POWER AND KNOWLEDGE IN POLICY EVALUATION: FROM MANAGING BUDGETS TO ANALYZING SCENARIOS

FRANK PASQUALE*

I

INTRODUCTION

Recent critiques of managerialist tendencies in U.S. governance have resonated with observers of diverse ideological orientations. For those proposing bold responses to contemporary problems, managerialism tends to interfere with their ambitious political aspirations. Managerialist demands weigh down charismatic leaders with the burdens of meeting key performance indicators that have little to do with long-term strategic vision and political exigencies. At lower levels of governance, it can be demoralizing to be required to formally institutionalize pragmatic problem-solving via standard operating procedures. While often useful, these duties can easily distract from more important aspects of governance, particularly when they deter cooperative initiative. One

Copyright © 2023 by Frank Pasquale.

This Article is also available online at http://lcp.law.duke.edu/

* Professor of Law, Cornell Law School and Cornell Tech. I wish to thank Julie Cohen and Ari Ezra Waldman for their vision in organizing this special issue and workshop, and for commenting on successive drafts. They truly went above and beyond as symposium organizers. I am also grateful to participants at the Cornell Law School summer faculty workshop series for excellent comments. I thank Ekow Yankah and Sarah Moss for inviting me to present this work at the University of Michigan Colloquium on Law, Social Theory, and Philosophy, and am grateful to them and participants at the workshop for their thoughtful questions and comments. Hilary J. Allen, Rory van Loo, Lorenzo Manuali, Saule T. Omarova, Jeffrey J. Rachlinski, Sabeel K. Rahman, and Eric Swanson also offered wise comments on the project.

1. On the role of democratic charisma in inspiring new policy conversations and possibilities for governance, see generally VINCENT W. LLOYD, IN DEFENSE OF CHARISMA (2018). As Wendy Brown has observed: “Only charismatic political leadership, [Max] Weber insisted, could productively re-enchant the political realm, disrupting its machineries of domination with visions and forms of action redemptive of the human power to shape the world.” WENDY BROWN, NIHILISTIC TIMES: THINKING WITH MAX WEBER 56 (2023). Anticipating objections to such emotive and affective aspects of political authority, she argues that “some who identify charismatic leadership with authoritarianism would tolerate technocracy in place of democracy, which today means being ruled not merely by economists, behaviorists, and bureaucrats, but algorithms.” Id. at 119 n. 62. The shortcomings of the algorithms of managerialism are a central concern of this article.

2. For a remarkable exposé of bureaucratic challenges to effective policy implementation, see JENNIFER PAHLKA, RECODING AMERICA: WHY GOVERNMENT IS FAILING IN THE DIGITAL AGE AND HOW WE CAN DO BETTER (2023).

3. See Julie E. Cohen & Ari Ezra Waldman, Introduction: Framing Regulatory Managerialism as an Object of Study and Strategic Displacement, 86 LAW & CONTEMP. PROBS. no. 3, 2023, at i, ii–iii (“Many of the most harmful practices seem beyond the reach of regulators starting their work from a crouched
paradoxical result of all this emphasis on documenting and demonstrating efficiency is a “demo-sclerotic” government studded with veto points, a Leviathan-turned-Gulliver hamstrung by Lilliputian rituals of accountability.4

A leading critique of managerialism in contemporary social theory—Julie Cohen’s *Between Truth and Power: The Legal Constructions of Informational Capitalism*—has sharpened these concerns. Cohen defines management as “the practice of deploying informational techniques to reshape organizations along competitively efficient lines; managerialism refers to the ideological framework that both posits such reshaping as desirable and prescribes how it may best be achieved.”5 Cohen faults managerialism for “drastically narrowing the courts’ ability to address the conditions of contemporary market and commercial life.”6 “Managerial efforts directed first and foremost toward regulatory minimization”—as led by the Office of Management and Budget—have also undermined important environmental, safety, and health protections.7 Cohen synthesizes the perspectives of scholars who have extensively documented the problems of managerialism in agencies and courts. One could add extant critiques of the Congressional Budget Office’s influence on health and public credit position, constrained by methodological restrictions that force them to justify every intervention in quantified terms and jurisdictional limits that render them powerless to address systemic threats.”).

4. See generally *Jonathan Rauch, Demosclerosis: The Silent Killer of American Government* (1995). For reflections on the problematic interactions and cumulative effects of tools of accountability and separation of powers, see Nicholas Bagley, *The Procedure Fetish*, 118 Mich. L. Rev. 345, 348 (2019) (“Administrative law is shot through with arguably counterproductive procedural rules. In past work, for example, I have argued that the Office of Information and Regulatory Affairs imposes a drag on regulation without adequate justification; that the presumption in favor of judicial review of agency action, and particularly the presumption in favor of pre-enforcement review, should be reevaluated; and that the reflexive invalidation of defective agency action is wasteful and unnecessary. But the list goes on. The judicially imposed rigors of notice-and-comment rulemaking, the practice of invalidating guidance documents that are ‘really’ legislative rules, the Information Quality Act, the logical outgrowth doctrine, nationwide injunctions against invalid rules—all could and perhaps should be reconsidered.” (footnotes omitted)).

5. *Julie Cohen, Between Truth and Power: The Legal Constructions of Informational Capitalism* 144 (2019) (hereinafter *COHEN, BTP*). As Cohen further elaborates, Managerial theories incorporate both ideologies about the nature of effective governance and assumptions about the universe of feasible institutional strategies and practices. Such theories both presume and work to reproduce a particular type of subjectivity; the ideal subject of managerialism is self-interested but understands his or her self-interest to be aligned with the organization’s larger goals. Such theories also presume and privilege managerial elites with the skills needed to coordinate productive competition, to discipline participant subjectivity in the interest of efficient production, and to keep wasteful bureaucracy in check.

Id. at 144–45. This combination of psychological and sociological aspects of managerialism helps explain its staying power as a sort of “common sense” of governance, *the* way to organize administration, when it is in fact only one of many ways of doing so.

6. Id. at 145.

7. Id. at 193–94 (“[T]he managerial reconfiguration of regulatory activity has tended to elevate values such as efficiency and technocratic oversight over others such as fairness and public-facing accountability.”). See generally *Frank Ackerman and Lisa Heinzerling, Priceless: On Knowing The Price Of Everything And The Value Of Nothing* (2004).
legislation to add a legislative branch dimension to the discussion.8 Cohen’s work makes the shortcomings of managerialism manifest. How, then, might troubling forms of managerialism be overcome?9 And how might we become wiser about the mystery of managerialism’s prevalence in what had long been a distinctive realm of governance?10 To answer each of these questions, this article presents scenario analysis (SA) as an alternative to, or way of restructuring, forms of cost benefit analysis (CBA) now prevalent in the U.S. executive branch. The White House can begin to mitigate managerialism’s negative effects by making OIRA’s regulatory impact assessments merely advisory. This solution becomes more palatable, as CBA’s chief normative appeal—to provide determinate, objective, and quantifiable grounds for assessing the impact of regulations—is explored and challenged in the pages below.

I should make one definitional clarification at the outset. U.S. environmental statutes and regulations almost always contemplate less formal modes of accounting for well-being or net benefits than a strict monetary quantification of costs and benefits, even when they require—or are interpreted to require—CBA.11 Some of CBA’s most prominent proponents routinely acknowledge this.12 However, there has been a strong tendency in the executive branch to identify thorough quantification and monetization of costs and benefits—what Amy Sinden calls “formal CBA”—as the truest and most rigorous form of CBA, both in environmental policy and beyond.13 For purposes of clarity, for the rest of this article, my references to CBA will be to formal CBA, which seeks monetary

9. I consciously use the word “overcome” here, to appropriate and reverse the title of Richard Posner’s Overcoming Law (a collection of essays which promote neo-Benthamite utilitarian economic analysis to supersede the hermeneutical methods and meta-ethical pluralism characteristic of legal reasoning). For an exposition of the problems of such Posnerian approaches, see generally SHAWN BAYERN, THE ANALYTICAL FAILURES OF LAW AND ECONOMICS (2023). Overcoming managerialism is a more ambitious aim than merely sidestepping, reforming, improving, or ameliorating it.
10. A third, related question is: “Did managerialism itself ever embrace the values it is now faulted for eliding?” This question is magisterially answered in the affirmative in RAKESH KHURANA, FROM HIGHER AIMS TO HIRED HANDS: THE SOCIAL TRANSFORMATION OF AMERICAN BUSINESS SCHOOLS AND THE UNFULFILLED PROMISE OF MANAGEMENT AS A PROFESSION (2007).
11. Amy Sinden, Formality and Informality in Cost-Benefit Analysis, 2015 UTAH L. REV. 93, 134 (“In sum, Congress has for the most part eschewed CBA in crafting our federal environmental statutes. In those few instances when it has directed agencies to use CBA, it has—with limited exceptions—directed them to use only informal varieties of CBA.”).
12. Id.
13. Id. (“[T]he law (federal environmental statutes and case law) seems to favor informal over formal varieties of CBA. Nonetheless, the executive branch appears to be moving toward the formal end of the spectrum. Executive Orders and guidance documents direct agencies to conduct a highly formal mode of CBA.”).
quantification of risks and opportunities posed by regulation.  

