

COST-BENEFIT ANALYSIS: AN ORGANIZATIONAL DESIGN PERSPECTIVE

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To the dismay of some and the satisfaction of others, the Obama administration has continued the use of cost-benefit analysis as the focal point of White House regulatory review. Regulatory skeptics support this practice,¹ while environmentalists have split, divided over whether to reform the methodology (the remodelers) or to replace it (the rebuilders). Remodelers, such as Dean Revesz and Professor Livermore, argue that the argument over using cost-benefit analysis is over, environmentalists have been ill served by their opposition to it, and it can usefully assist environmentalists if properly reformed.² Rebuilders, such as myself, would replace a cost-benefit analysis with a pragmatic assessment of potential regulatory impacts that would eschew the use of cost-benefit analysis except where it is legally required.³

This essay approaches the issue of the usefulness of cost-

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¹ See, e.g., John D. Graham, *Saving Lives through Administrative Law and Economics*, 157 U. PA. L. REV. 395 (2008).

² RICHARD L. REVESZ & MICHAEL A. LIVERMORE, *RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENT AND OUR HEALTH* (2008).

³ For arguments why I would replace cost-benefit analysis, and for a description of the replacement methodology, see RENA STEINZOR & SIDNEY SHAPIRO, *THE PEOPLE’S AGENTS AND THE BATTLE TO PROTECT THE AMERICAN PUBLIC: SPECIAL INTERESTS, GOVERNMENT, AND THREATS TO HEALTH, SAFETY, AND THE ENVIRONMENT* 72–93 (2010); Sidney A. Shapiro & Christopher H. Schroeder, *Beyond Cost-Benefit Analysis: A Pragmatic Reorientation*, 32 HARV. ENVTL. L. REV. 433 (2008); see also RENA STEINZOR, AMY SINDEN, SIDNEY SHAPIRO & JAMES GOODWIN, *A RETURN TO COMMON SENSE: PROTECTING HEALTH, SAFETY, & THE ENVIRONMENT THROUGH “PRAGMATIC REGULATORY IMPACT ANALYSIS,”* (2009), http://www.progressivereform.org/articles/PRIA_909.pdf [hereinafter CPR Whitepaper] (endorsing a reorientation that does not include cost-benefit analysis).

benefit analysis from an organizational design perspective, a viewpoint that has not previously been used in debates concerning this issue. This perspective, which is widely used in professional training in business and public administration,⁴ focuses on how organizations adopt decision-making methods that permit them to demonstrate their fitness and thereby gain support from investors, customers, and others.⁵ This perspective provides additional reasons why rebuilding cost-benefit analysis would not serve the public interest.

As discussed in Part I, the organizational design perspective is focused on contingency theory—the idea that the methods of decision making in an organization reflect the degree of uncertainty concerning the organization’s goals and how to achieve them. This section describes four decision-making modes that reflect these parameters. Only one of these modes is consistent with cost-benefit analysis, and few business firms use this methodology for anything but routine, non-complex decisions because they operate in environments in which the methodology is not effective.

Part II will map these decision-making modes onto government decision making. As in private organizations, some agency decisions involve a clear goal and clear methods of achieving that goal, permitting the use of cost-benefit analysis. But, like private organizations, this mode of decision making is best used only for routine and simple issues. For other decisions, particularly regulatory decisions, agency decisionmakers operate under conditions of bounded rationality, forcing them to adopt the same type of heuristical decision making used in private organizations.

Part III draws three lessons from an organizational design perspective concerning the usefulness of cost-benefit analysis. First, we ought to be suspicious about cost-benefit analysis because it has been imposed by the White House and not developed internally by the agencies themselves. The

⁴ HAL G. RAINEY, *UNDERSTANDING AND MANAGING PUBLIC ORGANIZATIONS* 10 (4th ed. 2009) (“Organizational theory and organizational behavior are covered in every reputable, accredited program of business administration, public administration, educational administration, or other form of administration.”).

⁵ See RICHARD BUTLER, *DESIGNING ORGANIZATIONS: A DECISION-MAKING PERSPECTIVE* 1 (1991).

organizational design literature teaches that institutions evolve decision-making approaches that are the most consistent with their environment, and it is notable that agencies only use cost-benefit analysis to satisfy White House requirements, but resort to organic decision-making methods in deciding how to satisfy statutory criteria.

Second, while there is a mismatch between agency decision making and cost-benefit analysis, it fits the objectives and intentions of the Office of Information and Regulatory Affairs (OIRA) quite well. Whereas agency decision-making seeks to accomplish the precautionary ends of regulatory statutes, OIRA is driven by its economic orientation and its concern about regulatory costs, a concern shared by the business community, a frequent visitor at OIRA. For this purpose, the methodology is sufficient.

Third, the OIRA review process is less systematic, robust, and discursive than agency decision making, which explains why OIRA oversight can veer into an anarchical process, lacking rhyme or reason. This insight presents an irony. Cost-benefit supporters regularly accuse agencies of engaging in non-systematic decision making, when in fact it is the White House that is more guilty of this approach.

Finally, Part IV considers arguments made by Dean Revesz and Professor Livermore in light of an organizational design perspective. Like the regulatory skeptics, they contend that cost-benefit analysis is necessary to bring rationality to the regulatory process, but this conclusion is inconsistent with the fact that business organizations adopt decision-making methods that recognize that the information necessary for cost-benefit analysis is simply unavailable in the real world. This does not mean that these business firms are irrational in the way in which they make decisions. The same is true for administrative agencies.

I. ORGANIZATIONAL DESIGN AND DECISION MAKING

Drawing on multiple disciplines,⁶ organizational design scholars analyze how individuals interrelate in an organization and what this means for the effective functioning of the organization.⁷ A particular interest is the relationship between decision making in

⁶ *Id.* at 2.

⁷ RAINEY, *supra* note 4, at 10.

an organization, the goals of that organization, and the availability of information.⁸ “Contingency theory,” a key insight, predicts that the method of decision making that an organization will adopt reflects the degree of uncertainty about its goals and about how it achieves those goals.⁹

This section explains contingency theory and then describes four decision-making modes that reflect degrees of certainty about organizational goals and how they can be achieved. An organization may find it appropriate to adopt one or more of these methodologies or even to blend one or more of them.

A. *Contingency Theory*

The organizational design literature focuses on how people in organizations make and execute decisions by studying observable decision-making patterns, including both formal and informal interactions.¹⁰ The pattern of decision making runs along a continuum, with “strict” or “crisp” decision-making rules at one end of the spectrum, and “elastic” or “fuzzy” methodologies at the other end. A crisp decision-making method spells out precisely the details of the process that will be used to make a decision, including who does what job, what decision-making rules apply, who can get involved in decisions, who reports to whom, and the nature of the analysis to be used in making a decision. An elastic method provides flexibility concerning the process to be used, which means that the previous elements may be handled in different ways concerning different decisions, and some of the elements may be augmented or deleted.¹¹ In an elastic system, decision-making rules are not “considered as laid down in tables of stone . . . ; they are considered flexible by decision makers and it is the intention rather than the letter of the rule that counts.”¹² The greater the uncertainty concerning an organization’s goals and how to accomplish those goals, the more likely it is that an organization

⁸ See, e.g., CHUN WEI CHOO, *THE KNOWING ORGANIZATION: HOW ORGANIZATIONS USE INFORMATION TO CONSTRUCT MEANING, CREATE KNOWLEDGE, AND MAKE DECISIONS* (2d ed. 2006).

⁹ See RAINEY, *supra* note 4, at 48 (describing the “contingency theory” as the “central school or movement” in organizational theory).

¹⁰ BUTLER, *supra* note 5, at 2; RAINEY, *supra* note 4, at 19–22.

