes of the American system, the lessons from that experience are relevant beyond U.S. borders. As was noted in the introduction to this article, evidence-based policy development pits rational processes against the attributes of the real world of political decision making (bargaining, entrenched commitments, and diverse stakeholder values and interests). The U.S. experience also suggests that use of CBA raises special problems for the advocates of evidence-based policy development.

The U.S. experience calls on us to acknowledge that conflict between the rational and political is likely to be inevitable. It challenges us to be modest about our expectations of overcoming that conflict.

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## Notes

1. These lenses draw on Graham Allison's work but are an attempt to expand them to include additional perspectives (Allison, 1971).
2. Law in the adversary system is not usually viewed as a problem-solving exercise nor one in which sharing information is valued or normal.
3. It appears that strong advocates of the technique continued to call it "cost-benefit," whereas those who had more modest expectations called it "benefit-cost."
4. Graham was the first and only non-lawyer to be named to the position. An economist, he ran the Harvard Center for Risk Analysis.
5. The Center for Progressive Reform describes itself as an organization of 60 academics from universities across the country specializing in the legal, economic, and scientific issues that surround federal regulation to protect public health, natural resources, and worker safety. One component of the Center's mission is to circulate academic papers, studies, and other analyses that promote public policy based on the multiple social values that motivated the enactment of our nation's health, safety, and environmental laws. We seek to inform the public about scholarship that envisions government as an arena where members of society choose and preserve their collective values. We reject the idea that government's only function is to increase the economic efficiency of private markets.
6. Strauss was also concerned about the creation of agency regulatory policy officers who had authority to scuttle proposed regulations without input of the public or agency experts.
7. Guidance refers to the decisions by an agency through regulations or memoranda that go beyond the authority spelled out in the laws.
8. Driesen provides extensive examples of the problems with Office of Information and Regulatory Affairs' (OIRA) use of cost-benefit analysis. They include regulations dealing with EPA issues and issues involving the Occupational Safety and Health Administration.
9. For example, Sunstein's book does not acknowledge any of the analyses that have been cited in this article nor does he attempt to respond to their critiques.
10. The appointment of the administrator of OIRA has required Senate confirmation since enactment of the Paperwork Reduction Act of 1986.

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