Direct solutions to such problematic impacts of CBA include abolition of the Office for Information and Regulatory Affairs (OIRA), or termination of its role in regulatory affairs. Yet perhaps there is a middle ground, seeking a modest mode of centralized policy evaluation that is more intellectually ambitious than the CBA methodology now dominating the field. By better recognizing the uncertainty inherent in forecasting human affairs, policy evaluation could demonstrate an epistemic pluralism respectful of the many forms of insight available via methods that do not rest on quantification and monetization.

Here I take inspiration from Cohen’s assessment of the divide between risk and uncertainty. In assessing the possibility of future harm and prospect of future well-being, as Cohen argues:

One approach, based on the concept of risk, emphasizes formal modeling and quantification; the other, based on uncertainty, holds that not all factors bearing on the probability of future harm can be modeled and quantified. The discourse of risk is conceptually crisper than that of uncertainty, and supplies a way of both describing probabilistic future harms and quantifying—and sometimes pricing—acceptable risk thresholds. For that reason, it has won influential adherents in government and business circles.

Cohen associates the first, risk-based approach with cost-benefit analysis, and the latter, uncertainty-acknowledging approach, with the precautionary principle. This is an accurate account of the main currents of legal academic debate in policy evaluation—and particularly environmental policy evaluation. However, the precautionary principle operates as much on an ideological as a methodological level, promoting conservation. Scenario analysis (SA) is a more
purely methodological component of uncertainty-acknowledging policy evaluation. SA systematically explores radically different futures that may arise out of contingent occurrences after policy is developed and implemented—or after no policy is developed and implemented, which may be far worse. 19

Critics of managerialism have often decried its tendency to displace democracy and community values. 20 This article charts a different path, examining the *epistemic* disadvantages of CBA-driven management of regulatory initiatives. In order to justify its role interfering with or blocking regulatory initiatives, OIRA’s architects and leaders have invested its analysts with a methodology of policy evaluation—cost benefit analysis—that is, on its surface, exceptionally parsimonious, transparent, and determinate. In the same way that clear rules enhance the perceived legitimacy of an agency enforcement effort, well-delineated methods of policy evaluation lend credence to a meta-agency like OIRA, when it reviews proposed regulations. 21 Unfortunately for CBA, though,

becomes operational, and gives the illusion of guidance, only because of identifiable features of human cognition. Human beings, cultures, and nations often single out one or a few social risks as “salient,” and ignore the others. A central point here involves the availability heuristic, . . . Individual and even cultural risk perceptions can be explained partly in that way. It follows that there can be no general Precautionary Principle—though particular, little precautionary principles, stressing margins of safety for certain risks, can and do operate in different societies.”); Gregory Mandel & James Thuo Gathii, *Cost-Benefit Analysis Versus the Precautionary Principle: Beyond Cass Sunstein’s Laws of Fear*, 2006 ILL. L. REV. 1037, 1039 (2005). I point out the twinned methodological and substantive commitments inherent in the precautionary principle to clear ground for a more purely methodological alternative to risk-based policy evaluation.

19. For more on the definition of scenario analysis, see infra Part III.A. For purposes of this article, scenario analysis includes narrative explanation of potential futures, simulations, war gaming, stress tests, and scenario building. It also includes many of the “scenario tools” described by Jenny Andersson in her excellent book, *The Future of the World*, as well as some critical forms of future studies. JENNY ANDERSSON, THE FUTURE OF THE WORLD 165 (2018) (“Future studies were conceived as a kind of counter expertise, a counter hegemonic project to Cold War prediction. For critical or radical futurists, the postulates of future research were thus turned on their head, so that the idea of social technology became a question of using forms of future knowledge as a way of actively shaping and ‘willing’ coming developments. This meant that no events or trends could be regarded as predetermined. Radical futurists rejected not only the idea of prediction, but also the idea that the future could be studied by recourse to established forms of observation and that there was any such thing as a future fact [in the social, as opposed to natural, sciences].”).

20. There is, as Robert Post has observed, a critical distinction between governance and management. Robert Post, *Between Governance and Management: The History and Theory of the Public Forum*, 34 UCLA L. REV. 1713, 1788 (1986) (“The function of an organization is to implement . . . premises, not to question them, and within its boundaries people and resources are arranged so as to attain this objective. Outside of this organizational domain, however, lies a public realm in which the attainment of institutional ends is taken to be a relevant, but not controlling consideration. In the public realm, assertions of value are not accepted as ‘premises,’ but rather are recognized as claims subject to evaluation and assessment.”); see also ROBERT POST, CONSTITUTIONAL DOMAINS: DEMOCRACY, MANAGEMENT, COMMUNITY 4–5, 15 (1992) (Managerial approaches tend to ignore “the independent requirements of community values or identity, following instead the logic of instrumental rationality . . . managerial domains of the administrative state must be carefully evaluated for their adverse effects on democracy and community . . . .”).

21. The coinage of “meta-agency” is meant to evoke my recent treatment of the problem of “meta-
its determinateness is largely illusory, as Part II below shows. CBA can only become truly determinate by sacrificing so many routes of inquiry that it fails to reflect not only the plurality of human values, but also the uncertainty inherent in predicting future events.

For many of those in the mainstream of policy evaluation scholarship, the next step is to try to refine CBA. For many of those in the mainstream of policy evaluation scholarship, the next step is to try to refine CBA. Part III explores a different path by relaxing the determinacy constraint and affirming alternative paths to legitimacy and fairness in policy evaluation. What if OIRA had only an advisory role, unable to delay regulators with its dreaded “return letters?” It would no longer be confined to policy evaluation methods which emphasize determinacy—or, to be more accurate, offer an appearance of determinacy. What the Office would lose in political authority, it would gain in intellectual freedom. Like the Government Accountability Office (GAO), which currently enjoys such a purely advisory role in many of its evaluative functions, OIRA could more readily consult a wider range of sources of insight, while acknowledging the multiple possible scenarios.

22. The latest initiative in this respect is the Office of Management and Budget’s recent proposed revisions to Circular A-4. Office of Mgmt. & Budget, Circular A-4 (Draft for Public Review) (Apr. 6, 2023), available at https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4.pdf [https://perma.cc/9QSA-ANCW] (“This proposed update to Circular A-4, when finalized, will supersede the previous version of OMB Circular No. A-4, issued on September 17, 2003. Until then, that version of OMB Circular No. A-4 remains in effect.”). If approved, the proposed revision would do much to improve the practice of CBA. K. Sabeel Rahman, Rewiring Regulatory Review, LPE BLOG, May 1, 2023, at https://lpeproject.org/blog/rewiring-regulatory-review/ [https://perma.cc/YJ7T-T689] (describing a “host of revisions that bring A4 more up to date with advances in economic and policy analysis.”). However, some critics have argued for a more fundamental rethink of the role of the Office. Luke Herrine, Some Shortcircuits in the Rewiring of Regulatory Review, LPE BLOG, May 8, 2023, at https://lpeproject.org/blog/some-short-circuits-in-the-rewiring-of-regulatory-review/ [https://perma.cc/44HH-SQMV] (“The overall logic is still one that commensurates costs and benefits in terms of additive individual willingness to pay . . . and that treats regulation as a presumptively unwarranted intrusion into the freedom of the market.”). This article presents scenario analysis as one route to such a rethink, since it is better attuned to problems of incommensurability, uncertainty, and irreversibility than CBA is.

23. Indeed, the term “authority” is sometimes directly associated with the tension between power and reason. While offering a “service conception” of authority that attempts to resolve this tension, Joseph Raz squarely recognizes its prevalence:

To be subjected to authority, it is argued, is incompatible with reason, for reason requires that one should always act on the balance of reasons of which one is aware. It is of the nature of authority that it requires submission even when one thinks that what is required is against reason. Therefore, submission to authority is irrational [in some conventional understandings of the concept that are challenged by Raz].