¹¹ BUTLER, *supra* note 5, at 13.

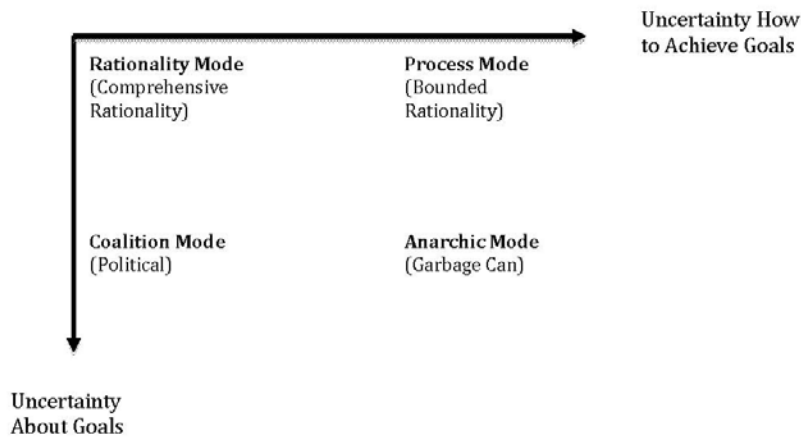
¹² *Id.* at 14.

will employ elastic decisional approaches.¹³

Organizations also differ concerning the set of ideas that decisionmakers take into account in making a decision, which is referred to as their “ideology.” The ideology of decision making runs along a similar spectrum with “focused” or narrow ideologies at one end and “robust” or multidimensional ideologies at the other end.¹⁴ A “robust ideology is one that contains a rich body of ideas and may be contrasted to a focused ideology which has a highly specific set of ideas.”¹⁵ The greater the uncertainty concerning an organization’s goals and how to achieve them, the more likely it is that an organization will employ a robust ideology. A more robust ideology is needed under conditions of uncertainty because the organization will need a set of more complex or richer ideas to make decisions under conditions of uncertainty.¹⁶

The nature of organizational decision making varies according to whether an organization confronts uncertainty about its ends, its means, or both. As the following diagram indicates, these parameters produce four modes of decision making.

FIGURE 1. MODELS OF ORGANIZATIONAL DECISION MAKING¹⁷



¹³ *Id.* at 13–15.

¹⁴ *Id.* at 15–16.

¹⁵ *Id.* at 16.

¹⁶ *Id.*

¹⁷ Adopted from *id.* at 59, and CHOO, *supra* note 8, at 211.

B. *Rationality Mode*

When both the goals of an organization and the means of achieving them are clear, an organization will engage comprehensive rationality, a systematic consideration of potential options that identifies all potential means of achieving the organization's goals, quantifies the benefits and costs of each goal, and then chooses the optimal action to pursue.¹⁸ In other words, the organization employs strict decision-making rules, using a focused ideology.

At one time, it was assumed that all organizations operated in this manner, because this was considered to be the "rational" way to make decisions, but organizational analysts, led by Herbert Simon, deflated this notion.¹⁹ The critics' insight was that institutional decision making in actual practice seldom looked like the comprehensive model except for the most routine decisions, a result that they attributed to the need to make decisions with incomplete information, under time pressures, with disagreement about goals.²⁰ Inadequate information is particularly a problem for the rationality mode. As one analyst notes, "The information requirements of a purely rational mode of decision-making are daunting."²¹

C. *Process Mode*

When the goals of an organization are clear, but the means of achieving them are not, the organization will adopt a process mode of decision making, which relies on decision-making rules that involve intuition and judgment.²² As the degree of uncertainty increases, attempts to calculate costs and benefits become less and

¹⁸ BUTLER, *supra* note 5, at 60; Colin S. Diver, *Policymaking Paradigms in Administrative Law*, 95 Harv. L. Rev. 393 (1981).

¹⁹ See HERBERT A. SIMON, *ADMINISTRATIVE BEHAVIOR* (2d ed. 1957), JAMES G. MARCH AND HERBERT A. SIMON, *ORGANIZATIONS*. (2d ed. 1993), and RICHARD M. CYERT & JAMES G. MARCH, *A BEHAVIOR THEORY OF THE FIRM* (1963), for examples of this organizational literature.

²⁰ SIDNEY A. SHAPIRO & ROBERT L. GLICKSMAN, *RISK REGULATION AT RISK: RESTORING A PRAGMATIC APPROACH* 23 (2003).

²¹ CHOO, *supra* note 8, at 204.

²² BUTLER, *supra* note 5, at 60–61.

less helpful, increasing the degree of intuition and judgment involved in choosing some means of accomplishing a goal. In this reality, the organization changes its objective, settling for a “satisfactory” solution, one that is good enough, rather than an optimal one.²³

Simon resisted the conclusion that any decision-making methodology that does not follow the rationality mode was not rational. He insisted that a process mode is “rational” as long as it is logically related to accomplishing an organization’s goals. This makes organizational decision making intendedly rational, while the people making the decisions are only boundedly so.²⁴ The people in the organization practice “bounded” rationality because they are unable to locate an optimal solution in light of resource and time constraints and in light of the unavailability of information needed to engage in comprehensive rationality.

As managers gain experience, they typically rely on decision-making techniques that have proven useful in the past. These rules and procedures specify who is to make a decision, what information is to be used, where to look for information, who to consult, and what decision-making criteria to use.²⁵ These processes “reduce the need for extensive search or for weighing many alternatives at the same time, and simplify the choice process by developing standard responses to defined situations.”²⁶ So, for example, the owner of a store could attempt to set an optimal price for the items the store sells by determining how demand would vary with price across potential customers. Lacking the necessary information, however, the store will apply a simple mark-up over cost that provides an acceptable level of profit.²⁷ Similarly, without conclusive evidence for this choice, a firm will set a target of a five percent increase in its profit for the next five years, a benchmark chosen on the rate of return that the firm has earned in the past.²⁸

Another strategy is to engage in incremental decision making, in which an organization breaks a problem down into small steps,

²³ CHOO, *supra* note 8, at 12.

²⁴ *Id.* at 13.

²⁵ *Id.* at 12–13; *see id.* at 216–220 (describing the process model in more detail with examples).

²⁶ *Id.* at 13.

²⁷ *Id.* at 205.

²⁸ RAINEY, *supra* note 4, at 182.

takes one step, and analyzes the result, rather than attempting to find the optimal solution to a problem.²⁹ Charles Lindblom famously described this approach as “muddling through” to distinguish it from the comprehensive rationality that was unobtainable.³⁰ While the distinction is accurate, the name is unfortunate in the sense that it suggests that an organization is unorganized, but the opposite is true. By proceeding incrementally, the organization attacks the problem of uncertainty about how best to achieve its goals.

D. *Coalitional Mode*

When an organization is uncertain about its goals, it adopts a coalitional mode of decision making, which involves finding decision-making processes that permit it to resolve the differences about those goals.³¹ In other words, when there is disagreement about an organization’s goals, inside the organization, outside of it, or both, managers end up bargaining with those who disagree to negotiate an agreeable set of goals. In this mode, the “composition of the firm is not given; it is negotiated. The goals of the firm are not given; they are bargained.”³²

Most organizations lack a clear set of goals about which persons inside and outside of the organization can agree. The problem is that any one goal is only one of a set of goals that the organization is attempting to accomplish and the goals are likely to conflict.³³ Thus, firms “try to manage conflicts among goals for short-term and long-term profits, community and public relations, employee and management development, and social responsibility (such as compliance with affirmative action and environmental protection laws).”³⁴

Disagreement about goals is also related to the division of labor in the firm. Key employees have different perspectives because they differ in their professional training and orientation.³⁵

²⁹ See Charles E. Lindblom, *The Science of “Muddling Through”*, 19 PUB. ADMIN. REV. 79 (1959).