JOSEPH RAZ, THE AUTHORITY OF LAW: ESSAYS ON LAW AND MORALITY 3 (1979). Another version of this form of authority is Justice Robert Jackson’s both humble and humbling apothegm about the nature of Supreme Court interpretations of the U.S. Constitution absent constitutional amendment to reverse them: “We are not final because we are infallible, but we are infallible only because we are final.” Brown v. Allen, 344 U.S. 443, 540 (1953) (Jackson, J. concurring).
that could arise out of (or influence) the implementation of a regulatory proposal. Freed from the burden of algorithmic quantification, it would be more likely to draw on the insights of sociologists, historians, and other experts. Diverse forms of expertise should be part of policy evaluation, and a wider range of relevant methods ought to be reflected in OIRA’s analytical repertoire. In a time of great uncertainty about once-fixed points in climate, public health, communications infrastructure, and geopolitics, diverse disciplinary perspectives are critical. Scenario analyses are one way to assure they are welcome in policy evaluation.

Part III.A. below makes a more general case for adding scenario analysis to regulatory impact analysis. Properly executed, SA will advance sorely needed forms of expertise in policy evaluation (ranging from the historical to the philosophical to the sociological). It would also better structure CBA, by illustrating what quantifiable costs and benefits would look like in a variety of situations, rather than trying to average across situations to reduce the net benefit or cost estimate to a single number or range of numbers. Part III.B. anticipates and responds to objections to scenario analysis, while Part IV concludes.

II
DETERMINACY AS A RATIONALIZATION FOR INCOMPLETE POLICY EVALUATION

Many regulators, guided by the Office of Management and Budget (OMB), are required to compare the costs and benefits of significant regulatory initiatives. If an agency fails to demonstrate that its proposed rule’s benefits outweigh its costs, OIRA, an office within OMB, may instruct the agency to revise the regulation. OIRA itself often takes many months to perform such a

24. Amy Sinden, All the Tools in the Toolbox: A Plea for Flexibility and Open Minds in Assessing the Costs and Benefits of Climate Rules, 39 YALE J. REG. 908, 948 (2016) (“As a matter of both legal mandate and good policy, the Biden Administration would do well to avoid the CBA orthodoxy that some commentators advocate. Instead, the Administration should as a matter of good policy—and can as a matter of law—make use of the rich variety of tools in the regulatory decision-making toolbox . . . in developing climate policy.”). Although Sinden does not specifically mention scenario analysis in this article, she has commended its potential in past work. Amy Sinden, Lessons from Environmental Regulation, 48 HASTINGS CENTER REPORT SUPPLEMENT: GOVERNANCE OF EMERGING TECH.: ALIGNING POL’Y ANALYSIS WITH PUB.’S VALUES S56, S56 (2018) (“[I]n the search for decision-making tools, we should not be looking for a single silver bullet that will work in all public policy realms. Perhaps, instead, different kinds of decision-making call for different tools. . . . I am not entirely sure what the ‘right’ tool is for synthetic biology applications, or even whether a ‘right’ tool exists. But at the end of this essay, I offer a few tentative thoughts about why scenario analysis—a strategic planning tool first developed in the context of military planning following World War II—might be one alternative worth considering.”).


26. Id. at 289–90 (noting that a careful reading of a “repository [of twenty-eight return letters, sixteen review letters, and sixteen prompt letters], despite the limitations of this empirical record, yields several insights into OIRA’s legal function. As a threshold matter, many of the letters confirm that OIRA focuses
review, and agencies may also find it difficult to satisfy the Office. The resulting delay may prevent a regulation from being promulgated (for example, when a different party takes the White House while review or revisions are being completed). The prospect of such delays may deter an agency from even proposing regulations, even when they are urgently needed.

The central idea behind CBA seems indisputable, at least on utilitarian grounds: a regulation's costs should not exceed its benefits. But utilitarianism is only one of several ethical perspectives. Moreover, even if its validity is assumed for the purpose of policy evaluation, behind CBA's façade of pragmatism lies a grim history and troubled present. CBA has frequently biased decisionmakers toward inaction due to many of its practitioners' inability or unwillingness to quantify abstract, long-term, and diffuse benefits, as well as low-probability (but potentially catastrophic) risks. Even when such quantification is completed, many commentators complain that CBA elevates business complaints about the cost of regulation, putting them front and center for policymakers, while it fails to comprehensively catalog benefits of regulation to individuals, groups, and communities. The net result of these two problems is a systematic tipping of the scales toward less health, safety, and environmental regulation, as Subpart A below demonstrates. 27 CBA nevertheless remains a dominant tool of policy evaluation because it promises a form of determinacy that other, more narrative and expansive methods of policy evaluation do not. However, as Subpart B shows, this determinacy is a mirage, and could only arise out of methods that occlude considerations that ought to be vital in rational policy evaluation.

A. Problematic Biases Against Regulation in CBA

The legitimacy of the modern administrative state rests on its ability to balance three sources of authority: legal regularity, politics, and expertise. The Environmental Protection Agency, for example, makes decisions that implicate its attorneys' knowledge of law, its scientific staff's expertise in toxicology, ecology, and related fields, and the values of the current presidential administration. A partisan may try to radically undermine the agency's statutorily defined mission or expand it well beyond its statutory mandate. But if rules of law and expertise hold, legal regularity and scientific findings will combine to constrain the political leadership's will.

its review on cost–benefit analysis and often asks agencies for more careful or different regulatory impact analysis, occasionally challenging the methodology employed by the expert agency.”)

27. Nicholas Bagley and Richard L. Revesz, Centralized Oversight of the Regulatory State, 106 COLUM. L. REV. 1260, 1270 (2006). (“This review process's asymmetry, moreover, has a pernicious effect on agencies' incentives to promulgate rules. Aware that overregulation may lead to reversal while underregulation will go unchecked, rationally risk-averse agencies initiating significant regulatory actions will, in the face of asymmetrical OIRA review, have powerful incentives to make their regulations less stringent (i.e., impose fewer compliance costs) if the expected benefits of a particular regulation are contingent, fairly contestable, or difficult to quantify—that is, nearly always. An agency that believes a watered-down regulation is preferable to no regulation at all will be sorely tempted to craft regulations that may not maximize net benefits but will nevertheless avoid unwelcome attention from OIRA.”)
In addition to scientific and legal expertise, another form of expert constraint has arisen in the administrative context: cost-benefit analysis. The “cost-benefit state,” in Cass Sunstein’s memorable phrasing, carefully husbands resources to ensure maximal impact.\(^28\) Policy evaluation with teeth is supposed to counteract the tunnel vision of regulators, promoting tailored solutions to well-defined problems. A drumbeat of whiggish rationalism has accompanied OIRA’s rise to power. Commentators have applauded the Office’s policy evaluation practices, characterizing its interventions as a welcome form of academic analysis in the halls of power.\(^29\)

However, CBA as pursued by OIRA has long had an anti-regulatory bent, undermining its claims to political neutrality and academic objectivity. The Reagan administration promoted CBA to rein in what it viewed as overzealous regulation.\(^30\) CBA was then presented primarily as a check on regulation, as expansive definitions of costs of government intervention were coupled with narrow definitions of benefits. After President Clinton affirmed CBA as a White House-level form of substantive rationality review for regulations, its liberal advocates have tended to style it as a way to promote more effective regulation, rather than as a roadblock for agencies. Nevertheless, an imbalance has compromised the legitimacy of White House-level CBA: it can gently nudge agencies to consider regulating more aggressively, but wields real power by blocking rules that fail to measure up to its standards. Until this imbalance is redressed, OIRA’s CBA will correctly be viewed as primarily a tool of deregulation.

Enduring problems like climate change, undue income and wealth inequality, and racial injustice, as well as crises like pandemics and financial instability, mean that the US needs entities in government promoting and accelerating regulation and market interventions, rather than questioning and slowing them down.\(^31\) The Biden Administration, recognizing these problems, wants to address them. As announced in the memorandum “Modernizing Regulatory Review,” the President has ordered the Director of the Office of Management and Budget (OMB) to propose “procedures that take into account the distributional consequences of regulations, including as part of any quantitative or qualitative analysis of the costs and benefits of regulations, to ensure that regulatory initiatives appropriately benefit and do not inappropriately burden


\(^{30}\) Elizabeth Popp Berman, Thinking Like an Economist 202 (2022) (“And while Reagan preferred ‘regulatory relief’ to Carter’s ‘regulatory reform,’ his administration nevertheless understood that expanding cost-benefit analysis was a useful way to achieve that goal and supported requirements for more of it.”).

disadvantaged, vulnerable, or marginalized communities." The OIRA modernization memorandum also orders the Director of OMB to "consider ways that OIRA can play a more proactive role in partnering with agencies to explore, promote, and undertake regulatory initiatives that are likely to yield significant benefits." This Biden administration directive arises out of concern that CBA has failed to identify significant benefits in its policy evaluation, impeding the executive branch's ability to solve important problems and create a better society.