³⁰ *Id.*

³¹ CHOO, *supra* note 8, at 211; *see also* Lindblom, *supra* note 29, at 82.

³² James G. March, *The Business Firm as a Political Coalition*, 4 J. POLITICS 662, 672 (1962).

³³ RAINEY, *supra* note 4, at 148.

³⁴ *Id.*

³⁵ BUTLER, *supra* note 5, at 7.

The vice-president for finance may favor some goal, while the general counsel may consider that goal to be inappropriate. Outside of the corporation, the firm confronts other organizations with potentially conflicting goals, including stockholders, suppliers, customers, governmental agents, and various types of employees.³⁶

When there is no single institutional mind that can speak for everyone, decision making becomes a process of shifting coalitions of interests and temporary alliances, which come together and submerge their differences, at least long enough for the institution to make a decision. Coalitions can involve only one issue, or they can involve tradeoffs, in which one interest might support an outcome in return for support from another interest on a future issue. Participants in the coalition make demands on the organization, often in the form of money, but also in the form of demands for policy commitments. Some of these demands will be consistent with each other, but some will not be.³⁷

E. *Anarchical Mode*

When an organization is unclear about both its goals and how to accomplish them, decision making resembles organized anarchy, famously described by Professors March and Olsen as the “garbage can” approach.³⁸ As the name of this mode suggests, decision making is random and unorganized.³⁹ This mode is different than the coalitional mode because a decision does not result from bargaining. Instead, decisions are reached through a decision-making process, but unlike the process mode of decision making, the process is unorganized and does not employ pre-existing decision-making principles.

In the anarchical mode, decisions are the outcome of four independent “streams of events.”⁴⁰ First, there are decisions about the organization’s goals. Second, people in the organization will develop information about potential means for carrying out the organization’s goals, but this process is independent of the

³⁶ March, *supra* note 32, at 672–73.

³⁷ *Id.* at 673.

³⁸ Michael D. Cohen & James G. March, *A Garbage Can Model of Organizational Choice*, 17 ADMIN. SCI. Q. 1 (1976).

³⁹ BUTLER, *supra* note 5, at 54.

⁴⁰ This description is drawn from BUTLER, *supra* note 5, at 53–56.

previous one. Third, the people who chose the goals may not be the same persons who become aware of ways in which to accomplish the organization's goals. Moreover, the people who ultimately choose one of those methods may be different from either the group who chose goals or those who identified means, or both. Finally, the organization makes a decision when a "choice opportunity" arises. A choice opportunity usually arises from some outside event, such as a crisis or the actions of a competitor, which focuses the organization on an issue. Since problems, solutions, participants, and choice opportunities flow into the organization as separate events, the organization acts like a "garbage can" in which these streams are stirred and mixed.

When a choice opportunity presents itself, the organization may or may not make a decision. If it does act, the decisionmaker will choose some means for accomplishing a goal, but the decision is not made according to an organized decision-making method or by using pre-existing decision-making rules. Instead, the decision making will look at what solutions are in the garbage can, and the person will choose one according to some ad hoc method. As noted, it is this lack of an organized decision-making method that distinguishes this mode from process-based decision making. Because decision making is not process-based, the organization can end up choosing a means of accomplishing a goal that does not serve that purpose, or the means it selects will not be as effective as other methods of accomplishing the goal that were available to it.⁴¹

Consider textbook publishing as an example.⁴² Firms are unsure in what disciplines they might want to publish a book, making their preferences about the goals of their business uncertain. Editors may perceive that a particular market is ripe for a new book, say on introductory physics, but they do not pursue that opportunity at the time because they lack a book proposal that would meet this objective. Book proposals arrive at the publisher but their arrival is unconnected to thoughts about what markets the firm should enter. The firm has no formula or set procedures to pick which books to publish, and editors often pick books in disciplines in which they have no training. Editors come and go, and the editor who picked a market to enter might leave before a

⁴¹ *Id.* at 55.

⁴² This description is drawn from CHOO, *supra* note 8, at 226–27.

suitable book is identified, with the result that the person's successor will reject such a book because that editor wants to enter a different market. Finally, decision making is tied to outside events, such as the arrival of a book proposal in a market in which the firm does not currently have a product, or an important discovery in a field that is not covered in the firm's current books, which opens a choice opportunity the firm may or may not pursue.

F. *Multiple Modes*

None of these models of decision making are exclusive. An organization may employ more than one of them: as the decision-making activity unfolds, there can be a change in the degree of uncertainty about goals or the means of achieving them.⁴³ Imagine, for example, a routine promotion decision, for which an organization employs the rationality mode, because the decision involves both a clear goal and a clear method of achieving it. But, the decision could become politicized when others perceive it as setting a precedent, forcing the organization into a coalitional mode of decision making.⁴⁴ In a similar manner, an organization could be using a process mode because of uncertainty about how to accomplish a goal, but subsequently shift to a coalitional mode because disagreement about the goal surfaces.⁴⁵

II. ORGANIZATIONAL DESIGN AND AGENCY DECISION MAKING

The organization design literature was developed primarily in relationship to private firms, but all four of the previous modes of decision making can be located in the government. Some agency decisions involve the rationality mode because there is a clear goal and clear methods of achieving that goal, but this mode of decision making is used only for routine and simple issues. For other decisions, particularly regulatory decisions, agency employees operate under conditions of bounded rationality, necessitating the adoption of the process model. Agencies also employ the coalitional model. This revelation should come as no surprise to anyone who observes the political bargaining that accompanies controversial rules between the agency and interested persons, but also between the White House and an agency.

⁴³ *Id.* at 229.

⁴⁴ *Id.*

⁴⁵ *Id.*

Finally, some governmental decision making resembles the anarchical model. This method probably best describes how Congress operates. At times, White House oversight also takes on this characteristic. As in the textbook publishing firm example, the identification of goals, methods of accomplishing those goals, different decisionmakers, and choice opportunities flow into the White House's garbage can, becoming mixed up in unpredictable and unsystematic ways.

A. *Rationality Mode*

Like private organizations, governmental institutions adopt the rationality mode for routine decision-making issues for which there is clear consensus on goals and a clear technology to achieve them, which sometimes occurs.⁴⁶ The choice of which brand of photocopiers to purchase, for example, is susceptible to a cost-benefit analysis which indicates the optimal choice. After identifying what qualities a copier must have, an agency can buy the least expensive model that has those qualities. But, even a quick look at how agencies reach decisions concerning proposed and final regulations will confirm that agencies do not practice comprehensive rationality for precisely the reasons that Simon and other organizational theorists identified. Limited information, time pressures, and individual cognitive limitations simply make it impossible to identify the optimal regulatory solution, as I have elaborated elsewhere.⁴⁷ Instead, like business firms, agencies employ a process mode of decision making that takes into account bounded rationality, as discussed next.

A justification for the original regulatory review executive order, issued by President Reagan, was to change the process decision-making approach in agencies into one of "comprehensive rationality."⁴⁸ The current executive order continues to demand this approach, requiring agencies to identify the specific problem that they are addressing, determine whether existing laws or regulations have contributed to that problem, identify and assess available alternatives, evaluate the relative risk they are addressing as compared to other risks they could address, quantitatively evaluate the cost-effectiveness of various solutions, assess both the

⁴⁶ RAINEY, *supra* note 4, at 180–83.

⁴⁷ SHAPIRO & GLICKSMAN, *supra* note 20, at 22–24, 65–71 (2003).

⁴⁸ Shapiro & Schroeder, *supra* note 3, at 446–447.

costs and benefits of the preferred and alternative solutions, and identify and assess alternative forms of regulation.⁴⁹

B. *Process Mode*

Although agencies employ comprehensive rationality for some routine and straightforward decisions, they use a process-based mode for rulemaking. While different agencies employ somewhat different approaches, decision making has five common characteristics.

First, agencies act under statutory standards that reflect the bounded rationality under which decisionmakers operate. Almost none of the major regulatory statutes use a cost-benefit standard to guide regulation.⁵⁰ Instead, agencies employ a number of other decision rules,⁵¹ the most common of which is “best available technology (BAT).” Under this approach, an agency chooses a level of health protection equal to that produced by the best protective technology that is available on the market.⁵² BAT involves the type of heuristical decision making that is the *sine qua non* of the process mode. BAT permits the agency to reach a decision more quickly than if the regulation was based on a determination of how much pollution is actually unsafe⁵³ or on a cost-benefit standard,⁵⁴ because it requires information that is more accessible than these other forms of decision making.

Second, decision making is multidisciplinary.⁵⁵ Agencies rely on a working group of agency experts in science, health, safety, technology, economics, law, and other disciplines.⁵⁶ Agencies rely on such teams because they must make scientific, engineering, policy, and legal decisions in the course of determining whether and how to regulate.

⁴⁹ Exec. Order No. 12,866, § 1, 3 C.F.R. 638, 638–39 (1993), *reprinted as amended in* 5 U.S.C. § 601 (2006).

⁵⁰ SHAPIRO & GLICKSMAN, *supra* note 20, at 40.

⁵¹ *See id.* at 40–45 (describing the decision-making standards).

⁵² STEINZOR & SHAPIRO, *supra* note 3, at 77.

⁵³ *Id.*

⁵⁴ SHAPIRO & GLICKSMAN, *supra* note 20, at 65–66.

⁵⁵ *See* Thomas O. McGarity, *The Internal Structure of EPA Rulemaking*, 54 L. & CONTEMP. PROB. 57 (1991); CPR Whitepaper, *supra* note 3, at 18 (case study establishing the interdisciplinary nature of EPA’s rulemaking on lead).

⁵⁶ STEINZOR & SHAPIRO, *supra* note 3, at 78–79.

Third, the form of decision making is discursive.⁵⁷ Participants are expected to give reasons for their advice concerning their respective disciplines and to respond to and defend those reasons in light of questions from the decision-making team. For example, an administrator, responding to concerns expressed by economists about the potential costs of stringent regulation, might press scientists on how confident they are that available scientific evidence suggests a chemical is dangerous even at low levels of exposure. The scientists are obligated to give reasons for their judgments about the dangerousness of the chemical. Reason giving is at the heart of the agency's efforts, and this supplies rationality to the process.

Fourth, the decision-making process includes inviting public comments and responding to them.⁵⁸ This enlarges the discursive dialogue conducted among agency employees and administrators. In particular, the regulated industry can be expected to contest the agency's scientific, engineering, economic, and legal judgments if they support strict regulation. Similarly, public interest advocates can challenge agency judgments if they support weaker regulation.

Finally, agencies make adjustments in rules for problems that the agency did not anticipate when it promulgated the regulation, as I have demonstrated in an earlier article that surveys five major regulatory statutes.⁵⁹ All of the statutes authorized agencies to make back-end adjustments in the form of deadline extensions and waivers, variances, and exceptions. Agencies are authorized to use these adjustments "on the basis of lack of adverse impact on the environment, hardship or technological unavailability, the desire to provide incentives to develop new pollution control or risk-reducing technology, fairness, conflicts between environmental and other social policy values, and, in at least one instance, in open-ended situations."⁶⁰ My coauthor and I concluded that "most, although not all, of these provisions provide policy

⁵⁷ *Id.* at 79.

⁵⁸ 5 U.S.C. § 553 (2006).

⁵⁹ Robert L. Glicksman & Sidney A. Shapiro, *Improving Regulation Through Incremental Adjustment*, 52 U. KAN. L. REV. 1179, 1187 (2004). The statutes were the Clean Water Act (CWA), 33 U.S.C. §§ 1251–1381 (2006), the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. §§ 6901–6992 (2006), the Clean Air Act (CAA), 42 U.S.C. §§ 7401–7671 (2006), the Occupational Safety and Health Act (OSH Act), 15 U.S.C. §§ 651–678 (2006), and the Endangered Species Act (ESA), 16 U.S.C. §§ 1531–1544 (2006).

⁶⁰ Glicksman & Shapiro, *supra* note 59, at 1188.

adjustments that should improve regulatory rationality.”⁶¹

As in other process-based decision-making systems, agencies do not seek an “optimal” solution because they perceive there is no way to identify such a solution. Therefore, based on experience, agencies use decision-making techniques that are addressed to informing their judgment—use of a multi-disciplinary staff, employing a discursive process, and opening decision making to public comment. In addition, there is an incremental element in the back-end adjustments that agencies make using waivers, adjustments, and so on.

C. *Coalitional Mode*

Decision making reflects the coalitional mode when an organization finds itself bargaining over what are appropriate goals for it to pursue, which is the result of an unclear organizational mandate. Although an agency’s statutory mandate provides some guidance, few observers would argue that the ends of government are certain. Rather, the “values that organizations pursue are diverse, multiple, and conflicting, and the values that government organizations pursue are usually more so.”⁶²

Disagreements about organizational ends reflect the different perspectives of the persons with whom an agency must negotiate, particularly the White House. In government, perspectives differ, because “where you stand depends on where you sit.”⁶³ That is, “most players ‘represent’ a department or agency along with the interests and constituencies their organization serves. Because their preferences and beliefs are related to the different organizations they represent, their analyses yield conflicting recommendations.”⁶⁴ Since power in government is shared, decisions are made “not simply for reasons that suppose a course of action, nor because of the routines of organizations that enact an alternative, but according to the power and performance of proponents and opponents of the action in question.”⁶⁵

This dynamic explains why scholars have found dozens of

⁶¹ *Id.*

⁶² RAINEY, *supra* note 4, at 72.

⁶³ Rufus E. Miles, Jr., *The Origin and Meaning of Miles’ Law*, 38 PUB. ADMIN. REV. 399, 399 (1978).

⁶⁴ GRAHAM ALLISON & PHILIP ZELIKOW, *ESSENCE OF DECISION: EXPLAINING THE CUBAN MISSILE CRISIS* 256 (2d ed. 1999).

⁶⁵ *Id.*

instances in which OIRA has opposed strong regulatory initiatives and has seldom, if ever, supported stronger ones.⁶⁶ The desk officers in OIRA, who review proposed and final regulations, reflect the narrow, economic perspective of their training and of the organization in which they work.⁶⁷ This leads to a paramount concern about regulatory costs. Thus, when Professors Bressman and Vandenberg surveyed EPA officials who served during the Bush I (1989–1993) and Clinton (1993–2001) administrations, respondents reported that OMB economists focused inordinately on regulatory costs, as opposed to the benefits of a rule, such as improvements in public health, and on short-term costs and benefits, as opposed to long-term costs and benefits.⁶⁸

OIRA comes by its anti-regulatory disposition for another reason. Since the Reagan administration, it has regarded the business community as an important constituency.⁶⁹ After a rule has been proposed, and even more so while it is being written, regulated entities press their case with OIRA to weaken agency initiatives.