But even if Biden's OIRA comprehensively addresses these issues, there are still deep epistemic problems with CBA which make it difficult and perhaps impossible for the methodology to adequately confront the seriousness of the problems now faced on environmental, health, and other regulatory fronts. As Cohen has argued, "Accounting and management methodologies rest on sets of assumptions about how to describe, measure, and account for program costs and benefits. Those assumptions are neither transparent nor inherently neutral, and merit careful scrutiny based on both the values that they enshrine and those that they elide or omit." Quantifying costs and benefits is difficult and all too often presumes a "view from nowhere" merely affecting, rather than embodying, objectivity. As economist Frank Ackerman and legal scholar, and former Associate Administrator of EPA's Office of Policy, Lisa Heinzerling argued in 2004:

The basic problem with narrow economic analysis of health and environmental protection is that human life, health, and nature cannot be described meaningfully in monetary terms; they are priceless. When the question is whether to allow one person to hurt another, or to destroy a natural resource; when a life or a landscape cannot be replaced; when harms stretch out over decades or even generations; when outcomes are uncertain; when risks are shared or resources are used in common; when the people ‘buying’ harms have no relationship with the people actually harmed—then we are in the realm of the priceless, where market values tell us little about the social values at stake.

There are, of course, quantifiers eager to estimate the monetary value of a pollution-free day at the Grand Canyon or the existence of endangered birds.

33. Id. For several examples of past precedents for (and current legal authorities for) such interventions, including New Deal initiatives and statutes, see MORGAN RICKS ET AL., NETWORKS, PLATFORMS, AND UTILITIES: LAW AND POLICY (2023).
35. COHEN, BTP, supra note 5, at 194.
38. KRISTIN JAKOBSON, CONTINGENT VALUATION AND ENDANGERED SPECIES: METHODOLOGICAL ISSUES AND APPLICATIONS (1996). To its credit, the field does include thoughtful reflections on the potential for bias in hedonic valuations, such as willingness to pay and willingness to accept methodology. Lala Ma, Learning in a Hedonic Framework: Valuing Brownfield Remediation, 60(3) INT’L ECON. REV. 1355 (2019).
But these methods cannot translate critical subjective and values-driven concerns into monetary terms. When potential negative outcomes of unregulated or under-regulated activities are catastrophic, even deeper problems emerge. Multiplying even catastrophic events by a very small percentage probability they occur, may rationalize courses of action that should never be pursued. Risking the ultimate catastrophe of, say, human extinction, is also a grave moral error. Nevertheless, Richard Posner once asked us to suppose “the cost of extinction of the human race ... can be very conservatively estimated at 600 trillion dollars,” as part of his attempt to quantify the risk of certain forms of fundamental physics research causing the earth to compress to a sphere of only a few meters in diameter. The presumption necessary to make such an estimate is remarkable, as is the willingness to gloss over problems of incommensurability. And while this may be an extreme example, more run-of-the-mill discounting of mortality risks still has the potential to bias policymaking and run roughshod over widely shared values.

The simplifications necessary for replicable and determinate CBA distort social reality. As Peter McMylor explains, via a gloss of the work of philosopher Alasdair MacIntyre, much “conventional social science methodology incorporates a very particular and limited view of the social world in its methodology, which in turn dovetails with the concepts and needs of managers and bureaucrats.” Key to this conceit is a conviction that the world is “composed

39. See discussion of Hartmut Rosa’s Resonance, infra note 83; Cass Sunstein, Incommensurability and Valuation in Law, 92 Mich. L. Rev. 779, 841 (“The real problem with any form of conventional CBA is that it is obtuse. CBA is obtuse because it tries to measure diverse social goods along the same metric.”).

40. Richard Posner, Catastrophe: Risk and Response 141 (2004). Probabilistic catastrophe framing has more recently helped inspire “longtermism,” which depends on even more contestable quantifications of the welfare of future humans, or even simulations of humans. Emile Torres, Against Longtermism, Aeon, Oct. 19, 2022, https://aeon.co/essays/why-longtermism-is-the-worlds-most-dangerous-secular-credo [https://perma.cc/6GPW-YCWR] (“If one takes a cosmic view of the situation, even a climate catastrophe that cuts the human population by 75 per cent for the next two millennia will, in the grand scheme of things, be nothing more than a small blip – the equivalent of a 90-year-old man having stubbed his toe when he was two.”). Torres convincingly critiques this point of view. Id.


42. For one example, see Isaac Chotiner, The Contrarian Coronavirus Theory that Informed the Trump Administration, New Yorker, Mar. 29, 2020 (“[O]n March 16th [2020, law professor Richard Epstein] questioned the World Health Organization’s decision to declare the coronavirus outbreak a pandemic, said that ‘public officials have gone overboard,’ and suggested that about five hundred people would die from Covid-19 in the United States. Epstein later updated his estimate to five thousand, saying that the previous number had been an error.”). As of January 16, 2023, there were at least 1,100,000 COVID deaths in the United States, a figure 2,200 times higher than Epstein’s initial estimate, and 220 times greater than his later, more considered projection. Epstein’s very low estimate of likely COVID deaths was reported to be shared in the Trump White House when it was developing its initial pandemic response. Id.

43. Peter McMylor, Alasdair MacIntyre: Critic of Modernity 133 (1994) (stating this in
of discrete and identifiable variables”—like quantifiable costs and benefits—that can be labeled “in a neutral and non-contestable way.” As MacIntyre wryly observes, such imitation of natural science methods by social scientists can rapidly become an essentially “histrionic subject: how to act the part of a natural scientist on the stage of the social sciences, with the more technical parts of the discipline functioning as do greasepaint, false beards and costumes in the theater.” Measuring the acceleration and momentum of a billiard ball will always be a fundamentally more determinate and replicable endeavor than measuring the costs and benefits of a regulation restricting the discharge of effluent. As John C. Coates IV has argued, with respect to financial regulation:

Quantified CBA of such rules can be no more than ‘guesstimated,’ as it entails (a) causal inferences that are unreliable under standard regulatory conditions; (b) the use of problematic data; and/or (c) the same contestable, assumption-sensitive macroeconomic and/or political modeling used to make monetary policy, which even CBA advocates would exempt from CBA laws. Therefore, a dose of epistemic humility is in order for those pursuing regulatory impact analyses.

Moral reconsideration is also in order. Fundamental values of inclusion may be elided in the utilitarian calculus of CBA. A concrete historical example of the subtle and not-so-subtle ways in which we are persuaded to see ourselves, and society as a whole, as mechanical objects in need of expert guidance and manipulation, rather than as reflective agents narrating a past and imagining a better future. Id., at 53 (“In other words, my focus in what follows is to argue via examples that the extended highly complex metaphor of Homo machina (like all social science) does not solely exist on the page, as it were, but becomes flesh and creates a world. This repressed feature of the social scientific theories extending from Hobbes to Pinker is a blind spot in their own theorization. What claims to be merely an act of discovery is in fact always also an act of ethical and ideological creation. But to say this is already to point beyond the metaphor of man as simply a computational mechanics”).

44. Id.
46. As the philosopher Charles Taylor has argued, in human affairs, “exact prediction is radically impossible. . . . we cannot shield a certain domain of human events, the psychological, economic, political, from external interference,” while the predictive power of the natural sciences depends on the identification and maintenance of closed systems. Charles Taylor, Interpretation and the Sciences of Man, 25 REV. OF METAPHYSICS 3, 48–49 (1971). Values and common understanding also shift, often so much so that “the very terms in which the future will have to be characterized if we are to understand it properly are not all available to us at present.” Id.
48. Tim Westmoreland, Standard Errors: How Budgetary Rules Distort Lawmaking, 95 GEO. L. J. 1555, 1596 (2006) (describing how “a highly effective preventive service could also fail the test of being cost-saving to Medicare if by prolonging life it induces future Medicare expenditures for unrelated illness,” thus leading to much preventable illness, suffering, and death). Though Westmoreland is focused on the Congressional Budget Office rather than OIRA, his point on short-sightedness and failure to take into account the full range of benefits of intervention is more general.
illuminates this concern. Carter-era bureaucrats applied simple cost-benefit analysis as they decided that retrofitting the New York City subway to accommodate the disabled was far too costly a project for the federal government to undertake, despite its being authorized to do so by the Rehabilitation Act:

[I]n the 1970s people with disabilities gained the right to access federally funded services, notably public transportation, on equal grounds. But within the Carter administration, the economists responsible for reviewing cost-benefit analysis of regulations were particularly upset with the enormous price tag of retrofitting New York City subway stations. In their analysis, the costs of making these stations accessible was too high given the number of people who would be affected. Despite the nominal right to transportation, many of these stations are still not wheelchair-accessible forty-plus years later.\(^49\)

As a result of this decision, many disabled and elderly persons painfully struggle to scale stairs in the subway—or resort to what are often underfunded or worse mobility alternatives.