OIRA is open for business with business in Republican administrations because of a shared anti-regulatory ideology, but the door is still open in Democratic administrations because OIRA and business interests share a common perspective—concern about regulatory costs. Consider, for example, how the Obama White House approached EPA's recent coal ash rule. Coal ash, which is the residue left after generation facilities burn coal to generate electricity, contains arsenic, beryllium, chromium, lead, and mercury, metals that are extremely toxic in small amounts.⁷⁰ One of the EPA's first projects in the Obama administration was to write a regulation that would better guarantee the safe storage and

⁶⁶ Shapiro & Schroeder, *supra* note 3, at 450–51 (describing the undisputed evidence that OIRA has opposed dozens of strong regulatory initiatives and the disputed evidence that it has supported strong regulation in a few instances).

⁶⁷ *Id.* at 466.

⁶⁸ Lisa Schultz Bressman & Michael P. Vandenberg, *Inside the Administrative State: A Critical Look at the Practice of Presidential Control*, 105 MICH. L. REV. 47, 72–74 (2006).

⁶⁹ Shapiro & Schroeder, *supra* note 3, at 464.

⁷⁰ Rena Steinzor, *Eye on OIRA: The 121st Day and Coal Ash Still Going to Pits in the Ground*, CPR BLOG (Feb. 12, 2010), <http://www.progressivereform.org/CPRBlog.cfm?idBlog=C3858DAF-B077-29C3-FDB46FDDB7FFBC6D>.

disposal of this material.⁷¹ Before EPA could issue a proposed rule, industry lobbyists flocked to the White House to block its efforts to adopt stringent regulations. In response, OIRA staff has met thirty-three times with interested parties, with no fewer than twenty-eight meetings being with industry lobbyists.⁷²

D. *Anarchical Mode*

The hallmark of the anarchical mode is that decisionmakers adopt solutions that they favor without much, if any, assessment of whether the policy adopted serves the goals of the organization or whether it is the best policy available for this purpose. If you take John Kingdon's description of the legislative process, Congress is the very epitome of the anarchical mode of decision making. In the legislative process, different persons identify problems and solutions, and Congress remains aware of the problems and solutions without acting on them. An outside event, usually a crisis, precipitates a decision when it puts an issue on Congress' decision-making agenda. Congress then chooses a solution favored by those in power at the time the decision is made.⁷³

White House oversight of rulemaking can also veer into the anarchical mode. As in Congress, the decision to do something is tied to an outside, precipitating event, usually complaints from someone about pending agency action, as the coal ash story discussed earlier demonstrates.⁷⁴ Further, White House actions turn on who happens to be involved. According to the respondents in the Bressman-Vanderbergh study, OIRA involvement was "sporadic;" it was "very involved in the things they got involved in [but] they let most of it go by;" and OIRA had "heavy involvement in some rulemakings but hardly any or none in plenty of other rulemakings."⁷⁵ Those surveyed attributed the intensity or lack of intensity of review to the professional or political interests of particular OIRA staffers.⁷⁶ Finally, White House interveners choose solutions from those available to them at the time of intervention, forgoing the process mode of decision making

⁷¹ *Id.*

⁷² *Id.*

⁷³ JOHN W. KINGDON, *AGENDAS, ALTERNATIVES, AND PUBLIC POLICIES* 34 (2d ed. 2003).

⁷⁴ See Steinzor, *supra* note 70.

⁷⁵ Bressman & Vandenbergh, *supra* note 68, at 67.

⁷⁶ *Id.* at 70.

employed by an agency. As in Congress, political considerations can drive this choice.

OIRA's oversight of EPA's attempt to establish a revised air quality standard for ozone illustrates how White House decision making can be anarchical.⁷⁷ In 2003, the American Lung Association sued the EPA over delays in reviewing the then existing NAAQS for ozone, and EPA settled the case, agreeing to issue revised standards no later than March 12, 2008.⁷⁸ EPA commenced its deliberations with a staff review of the 1,700 additional scientific studies of ozone and its effects on public health that had come out since EPA last took up this issue, a review that was vetted by EPA's Clean Air Science Advisory Committee (CASAC). The committee recommended *unanimously* that EPA should make both the primary and the secondary standards more protective,⁷⁹ and Stephen Johnson, the EPA Administrator, proposed lower standards, although not as low as the committee recommended. The limits were then published for comments, the EPA staff reviewed all the comments, and a final rulemaking notice was prepared. Johnson sent it over to the White House, expecting it to be approved in time for a press conference he had scheduled for March 12, 2008.⁸⁰

On March 6, 2008, the OIRA director, Susan Dudley, wrote Johnson a memorandum explaining that she disagreed with the secondary NAAQS issued by the EPA and planned to appeal the

⁷⁷ The Clean Air Act (CAA) requires EPA to set "National Ambient Air Quality Standards" (NAAQS) for seven "criteria pollutants," one of which is ground-level ozone, commonly referred to as smog. 42 U.S.C. § 7408 (2006). EPA must set a "primary" standard to protect public health and a "secondary" standard to protect public welfare. 42 U.S.C. § 7409 (2006).

⁷⁸ The CAA requires EPA to review the NAAQS every five years, revising them downward if scientific evidence indicates that they are not sufficiently protective. 42 U.S.C. § 7409(d)(1) (2006).

⁷⁹ Letter from Dr. Rogene Henderson, Chair, Clean Air Scientific Advisory Committee (CASAC), to Stephen L. Johnson, Administrator, EPA (Oct. 24, 2006) [hereinafter CASAC Letter], available at <http://www.epa.gov/sab/panels/casacorpanel.html>.

⁸⁰ Investigative documents compiled by the Democratic staff of the House Committee on Oversight and Government Reform offer an excellent description of subsequent events. *See generally*, House Committee on Oversight and Government Reform, White House Overruled EPA Administrator on Ozone Regulation, http://democrats.oversight.house.gov/index.php?option=com_content&view=article&id=3491:white-house-overruled-epa-administrator-on-ozone-regulation&catid=43:investigations (last visited Apr. 13, 2011).

issue to the President.⁸¹ Dudley argued that the EPA should have considered economic values in setting the standard; Johnson's deputy administrator, Marcus Peacock, responded that cost was not a legally permissible criterion under the Act.⁸² In the end, President Bush agreed with Dudley. The secondary standard was then changed to be the same as the primary standard.⁸³

Even if it is not standard practice for OIRA to demand illegal regulatory decisions, this example demonstrates how the White House decision process can veer off into anarchy. The Dudley decision reflects such garbage can elements as a choice opportunity (submission of the final rule), the choice of a solution based on the preferences of the decisionmaker (rejection of EPA's secondary standard based on cost considerations), and the choice of a solution that is mismatched to the problem at hand (a solution that ignored the scientific evidence compiled in the rulemaking record).

E. *Multiple Modes*

As in the case of private organizations, the mode of decision making in government can be a combination of methods. As Figure 2 indicates, regulatory agencies combine process-based and coalitional decision making, while OIRA combines process-based, anarchical, and coalition-based decision making.

Regulatory agencies operate in the space between process-based and coalitional decision-making. They employ process-based methods that seek to choose an appropriate (not an optimal)

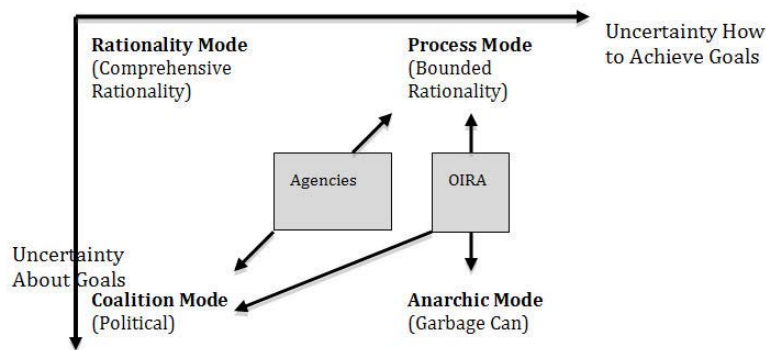
⁸¹ Memorandum from Susan E. Dudley, Adm'r, OIRA, to Stephen Johnson, Adm'r, EPA (Mar. 6, 2008) [hereinafter Dudley Memo], http://www.reginfo.gov/public/postreview/Steve_Johnson_Letter_on_NAAQs_final_3-13-08_2.pdf. The secondary standard was set on the basis of cumulative ozone levels during the growing season for crops, a new approach ratified by the EPA's science advisors, to replace the old standard, which measured ozone over an eight-hour period. CASAC Letter, *supra* note 79, at 5-7.