What is also fascinating and troubling here is the failure to reflect on the path-dependency generated by the initial design of the stations. Elevators, or the capacity to install them, could have been designed into many at the outset. It is only the lack of inclusive foresight at the outset that caused the “enormous price tag” lamented decades later. Similarly, current opposition to policies advancing sudden reduction of carbon emissions, could have been ameliorated or eliminated had the opponents or their ideological forbears acceded to gradual decarbonization starting in 2000, when the dangers of global heating were already apparent.\(^50\) The carbon lobby’s past opposition to emissions-reducing schemes makes their current opposition more plausible, as the scale of action needed is more likely to appear too great to accomplish, the longer it is delayed.\(^51\) By failing to recognize such historical dimensions of current problems, CBA tends to amplify—rather than question or diminish—the troublingly self-reinforcing dimensions of early policy decisions.\(^52\)

Given such problematic applications of CBA’s quantified consequentialism, there are at least two ways to respond. One is to try to reform CBA, toward a more capacious monetization of benefits. For example, advocates could elevate the work of legal scholar and advocate Ani Satz on the widespread benefits of

---


51. This practical problem even shows up in United States legal doctrine in the redressability prong of constitutional standing doctrine. *See Massachusetts v. EPA*, 549 U.S. 497, 543 (2007) (Roberts, C.J., dissenting) (“[W]hen a party is challenging the Government’s allegedly unlawful regulation, or lack of regulation, of a third party, satisfying the causation and redressability requirements becomes substantially more difficult.” (internal citations omitted))

universal design, to better encompass the value of accessibility. A subway station with an elevator does not just help persons in wheelchairs; it also assists parents with baby carriages, travelers with heavy luggage, weekend warriors recovering from knee pain, workers carrying their equipment, and many other persons. It enables more bicyclists and e-bikers to both avoid driving and avoid trying to lug bulky equipment up and down stairs. These are “cobenefits” of the principal benefit of accommodating the disabled. They are manifold, and could be valued in numerous ways—for example, avoiding an expensive cab ride to the airport if more subway stations had reliable elevators to accommodate heavy bags that few want to lug down stairs.

Nevertheless, deeper problems remain. If, as Elizabeth Popp Berman argues, Republican administrations are less likely to be consistently constrained by CBA’s economic style of reasoning, then Democratic adoption of even enlightened versions of it may tilt the policy playing field to the right—if only because the relevant cost-benefit analyses take time to calculate and create additional veto points to stop action. This suggests that sidestepping—rather than reforming—the economic style, may be the wisest course for those interested in robust regulatory action.

B. Illusions of Determinacy via CBA

Despite all the problems of CBA chronicled in Subpart A above, the method retains a certain cachet, especially among technocratic policymakers. The rhetorical power of a single numerical value (such as an estimate of net cost or benefit) can far exceed that of a wall of words. In policy contexts, one key aspect of this power is the promise of determinacy. There are several dimensions of such perceptions of determinacy. First, a numerical, monetary valuation suggests the

53. Ani B. Satz, Disability, Vulnerability, and the Limits of Antidiscrimination, 83 WASH. L. REV. 513, 542 (2008) (“Universal design, the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design, may ultimately be the most economical way to address the vulnerabilities of disabled individuals arising from physical spaces.”).


55. On the destructive power of excessive veto points, see generally JONATHAN RAUCH, DEMOSClerosis (1995).

ultimate commensurability of all the values at stake: that they can all be measured along the same, monetary yardstick. Second, the transitivity of numbers is assumed to transfer to situations evaluated numerically, allowing one to be presented as clearly better than others with lesser net benefits. Third, there is a common assumption that numerical estimates can be replicated accurately by varied practitioners over time, ensuring that like situations are treated alike. Unfortunately for advocates of CBA, neither the commensurability, transitivity, nor replicability of purely mathematical operations automatically applies with respect to characterizations of net costs or benefits.

Pressure on OIRA to develop formal monetization of cost and benefits arose in response to the agency’s legitimisation crisis. How could non-experts in the White House’s orbit systematically interfere with agency decision-making on the basis of their own, contested, economic meta-expertise—instead of the political and policy considerations long recognized as the most legitimate basis of Presidential centralization of power? Just as antitrust law re-established itself on a firm, if deeply problematic, foundation of quantitative measures of consumer welfare, OIRA’s policy evaluators could point to the precision and superficial indisputability of CBA to rationalize their role in the policy process. In a nutshell: for advocates of CBA, quantification promises determinacy and predictability. The problem, of course, is that this epistemic power play has in practice become far more evidently a rationalization in a Freudian rather than a Weberian sense: defensively projecting lack of rigor onto the Office’s critics, rather than engaging in the larger project of subjecting power to reasoned process described so well in Weber’s account of bureaucracy.

Like many efforts to translate values into numbers, CBA sacrifices fidelity to reality for administrability. To understand the advantages and disadvantages of such methods, imagine, for instance, a theme park deciding what children to admit to a roller-coaster, where there is concern that a child lacking impulse control might squirm out of the safety belts and knee guards. To keep such children off the ride, the park might give each entrant a battery of tests (like the famed “marshmallow test”), to ascertain their level of self-control. Or they might ask how old the child is, for a far rougher sense of the child’s capacity to ride. But few parents carry around a child’s birth certificate, or comparable identification method, so most parks developed a method that is immediately ascertainable: children above a certain height can board the ride, and those below cannot. The data point needed is immediately available and indisputable, speeding assessment. But it is almost certainly over- and under-inclusive, eliminating precocious short children and including undisciplined large ones.

The stakes are relatively low for the rollercoaster screening, given the rarity of accidents and the small lack of enjoyment that burdens those excluded. Stakes are far higher for policy evaluation designed to assess whether, say, arsenic levels in water should be reduced, or masks should be required for staff in nursing homes during pandemics. In each case, the ultimate decision made is likely to be contingent on the valuation of human life, and the “dis-value” of illness and disability. There is an elaborate literature on the valuation of life in regulatory contexts, based on methods including contingent valuation—how much would a person need to be compensated to accept a certain risk of death—and “observed” valuation—how much more persons are paid in dangerous jobs than persons in similar, but less dangerous jobs. (Think, for instance, of the pay differential between construction workers on the second and fiftieth floors of a building.)

However, there can be radically different answers to such questions based on the life circumstances of the person asked. A financially struggling worker with little prospect of a raise might be willing to accept far less marginal income in order to take on a one percent annual risk of death than, say, a well-compensated economist analyzing data based on such workers’ responses. Whether the struggling worker’s, economist’s, or some other sample’s views should be determinative, is a contestable value judgment. To grant an Office the power to delay safety rules, sometimes indefinitely, on the basis of necessarily indeterminate quantifications of the monetary effects of regulation, risks undermining the very substantive legitimacy claims that CBA is supposed to support. This is particularly the case now, when hostile courts and skilled litigants have done so much to stall administrative action even in the face of urgent public needs.59

Problems of indeterminacy compound when the very application of CBA itself can be contingent on the ideology of the administration staffing OMB. Consider, for instance, this account of OIRA’s role in improvidently granting its imprimatur to an unsupported decision to severely limit rules limiting mercury exposure:

In the instance of EPA’s proposed gutting of the Mercury Air Toxics Standards (or MATS)—rules that save as many as 11,000 lives every year across America, and prevent hundreds of thousands of hospitalizations, asthma attacks, and missed school and work days—OIRA greenlighted EPA’s plan to issue a backhanded repeal of the regulations. In doing so, OIRA turned a blind eye to the fact that EPA had conducted no analysis whatsoever of the lost public health benefits of this rule for the American public. OIRA instead went along with EPA’s transparent subterfuge, relying on a legal technicality to claim that EPA was not repealing the rule at all. Not only did OIRA entirely ignore the actual consequences of the agency’s action, it went even further by tacitly adopting a new way of performing cost-benefit analysis that allows OIRA to pretend that the real world benefits of certain rules (including but not limited to the MATS rule) simply do not exist.60

59. Bagley, supra note 4, at 348.
Nor is this an isolated concern. As Elizabeth Popp Berman has documented, Republican administrations before Trump engaged in forms of policy evaluation—and discretionary applications of such policy evaluation—that similarly stacked the deck in favor of deregulation.\(^{61}\)

A managerialist reform may be to simply impose substantive rules on OIRA, to assure that it is just as stalwart at identifying the costs of deregulation, self-regulation, and non-regulation, as it is at identifying costs of regulation. But what is to stop a future administration from repealing those rules? Even if we assume none did, there is an even deeper problem: who could sue OIRA for failing to abide by such rules? The Administrative Procedure Act does not apply to the Office.\(^{62}\) Even if Congress were to amend the APA, separation of powers concerns might lead courts to refrain from enforcing such procedural requirements on an office so closely associated with the President. This is yet another impediment to determinacy, preventing courts from insisting upon consistent application of CBA rules.

### III

**COMPLEMENTING AND CHALLENGING CBA WITH SCENARIO ANALYSIS**

Part II above has painted a grim picture of CBA, at least as it has been practiced at OIRA. A narrow focus on monetization of short-term costs and benefits of particular rules has, predictably, blinded policy evaluators to more complex considerations about the long-term nature of policy development and unexpected consequences of action and inaction. Nor is the method as determinate as it is often claimed to be since the data necessary to assess costs and benefits in many areas is so pervasively subject to value judgments about its proper scope and weight.

At this point, the policy evaluators at OIRA stand at a crossroads. They can either double down on the intertwining of determinacy and power, developing more detailed and enforceable rules about what counts as a cost, and what counts as a benefit, in order to justify their ability to interfere with rulemaking. Or they can give up on the need for determinacy and embrace modes of policy evaluation neomi-rao-and-deregulation-at-any-cost/ [https://perma.cc/NY5E-WM6K]. The Administrative Procedure Act requires that a revision or elimination of a substantive rule undergo the same process necessary in order to promulgate the rule. Motor Vehicle Mfgs. Ass’n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 46 (1983) (holding Reagan Administration’s elimination of passive restraint rule arbitrary and capricious). OIRA similarly has committed itself to reviewing deregulation as well as regulation. However, it retains discretion with respect to the intensity of such reviews, adding another layer of indeterminacy to its findings and actions.


62. Bagley and Revesz, *Centralized Oversight*, supra note 27, at 1281 (“[T]he APA does not apply to OIRA, inoculating its decisions from judicial review and making disclosure of its outside contacts with regulated entities a less-pressing concern for the agency.”).
which openly acknowledge the uncertainty inherent in planning for the future. Subpart A below examines one such mode—scenario analysis (SA)—which could comfortably complement, challenge, structure, or supplant CBA if OIRA took on a more purely advisory role. Subpart B anticipates challenges to proposals to include SA in policy evaluation and responds to them.

A. Scenario Analysis as a Mode of Policy Evaluation

Scenario analysis (SA) consists in extended narrative prediction of how a given policy decision will increase the likelihood of some complex set of consequences and decrease that of others. Popularized in the 20th century, SA is poised for renewed influence in the 21st. For example, in the growing literature on algorithmic accountability, “algorithmic impact assessments” and audits are already beginning to include some of these narrative and qualitative elements. Such contextual analysis helps enable policy evaluators to better understand and predict interrelated aspects of technological advance, economic changes, and policy shifts.

Rather than doubling down on the managerialist impulse to quantify costs and benefits, policy evaluators should shift toward scenario analysis that a) explains in detail potential interactions and knock-on effects of both regulation and failure to regulate and b) acknowledges uncertainty about the “forking paths” that may occur given hard-to-forecast “hinge points,” “tipping points,” or

---

63. Such an informal, non-determinate approach would acknowledge quantitative estimates of costs and benefits, but also recognize they may be very different given different potential scenarios. Informalization is the likeliest rational future for substantive policy evaluation in the 21st century, just as informal rulemaking supplanted ossified formal rulemaking in the 20th century. To their credit, current leaders of OIRA have demonstrated interest in more nuanced, qualitative assessments of the range of potential outcomes of regulatory initiatives. Office of Mgmt. & Budget, Circular A-4 (Draft for Public Review) (Apr. 6, 2023) at 67, available at https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4.pdf (Both qualitative and quantitative assessments of uncertainty can provide useful information.).


similar non-linear or binary phenomena. This Part describes paths to scenario analyses that give a fuller and fairer picture of the productive potential of regulation, as well as other positive outcomes of using such tools.

Having made the case for informal CBA in other work, Amy Sinden has advanced a tentative case for scenario analysis when evaluating policy in the context of new technology. She points to the development of lead as an additive to gasoline in the United States in the 1920s. While it was obvious even to ancient Romans that lead was poisonous when used as dishware, no good evidence existed in the 1920s on its effects once aerosolized via combustion engines. A formal CBA—and perhaps even an informal one—would have been hard-pressed to quantify and monetize, or even to list, the ill-effects of lead-infused particulate pollution. By contrast, Sinden argues:

It’s hard to imagine that a narrative description of potential future scenarios developed in 1925 would not have explored the possibility that the discharge of lead from millions of car tailpipes across the country would irreversibly disperse lead throughout the environment and produce serious adverse public health effects. And since, even in the 1920s, there were known alternatives for resolving the knocking problem [which lead was introduced to solve], like ethanol, it’s hard to imagine that a scenario analysis—at least one conducted honestly and in good faith—would not have pointed toward a different path.

Of course, as Sinden herself readily concedes, a more capacious method of policy evaluation itself does not guarantee a different outcome here. The story of lead in the United States is twisted and shameful, in fields ranging from energy to plumbing to construction. The power of industry overwhelmed rational policy analysis in the case of lead paint, for example: long after most of the developed world banned the product, U.S. factories and builders continued producing and using it, poisoning thousands of children. Nevertheless, given our knowledge of this sad history, current scenario analysis could also recognize and

---

66. The “tipping point” is one of several metaphors of self-reinforcing and eventually irreversible change. Frank Pasquale, Authoritarianism, in TIPPING POINTS IN INTERNATIONAL LAW: COMMITMENT AND CRITIQUE (Jean d’Aspremont and John Haskell, eds., 2021) 42 (a “tipping point,” or “point of no return,” occurs “when small changes aggregate to the point where they create a much larger, more important, and irreversible change.”). Changes that are irreversible are, ceteris paribus, far more serious than those that can be reversed.


68. Id.

69. Id. The mention of alternatives here also recalls recent promising trends in NEPA analysis. See Naomi Wheeler, Note, Requiring Robust NEPA Analysis for Fossil Fuel Projects: A Promising Trend in the Tenth Circuit, 47 ECOLOGY L. Q. 579, 607–08 (2020) (discussing requirements of the BLM to consider alternatives, and the indirect and cumulative impact of its decisions).


account for the power of unregulated or under-regulated industry to shape political life, and even the knowledge base for decision-making.\textsuperscript{72}

Scenario analysis assists decisionmakers to appreciate the importance of profound or even just unexpected change over time. A co-author with expertise in computing and I have engaged in scenario analysis in past work on the potential impact of automation in the legal profession.\textsuperscript{73} We emphasized that only time would tell whether the intensity of legal regulation would increase or decline over time, and whether legal tasks would actually prove susceptible to automation or remain resistant to it.\textsuperscript{74} The following figure briefly introduced the scenarios we explored arising out of varied combinations of these factors:

<table>
<thead>
<tr>
<th>High Susceptibility to Automation</th>
<th>Low Intensity of Legal Regulation</th>
<th>High Intensity of Legal Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1) Vestigial Legal Profession</td>
<td>(2) Society of Control</td>
</tr>
<tr>
<td>Low Susceptibility to Automation</td>
<td>(3) Status Quo</td>
<td>(4) Second Great Compression</td>
</tr>
</tbody>
</table>

Each box would produce a distinctive “environment” for legal automation, accelerating or vitiating it in different ways.

A skeptic may charge that such environments themselves far too bluntly and vaguely describe social conditions to truly inform estimates of the spread of legal automation.\textsuperscript{75} Yet this skepticism itself illuminates the power of scenario analysis properly understood and accomplished. Richly engaging and convincing scenarios force consideration of specifics which can easily be glossed over in monetization or listings of estimated impacts or effects—here, of computerization on the legal profession.\textsuperscript{76} Perhaps the category of legal

\textsuperscript{72} DANIEL CARPENTER & DAVID MOSS, PREVENTING REGULATORY CAPTURE 2–11 (2013) (documenting the problem of capture); WENDY E. WAGNER & THOMAS O. MCGARITY, BENDING SCIENCE 60–86 (2012) (tracing the distortion of scientific research by interested parties).

\textsuperscript{73} Frank Pasquale & Glyn Cashwell, \textit{Four Futures of Legal Automation}, 63 UCLA L. REV. DISCOURSE 26, 28 (2015) (“Scholars have addressed the automation of legal processes since at least the 1960s. None foresaw all the critical developments of the past two decades and detailed prognostication is still a fool’s errand. Nevertheless, in a time of rapid technological change, scenario analysis can help clarify the possibilities ahead. This Essay describes four possible future climates for the development of legal automation, ranging from a computationally administered ‘society of control’ to a muddling continuation of the status quo.”).

\textsuperscript{74} Frank Pasquale & Glyn Cashwell, \textit{Four Futures of Legal Automation}, 63 UCLA L. REV. DISCOURSE 26, 31 (2015).