⁸² Memorandum from Marcus Peacock, Deputy Adm'r, EPA, to Susan Dudley, Adm'r, OIRA (Mar. 7, 2008), http://www.reginfo.gov/public/postreview/Steve_Johnson_Letter_on_NAAQs_final_3-13-08_2.pdf; Dudley Memo, *supra* note 81. The Act requires EPA to set a limit that protects health and the environment with an "adequate" margin of safety. 42 U.S.C. § 7409(b)(1) (2006). The Supreme Court has interpreted this mandate to mean that the EPA can only consider adverse effects and may *not* consider the costs of reducing criteria pollutants, such as ozone. *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 471 n.3, 486 (2001).

⁸³ STEINZOR & SHAPIRO, *supra* note 3, at 205.

regulatory option based on the statutory criteria that they must employ (almost never a cost-benefit requirement). This process is multi-disciplinary, discursive, problem-oriented (based on statutory criteria), and contains a feedback loop (in the form of waivers, adjustments, etc.). But agencies must also address the objections of the White House, members of Congress and powerful political interests, placing them into a coalitional mode. Agencies adjust the conclusions reached through process-based decision-making to the political demands they cannot ignore.

FIGURE 2. GOVERNMENTAL DECISION MAKING



For its part, the White House operates in the space between process-based and anarchical decision making. Unlike agencies, OIRA employs cost-benefit analysis, which leads analysts to disagree with agency proposals because they are applying a different methodology than the agencies, one that conflicts with the statutory criteria under which agencies almost always operate. But, as the ozone standard demonstrates, decision making in the White House also has elements of the anarchical model. It is not clear which process dominates, although the Bressman-Vanderbergh study suggests that it is closer to anarchical than process based. The study is, however, dated.

White House review also reflects coalitional decision making. While agencies generally go along to get along with OIRA,⁸⁴ agency administrators may push back, requiring OIRA to negotiate with the agency concerning the outcome. And, as also discussed

⁸⁴ See *infra* notes 100–103 and accompanying text.

earlier, OIRA may be influenced by outside parties, particularly industry, and will therefore bargain with these interests concerning what outcome to support.

III. IMPLICATIONS

The organizational design literature helps us to focus on the nature of agency decision making and the relationship of that process to the environment in which the agency operates. This perspective leads to three conclusions that reinforce arguments against White House-driven, cost-benefit centered regulatory review already expressed in the literature on other grounds.

A. *Imposed, Not Evolved*

From an organizational perspective, the fact that the White House imposed cost-benefit analysis from the outside ought to make us suspicious about the value of cost-benefit analysis in agency decision making. Under the contingency theory, an organization will evolve a decision-making approach consistent with its environment,⁸⁵ and when cost-benefit analysis was imposed on agencies, it did not evolve within them.⁸⁶

While the organizational design literature is suspicious of decision-making methods that are not organic, there may be a distinction between private firms and government agencies. The literature assumes that the method of decision making adopted by a firm is the one best suited to it because it operates in a competitive environment. If the firm uses an inappropriate form of decision making, it will lose out to other firms who have adapted better to their business environment. If, therefore, most firms do not use cost-benefit analysis, organizational design theorists conclude it is ill suited for business decisions. They then ask what it is about a firm's environment that makes it so, and the answer the literature offers, as we have seen, is that decisionmakers in these firms operate under conditions of bounded rationality.

Unlike private companies, government agencies do not face the spur of competition and the rewards of profit making, which

⁸⁵ See *supra* notes 10–16 and accompanying text (identifying the environment-specific factors that an organization will take into account when choosing a decision-making approach).

⁸⁶ See Exec. Order No. 12,866, § 8, 3 C.F.R. 638, 648-49 (1993), *reprinted as amended in* 5 U.S.C. § 601 (2006).

may distinguish public decisionmakers from their private counterparts. This distinction opens the door to the argument that agencies, unlike their private firm counterparts, will not necessarily replace forms of decision making that do not work well. One idea behind cost-benefit analysis is to discipline decision making at agencies, on the ground that existing decision-making methods lead to regulatory excesses.⁸⁷

This response does not seem plausible from the organizational design perspective. Many in the field, particularly the founders, downplayed any particular distinctiveness of public organizations.⁸⁸ Like private firms, government bodies must seek resources and support to survive, necessitating the adoption of decision-making processes that facilitate this process. For an agency, this would include successful completion of its statutory mission. Newer research contends that, if anything, governmental organizations are more susceptible to outside influences than their private counterparts. While governmental agencies do not operate in competitive environments, they are nevertheless under strong pressure to perform competently.⁸⁹ As just one example, unfavorable press coverage can damage an administrator's reputation, a program, or even an entire agency.⁹⁰

It would be curious if the business world found it difficult to make decisions using cost-benefit analysis under conditions of uncertainty, but somehow the government was able to do so. Moreover, it is not true that organic decision-making methods have led the government astray. As Lisa Heinzerling, Richard Parker, myself, and others have demonstrated, claims to the contrary do not stand up to careful analysis.⁹¹

B. *Mismatch*

When an organization is uncertain about how it can achieve its goals, it evolves elastic decision-making rules, which are fueled

⁸⁷ Graham, *supra* note 1, at 399–400.

⁸⁸ RAINEY, *supra* note 4, at 60.

⁸⁹ *Id.* at 105.

⁹⁰ *Id.* at 117.

⁹¹ See Lisa Heinzerling, *Regulatory Costs of Mythic Proportions*, 107 YALE L.J. 1981, 1983–86 (1998); Richard W. Parker, *Grading the Government*, 70 U. CHI. L. REV. 1345 (2003); Lisa Heinzerling, *Five-Hundred Life-Saving Interventions and Their Misuse in the Debate Over Regulatory Reform*, 13 RISK 151 (2002); SHAPIRO & GLICKSMAN, *supra* note 20, at 80–91.

by robust ideologies, a set of ideas that is broad and deep enough to address the uncertainties it faces.⁹² The agency decision-making process, which is problem oriented, multi-disciplinary, discursive, qualitative, and contains a feedback loop, reflects the previous qualities.⁹³ Decision-making rules are “elastic” in the sense that decision-making is not formulaic, nor could it be, given the uncertainties involved. Fueling this process is a pragmatic ideology, which is robust precisely in the sense meant by the organizational theory literature,⁹⁴ as I have established elsewhere.

By comparison, cost-benefit analysis contains “crisp” decision-making rules, and is backed up by a narrow ideology. Cost-benefit analysis is the methodology of comprehensive rationality, expecting decisionmakers to choose the optimal solution based on a quantification of the costs and benefits of regulatory options. It is backed up by a narrow ideology—utilitarianism—that pursues a one-dimensional normative vision that is inconsistent with the multidimensional normative values that underlie most regulatory regimes.

This comparison suggests that cost-benefit analysis is a poor match for the decision-making environment in which agencies find themselves. Moreover, this mismatch explains why agencies use the pragmatic decision-making process, described earlier,⁹⁵ rather than the cost-benefit approach, when it comes time to make regulatory decisions, as opposed to filling out reports for the White House.

C. OIRA Stands in the Wrong Place

The organizational design literature recognizes that an organization may have to resolve conflicts about its goals, conflicts that are resolved by bargaining inside and outside of the agency.⁹⁶ Conflicts between parts of the government arise because power is shared among people who reflect the perspective of their department or agency, producing a “where you stand depends on where you sit” phenomenon.⁹⁷

⁹² See *supra* note 10 and accompanying text.

⁹³ See *supra* note 50–61 and accompanying text.

⁹⁴ SHAPIRO & GLICKSMAN, *supra* note 20, at 14–30.

⁹⁵ See *supra* notes 22–23 and accompanying text.

⁹⁶ See *supra* notes 31–32 and accompanying text.

⁹⁷ See Miles, *supra* note 63 and accompanying text.

While EPA personnel and other regulatory agencies pursue the precautionary ends of the environmental statutes, OIRA desk officers and managers pursue an economic orientation that emphasizes minimizing regulatory costs. OIRA might become less hostile to regulation under Presidents who are Democrats, but OIRA will continue to be in conflict with EPA because it has a different mission than EPA, as the earlier coal-ash story indicates.⁹⁸

Conflicts between different agencies or departments are hardly new. One of the most famous books in organizational theory, Graham Allison's analysis of decision making in the White House during the Cuban missile crisis, includes an account of the coalitional decision making that occurred, particularly differences between the Pentagon and the State Department.⁹⁹

In coalitional decision making, the outcome depends on the relative political power of the officials engaged in bargaining.¹⁰⁰ OIRA currently has the upper hand for two reasons. The executive order forbids EPA or other agencies from publishing a proposed or final rule in the Federal Register until OIRA has approved the agency's regulatory impact study,¹⁰¹ a condition that OIRA can employ to slow or stop regulatory efforts it dislikes. Agency administrators are bound by this prohibition in the sense that it is a decision rule announced by the President, and they work in the government. They could, as a legal matter, ignore the rule, but few have ever done so out of loyalty to the President.¹⁰²

This arrangement has consequences in terms of organizational design and decision making. It substitutes decision making based on cost-benefit analysis for decision making at the agency focused on statutory criteria. In addition, decision making in the White House can veer into the anarchical mode. Thus, as a comparative institutional issue, it is not a good idea to give decision makers subject to an anarchical method of making decisions the power to

⁹⁸ See *supra* notes 70–72 and accompanying text.

⁹⁹ ALLISON & ZELIKOW, *supra* note 64, at 296–98.

¹⁰⁰ See March, *supra* note 32, at 673.

¹⁰¹ Exec. Order No. 12,866, § 8, 3 C.F.R. 638, 648–49 (1993), *reprinted as amended in* 5 U.S.C. § 601 (2006).

¹⁰² See Richard J. Pierce, Jr., *Saving the Unitary Executive Theory from Those Who Would Distort and Abuse It*, 12 U. PA. J. CONST. L. 593, 603–05 (2010) (reviewing STEVEN G. CALABRESI AND CHRISTOPHER YOO, *A REVIEW OF THE UNITARY EXECUTIVE* (2008)) (describing the impact of political loyalty).

veto decision makers who operate in a more systematic decision-making system.

This conclusion is not without its irony. Cost-benefit proponents celebrate the potential of the methodology to bring a more disciplined approach to decision making than is employed in agencies.¹⁰³ In fact, the opposite is true. While agencies employ process-based decision making, it is White House decision making that is anarchical.

IV. AN ORGANIZATIONAL DESIGN PERSPECTIVE ON REMODELING

The organizational design perspective used here reinforces arguments made on other grounds that regulatory impact analysis should be reoriented away from cost-benefit analysis. In their book, Dean Revesz and Professor Livermore endorse another path: the remodeling of cost-benefit analysis to make it less hostile to environmental concerns. This section will consider their support for cost-benefit analysis in light of an organizational design perspective employed in this essay.

A. *Comprehensive Rationality*

The precise reason why Revesz and Livermore favor remodeling cost-benefit analysis is unclear. Sometimes they seem to endorse cost-benefit analysis because it provides comprehensive rationality. At other times, as discussed next, they see it as a useful heuristic. As an example of the former rationale, consider their discussion of health care regulation, where they insist, “in the absence of an obvious endpoint, we need a mechanism that tells us when to stop spending money. Cost-benefit analysis is that mechanism”¹⁰⁴ The organizational design literature, however, throws considerable doubt on this aspiration. Once bounded rationality is taken into account, the goal of comprehensive rationality becomes an illusion.¹⁰⁵ Since most regulatory decisions involve bounded rationality,¹⁰⁶ Revesz and Livermore have the burden of explaining how they will overcome bounded rationality, something that they do not do.

¹⁰³ See *infra* notes 129–131 and accompanying text.

¹⁰⁴ REVESZ & LIVERMORE, *supra* note 2, at 12.

¹⁰⁵ See Choo, *supra* note 8, at 204–05.

¹⁰⁶ SHAPIRO & GLICKSMAN, *supra* note 20, at 22–24.

B. *Useful Heuristic*

Instead of arguing that cost-benefit analysis promotes comprehensive rationality, Revesz and Livermore may only be arguing that cost-benefit analysis is a useful heuristic. Just a few pages after making their claim about comprehensive rationality, they argue that cost-benefit analysis should not be a “master decision-making procedure capable of trumping all other values.”¹⁰⁷

The organization design literature, however, also throws doubt on this role for cost-benefit analysis. In the organizational design literature, as noted earlier, institutions are presumed to seek the most effective decision-making systems.¹⁰⁸ Institutional design scholars believe that this presumption applies equally to public and private organizations.¹⁰⁹ The failure of agencies to adopt cost-benefit analysis therefore raises a strong inference that they did not find it a useful heuristic.

Moreover, where an organization’s means and ends are uncertain, institutional design scholars have found that the organization will rely on elastic decision-making methods (intuition and judgment) and on a robust ideology (multidimensional set of ideas).¹¹⁰ By comparison, cost-benefit analysis involves strict or crisp decision-making rules and a one-dimensional ideology.¹¹¹ It is unclear how one can mix these two disparate systems of decision making or even whether it can be done. It is notable that after Revesz and Livermore suggest that cost-benefit analysis can be blended into a decision-making system that supports values other than economic efficiency,¹¹² they do not elaborate on how this might be done or how they would reconcile economic efficiency with other values.

C. *Common Sense*

Revesz and Livermore offer a third defense of cost-benefit analysis: it is simply common sense. After all, government officials who refuse to “look[] at alternative courses of action, and

¹⁰⁷ REVESZ & LIVERMORE, *supra* note 2, at 15.

¹⁰⁸ See *supra* note 94 and accompanying text.

¹⁰⁹ See *supra* notes 88–92 and accompanying text.

¹¹⁰ See *supra* notes 10–14 and accompanying text.

¹¹¹ See *supra* note 18 and accompanying text.

¹¹² *Id.*

anticipat[e] the likely consequences of their actions” are “as foolish as someone who fails to consult a map when driving in unfamiliar territory.”¹¹³

This claim makes it seem like something is deadly wrong with the findings of the organizational design literature that organizations find cost-benefit analysis unhelpful when the organization’s means and ends are uncertain. Their argument, however, trades on the ambiguous nature of what it means to weigh costs and benefits. Considering the pros and cons of any important decision is both common sense and a good idea. But considering the pros and cons is something entirely different than cost-benefit analysis, which is an artificial construct of economics, rather than a methodology that individuals ordinarily use to make important decisions.¹¹⁴

If one needs proof that common sense and cost-benefit analysis are not the same thing, consider the important decisions that Revesz and Livermore identify in the first paragraph of their book: “choosing a spouse or purchasing a home; picking a daycare provider for a child; providing the right level of discipline for a teenager; or deciding on the best care for an elderly parent.”¹¹⁵ Everyone has made one or more important decisions like those in this list, but I wager that no one, except perhaps for the most dedicated economists, has made such a decision by performing a formalized cost benefit analysis.