\textsuperscript{76} It should be noted that our scenarios are not policy evaluation itself, but rather, are meant to inform impact assessments of proposed regulation of legal automation.
automation itself is less appropriate than, say, civil law automation and criminal law automation. This may seem a relatively simple point, but it was rarely acknowledged by the many commentators who in the 2010s repeatedly predicted that AI would revolutionize law as such.

Scenario analysis may also increase awareness of the speculative nature of many economic estimates. Simple supply and demand curves and received ideas about minimum wage laws that today’s policymakers learned in, say, an Econ 101 class in the 1980s, may be guiding the highest levels of policymaking in various agencies and Congressional offices today. Since that time, numerous studies have either questioned or confirmed the Econ 101 view that a higher minimum wage reduces jobs. A proper response to this diversity of approaches is not to try to simply weigh the evidence on one side or another to come down with a verdict on whether a higher minimum wage would be good or bad, efficient or inefficient. Rather, a range of social sciences can contribute to nuanced accounts of situations where an increasing minimum wage may have either a positive, neutral, or negative effect on employment—and many other desiderata, such as economic security, inequality, dignity, fairness, and productive investment. I emphasize productive investment here, because a reduction in availability of fast food, due to rising wages for workers, may be a complex phenomenon. To the extent many fast-food restaurants undermine health and exploit the environment, increasing investment in them may itself be unwelcome. A society may rationally choose to encourage less, but generally higher quality, restaurants, by raising the minimum wage of workers in the sector, if historical and sociological research supports the likelihood of such an outcome. Economist William Baumol has argued that the relative balance of productive, unproductive, and destructive investment is not dictated by technology or culture. “Changes in the rules and other attendant circumstances can, of course, modify the composition of the class of entrepreneurs,” he reminds us, insisting on the intertwining of political and economic reality.

Another notable dimension of the diversity of opinions among economists on the effects of minimum wage laws, has been its relative distance from the political debates and commercial realities actually affecting wage levels. As journalist Peter C. Baker recently concluded after a lengthy investigation of claims on both sides:

[T]here is a single, widely shared assumption [among economists studying minimum wage levels]: that the only important measure of the success of a minimum wage is whether

77. Kate Raworth has documented the extensive shortcomings of this simplistic view. See generally KATE RAWORTH, DOUGHNUT ECONOMICS (2017).
economic studies show that it has increased the total earnings of low-wage workers—without this increase being outweighed by a cost in jobs or hours. . . . [But when] examined closely, the minimum-wage discourse playing out in the field of economics—and, by extension, across the media landscape—had startlingly little direct relevance to anything at all other than itself.81

Baker prefers, instead, to focus on “the fundamental question: how do we value work?” And one can easily imagine scenario analyses which more richly imagine both the potential positive and negative effects of minimum wage hikes, in far richer and contextual terms than a simple focus on overall number of jobs or money earned could provide. If, for example, a viable alternative path for those who will not be working in minimum wage jobs is education toward better-paying jobs, that is a much more positive potential than idleness. Assessing the viability of such alternative paths could, in turn, hinge on qualitative analyses of interviews with workers, projections of enrollment based on current income-based repayment rules, assessment of the quality of educational programs available, and more.

A rethinking of valuation and opportunity costs should also inform scenarios analyzed in a variety of other fields, such as environmental policy. To be sure, a river, beach, or wetland provide “ecosystem services” with certain dimensions which can be monetized.82 But we should also realize, with sociologist and philosopher Hartmut Rosa, that nature is “a—or perhaps even the—central sphere of resonance in modernity.”83 “Faced with the expanse of the sea or a landscape, or under the warmth and light of the sun,” Rosa writes, “our breathing, posture, skin resistance, and the alignment or orientation of our sensory apparatus all literally change; our psychophysical relationship to the world changes.”84 He chronicles the ways large and small, immediate and ramified, in which nearly everyone seeks some direct experience of nature.85 This articulation of successful and unsuccessful relationships to the world which environmental law seeks to preserve. It is more direct because it attempts to articulate first-person, phenomenological appreciation of aspects of the world which environmental law seeks to preserve. It is less direct to the extent that it relies on a theory of value that may not be as widely shared as common appreciation of the worth of money. But even these common understandings of monetary value are easy to question; consider, for instance, the vast chasm between what a fine of $10,000 means to someone with

81. Baker, supra note 78.
83. HARTMUT ROSA, RESONANCE: A SOCIOLOGY OF OUR RELATIONSHIP TO THE WORLD 270 (2019).
84. Id. at 271.
85. Id. at 269–71. Devotion to pets could, in this frame, be read as manifesting this humane will to relate to the world, rather than as its self-serving domestication.
Rosa offers another rationale for promoting the consideration of multiple scenarios, as opposed to flattened monetary measures or lists of costs and benefits, in his book *The Uncontrollability of the World*. Composing and comparing multiple scenarios that may arise out of a regulatory intervention is a way of practicing the virtue of epistemic humility in a world of enormous uncertainty, while also contemplating bold action. We need not accept the Hayekian yoking of epistemic humility to laissez-faire in policymaking. Rather, an appreciation of uncertainty can lead policy evaluation offices like OIRA to diversify their portfolio of predictive and evaluative toolkits, while abstaining from interfering with bold executive action to address important social problems.

Consider, for instance, a commitment to ending or sharply reducing nuclear power dependence. In the wake of the Chernobyl and Fukushima disasters, such a move may have seemed particularly environmentally conscious. As the threats posed by global warming and irresponsible petrostates rise in salience, the risk of meltdown or persistent radioactive waste may become less salient. As solar energy becomes less expensive, such risks may become more prominent. Future analysis of green policies must take the interaction of such problems into account, however difficult it is to quantitatively estimate their likelihood, or the magnitude of their effects on well-being.

Sophisticated analysts of administrative power have realized the importance of taking into account “fat tail” risks, including low probability but immensely impactful scenarios. For example, Mehrsa Baradaran has explored the value of “war gaming” low probability, high impact developments in financial markets.87 Rory Van Loo’s “Stress Testing Governance” explains how agencies can and should anticipate a wide range of scenarios during their decision-making.88 Hilary Allen has demonstrated the value of financial regulation that requires machine

---

88. Rory Van Loo, Stress Testing Governance, 75 VAND. L. REV. 553, 558 (2022) (“Stress tests go beyond modeling threats, such as the risk of a natural disaster or financial crisis, to assess how well private or public organizations would respond to those threats. Stress tests thus incorporate elements of scenario analysis and simulations.”). Scenario analysis includes stress tests and may be a more capacious term than stress test, but this is an emerging field and it may take some time to establish what is the most capacious term. In extant legal scholarship, the stress test is focused on anticipating and responding to negative events. See, e.g., id. (focusing on a wide array of disasters and emergencies); Crawford, infra note 93 (focusing on financial crises); Baradaran, supra note 87 (focusing on financial crises); Allen, infra note 89 (focusing on financial crises). By contrast, scenario analyses may not only anticipate negative events, but may also include very positive outcomes—like the positive uses of data access rights described in detail in scholarship on the effects of the GDPR. René L. P. Mahieu & Jef Ausloos, Harnessing the Collective Potential of GDPR Access Rights: Towards an Ecology of Transparency, INTERNET POL’Y REV. (July 6, 2020), https://policyreview.info/articles/news/harnessing-collective-potential-gdpr-access-rights-towards-ecology-transparency/1487 [https://perma.cc/R9KF-824L].
learning algorithms used in finance contexts to be exposed to varied scenarios.\textsuperscript{89} These scholars also acknowledge some potential shortcomings of SA and cognate, non-quantitative, dynamic, and narrative modes of policy evaluation, which are discussed in Subpart B below.

B. Anticipating and Meeting Objections to Scenario Analysis

As financial law experts are well-aware, “regulation by hypothetical” is subject to some predictable distortions.\textsuperscript{90} Mehrsa Baradaran has described bank “stress tests” that did little to explore an array of potential financial developments that could both spark—and be reinforced by—different rules and applications of rules at financial institutions.\textsuperscript{91} Baradaran asks:

Was the intent of the tests to assure markets or to test accurately firm vulnerabilities? If regulators view these tests as a means of calming the markets, there is an inherent incentive to go light on adverse conditions [modeled] . . . . The mismatch of regulatory incentives in the European regulators’ stress tests produced such inaccurate results that commentators deemed them all but useless.\textsuperscript{92}

Fortunately, this objection to regulation by hypothetical is more focused on the agency level, rather than the purely advisory “meta-agency” role of policy evaluation contemplated by the applications of SA I am describing. Performed at this remove, SA will be less vulnerable to these types of pressures. Policy evaluation without direct consequence—designed instead to illuminate the long-term consequences of different regulatory choices—would be more independent by design, than direct financial regulation and information generation that risks moving markets inadvertently.