D. *Mitigate Capture*

Yet another justification offered by Revesz and Livermore is that cost-benefit analysis is necessary to reduce the role of back room politics dominated by interest groups.¹¹⁶ The organizational design literature recognizes that organizations may engage in bargaining over ends and means with persons inside and outside of the organization.¹¹⁷ Not surprisingly, it suggests that the outcome depends on the power of the groups or individuals with whom the organization bargains. Agencies, of course, are in this situation,

¹¹³ REVESZ & LIVERMORE, *supra* note 2, at 2.

¹¹⁴ See Shapiro & Schroeder, *supra* note 3, at 497–98 (elaborating on the difference between cost-benefit analysis and considering the pros and cons of a pending decision).

¹¹⁵ REVESZ & LIVERMORE, *supra* note 1.

¹¹⁶ *Id.* at 12.

¹¹⁷ See *supra* note 31–32 and accompanying text.

using a blend of the process and coalitional modes of decision making.¹¹⁸ If cost-benefit analysis can work to the advantage of environmental interests, as Revesz and Livermore claim,¹¹⁹ this would be a good thing. But it is difficult to see how this happens.

The advantage of the Sierra Club and other similar groups over industry is their capacity to mobilize the support of their many members on behalf of environmental causes. Environmental interest groups will always be less able than industry to play the expensive game of hiring economic expertise to produce hundreds of pages of economic analysis, or to do a surgical job of disputing the obscure underpinnings of cost-benefit studies that do not favor strong environmental action.¹²⁰ Penetrating an extensive cost-benefit study, let alone rebutting such a study, is impossible for the amateur, even if she or he is a well-informed lawyer.¹²¹

A recent empirical study by Professors Wendy Wagner, Katherine Barnes, and Lisa Peters supports this conclusion by demonstrating that public interest groups do not engage in toe-to-toe fighting with industry over proposed hazardous air pollutant rules.¹²² For the thirty-nine rulemakings studied, industry averaged 77.5% of the total comments while public interest groups averaged only 5% of those comments.¹²³ In fact, public interest groups filed comments for only 46% of the rulemakings.¹²⁴ Prior to the start of a rulemaking, industry accounted for an average of 83.6% of the informal communications, while public interest groups averaged 0.65% of those communications.¹²⁵ While these results are similar to prior research demonstrating the limited resources of public interest groups,¹²⁶ this study focused on rules

¹¹⁸ See *supra* Part II.E.

¹¹⁹ REVESZ & LIVERMORE, *supra* note 2, at 193.

¹²⁰ STEINZOR & SHAPIRO, *supra* note 3, at 80 (“Written by economists for economists, traditional cost-benefit analyses are laden with jargon, elaborate formulas, and dense graphs and charts.”).

¹²¹ *Id.*

¹²² Wendy E. Wagner, Katherine Y. Barnes & Lisa Peters, *Air Toxics in the Board Room: An Empirical Study of EPA’s Hazardous Air Pollutant Rules* (Univ. of Ariz. Rogers Coll. of Law, Discussion Paper No. 10-01; Univ. of Texas Law and Econ. Research Paper No. 190, 2009).

¹²³ *Id.* at 17.

¹²⁴ *Id.*

¹²⁵ *Id.* at 23.

¹²⁶ See STEINZOR & SHAPIRO, *supra* note 3, at 45–46 (describing empirical studies finding that industry participation in rulemaking was substantially greater than that of public interest groups).

that were both controversial and technically complex.¹²⁷

Wagner and her coauthors conclude that industry dominance sets up “information capture,” in which regulatory outcomes tilt towards industry interests because of their overwhelming domination of the rulemaking process.¹²⁸ This form of capture is likely to increase if decision making is centered on cost-benefit analysis because of its information-intensive nature.

E. *No Alternative*

Eventually cost-benefit supporters go to their Maginot Line defense: there simply is not any other way to make difficult policy decisions. Likewise, Revesz and Livermore imply that cost-benefit analysis is necessary because the alternative is “gut-level” decision making.¹²⁹ They cite Christopher DeMuth, who asks: “How else would you make decisions – consult a Ouija board?”¹³⁰

Organizations develop decision-making methods that account for bounded rationality, and these do not resemble the cost-benefit analysis.¹³¹ Yet, despite the fact that private and public organizations develop such methodologies, and use them effectively, cost-benefit supporters cannot envision a world where decision making is organized using methods other than comprehensive rationality.

Supporters and remodelers believe that the only form of rationality is comprehensive rationality. As discussed earlier, those who studied organizations once made the same assumption, but ever since Herbert Simon’s pioneering work, the organizational design literature has rejected this narrow perspective. Following Simon, the literature holds that a decision-making procedure is rational as long it is logically related to accomplishing an organization’s goals.¹³²

Moreover, the alternative to cost-benefit analysis is not “gut-level” guesses, it is the process-based decision making that is employed by most organizations.¹³³ These processes have been

¹²⁷ Wagner et al., *supra* note 122, at 3.

¹²⁸ *Id.* at 27.

¹²⁹ See REVESZ & LIVERMORE, *supra* note 2, at 3.

¹³⁰ *Id.* at 202.

¹³¹ See *supra* notes 19–21 and accompanying text.

¹³² See *supra* note 24 and accompanying text.

¹³³ See *supra* notes 19–21 and accompanying text.

developed over the years based on an organization's experiences as to what types of decision-making approaches and rules work for it under the types of bounded rationality with which their employees must deal.¹³⁴ These methods are fine-tuned to the organization's situation, and involve some degree of intuition and judgment. The less clear the means for achieving an organization's ends, the greater it must rely on intuition and judgment.¹³⁵

The use of intuition and judgment is inevitable in complex rulemaking. But, as described earlier, such judgments are made in the context of an elaborate process-mode of decision making that is multidisciplinary, problem-oriented (defined by the agency's statute), discursive, and participatory.¹³⁶ This considerable process of deliberation, verification, narrowing, and reason giving informs the judgments. It is therefore incorrect to call the decisions produced by this process a "gut-level" guess.

CONCLUSION

This article has offered a new perspective concerning the debate over cost-benefit analysis. It asks about the usefulness of this methodology in light of the organizational design literature. The key insight of this literature is that organizations adopt decision-making processes that allow them to be effective. Based on the actual experience of organizations, organizational design scholars have found that organizations use cost-benefit analysis when there are clear goals and solutions to reach those goals, but not when decisionmakers are subject to bounded rationality. This means that cost-benefit analysis is not the tool of choice for many decisions made in business environments.

The same is true for the decisions made by EPA and other safety and health agencies. Under conditions of bounded rationality, cost-benefit analysis is not the most effective way to make decisions. It is therefore puzzling why the remodelers have thrown in their lot with cost-benefit supporters. Like the supporters, they have failed to recognize what Herbert Simon pointed out long ago. In a world of bounded rationality, decision making that serves the ends of an organization is "rational." Yet,

¹³⁴ See CHOO, *supra* note 8, at 12 and accompanying text.

¹³⁵ See *supra* Part IV.B.

¹³⁶ See *supra* notes 50–61 and accompanying text.

because supporters and remodelers cling to the notion of comprehensive rationality as the only definition of rationality, they ignore what most of the rest of the world has learned.