Regulatory capture and other dynamics can easily lead to the construction of “rosy scenarios” for either regulatory or deregulatory interventions. Baradaran wisely counsels that a more adversarial procedure for stress tests, known as war gaming, would create better regulatory incentives for participants to anticipate a wider range of threats.\textsuperscript{93} Similar adversarial procedures could be incorporated

\textsuperscript{89} Hilary Allen, \textit{Driverless Finance}, 10 HARV. BUS. L. REV. 157, 198 (2020) (“In order to mitigate systemic risk, financial algorithms capable of machine learning may therefore need to be exposed to hypothetical scenarios that emphasize worst-case scenarios and demonstrate the consequences of correlated responses to such events.”).


\textsuperscript{91} \textit{Id.} at 1297 (discussing bank stress tests in 2009).

\textsuperscript{92} \textit{Id.}

\textsuperscript{93} \textit{Id.} at 1319 (“Properly conducted financial war games would test firm management and balance sheets as well as regulatory response in the context of crisis management.”); see also John Crawford, \textit{Wargaming Financial Crises: The Problem of (In)Experience and Regulator Expertise}, 34 REV. BANKING & FIN. L. 111, 111 (2015) (“Wargames can provide regulators with a repertoire of crisis experiences that they will have ‘lived,’ in a real if attenuated way, which can then aid them in perceiving key patterns and anomalies and in anticipating potential consequences of decisions to intervene (or not) under the intense time pressure and stress of an actual crisis.”); John McLaughlin, \textit{A Putin nuclear strike on Ukraine? A Chinese attack against Taiwan? How the US prepares for global nightmares}, GRID NEWS, (Dec. 12, 2022), https://www.grid.news/story/global/2022/12/12/a-putin-nuclear-strike-on-ukraine-a-chinese-attack-against-taiwan-how-the-us-prepares-for-global-nightmares/ [https://perma.cc/35QJ-U8KB] (addressing
into SAs, to ensure that the actions of destructive, chaotic, or merely self-interested actors are anticipated by policy evaluators.

While writing about a concept cognate to scenario analysis—stress testing—Rory van Loo has documented remarkably prescient recommendations from professionals who used non-quantitative, non-economic methods to broaden agencies’ understanding of what events would be made more likely by both government action and inaction. But he also presciently anticipates the many ways that stress tests, and cognate forms of narrative anticipation of potential futures like SA, could go wrong.94 For example, Van Loo acknowledges that “[s]tress tests are not particularly well-suited to directly tackle arguably the world’s most pressing threat: global warming. Arguably, global warming progresses too gradually and causes too broad an array of harms that are difficult to link to any single agency or hazard.”95 By the same token, even extensive scenario tests focused narrowly on a single proposed rule may end up being too narrow. Therefore, policy evaluators at OIRA may want to develop some SAs that model an agency’s entire set of regulatory proposals for a year or a presidential term. Such a comprehensive approach could help SA avoid the “forest for the trees” problem that has beleaguered those applying CBA.

This aspiration to comprehensiveness may also set off alarm bells among those familiar with controversies over the application of the National Environmental Policy Act (NEPA). NEPA requires “federal agencies identify and analyze impacts on the environment prior to taking, authorizing, or funding ‘major Federal actions significantly affecting the quality of the human environment.’”96 As John C. Ruple and Kayla M. Race have observed, this impact analysis “requires that agencies take a ‘hard look’ at the environmental impacts of their actions and consider a range of alternative means of achieving agency goals before undertaking federal actions,” which “can involve significant time and expense.”97 However, the burdensomeness of NEPA is in large part premised on the threat of litigation: even though only one in 450 NEPA decisions were litigated in a sample studied by Ruple and Race, all such determinations operate in the shadow of litigation threats. By contrast, the SA recommended in this article would largely be conducted at OIRA, and would be as immune to judicial challenge as are current CBAs conducted at the Office.

But another, deeper issue with SA must be acknowledged: can it be misused? Or support undesirable policy outcomes? Scenario analyses will not always lead

how scenario-planning works and observing that “[m]y experience in government taught me that there are many ways to prepare for such uncertainties and entire teams of people whose job descriptions might best be described as ‘preparing for nightmares’”).

95. Id. at 602.
97. Id.
in known directions for policy. Consider data protection and privacy law, where cost benefit analysis could give way to scenario analysis of expanded data access rights—for example, rights for a person to know what data an entity has collected about them, how it is analyzed, and how it is used. SA may give far more support to proponents of data access rights than a CBA, since CBA is so tilted toward recognizing the short-term costs to businesses that such access rights would pose. A scenario analysis could examine, in far more detail and with more imagination, the type of society that data access rights would create. But a truly comprehensive analysis of data access rights would also need to address troubling potential uses of them.98 What if firms begin requiring job applicants to exercise their rights under data access rights to gather information, and demand to evaluate that dossier? What if data access rights present a significant new “attack surface” for hackers, who pretend to be inquiring data subjects and thereby steal their sensitive data? Such questions need answers, even if their speculative quality makes narrative exploration necessary. Scenario analysts may ultimately decide that enough countervailing forces exist to make such outcomes rare or very unlikely. They may recommend rules that mitigate such dangers. Or they may strongly advise legislators to rethink the entire project of expanded data access rights with full consideration of the unintended consequences of such laws in mind.

Most advocates of stress tests and war gaming focus on their likely positive effects, leading to outcomes that are politically rational.99 But it should be acknowledged that SA by itself will not necessarily lead to more rational outcomes. SA may lead policymakers to, say, better acknowledge the complex and interlinking risks posed by global heating. However, there is nothing in principle to stop a well-resourced pro-fossil-fuel foundation from developing “adaptation scenarios” that include, say, plans for underground housing to protect persons from heat—or even risky geoengineering designed to obscure sunlight via release of certain particles in the upper levels of the atmosphere. One particularly bizarre projection was reported on by Jane Mayer at a Koch-funded exhibition at the Smithsonian:

The David H. Koch Hall of Human Origins, at the Smithsonian’s National Museum of Natural History, is a multimedia exploration of the theory that mankind evolved in response to climate change. . . An interactive game in the exhibit suggests that humans will continue to adapt to climate change in the future. People may build “underground cities,” developing

---

98. Extensive research on rights to access to information from public agencies has usefully focused on these types of unexpected effects. See, e.g., David Pozen, Transparency’s Ideological Drift, 128 YALE L. J. 100 (2018).

99. See, e.g., Van Loo, supra note 88, at 604 (“With Federal Reserve officials more aware of the financial stability implications of climate change, they may be more willing to advocate for environmental action—a process that appears to have already begun. Moreover, financial regulatory officials may have something to offer climate change forecasts. The National Climate Assessment omits consideration of financial stability, for instance. Thus, policymakers may currently underestimate the full risks of climate change, in part due to its disconnect from financial forecasting.”). Van Loo also concludes that “stress tests and related tools . . . might spur an inert state to action.” Id. at 613.
“short, compact bodies” or “curved spines,” so that “moving around in tight spaces will be no problem.”

Critics of SA may worry that a fully developed scenario based on such ideas may seduce its readers into believing that far-fetched technological solutions to problems will eventually arise, diminishing their appetite for containing risks with difficult work now. By contrast with the precautionary principle, which is substantively tilted toward preserving existing ecosystems, environments, and patterns of life, a rosy SA focused entirely on narrow definitions of human well-being and ideologically aligned with the contemporary effective accelerationist views, may provide an excuse for inaction.

Nevertheless, it would be untrue to say that anything goes in SA, and unfair to say the method would be significantly more irresponsible than CBA. The types of long-termism most compatible with such radical-adaptationist scenarios are thoroughly utilitarian projects. Plausibility matters in narrative projections of likely futures. To the extent any rational policy evaluation process contemplated the interactive game mentioned above, it would quickly demolish the plausibility of that given adaptation solution, given that “current projections predict radical climate shifts occurring over the span of a few decades,” not thousands of years. Moreover, the value of life outdoors, as mentioned in the discussion of Hartmut Rosa above, is entirely elided.

More generally, there are standard ways of assessing better and worse scenario analyses. In addition to the categories of plausibility and reflection of important values, they may be assessed by such “criteria of adequacy as economy, originality, perspicacity, concinnity, elegance, cogency, and form.” The vast array of CBA methodologies was not built out overnight, and it may take some time for a critical mass of better and worse work to guide SA as a craft. However burdensome the development (or, more accurately, revival) of the craft of SA


101. As psychologist Jerome Bruner argues, “it is very likely the case that the most natural and the earliest way in which we organize our experience and our knowledge is in terms of the narrative form.” JEROME BRUNER, THE CULTURE OF EDUCATION 121 (1986); see also JACK BALKIN, CULTURAL SOFTWARE 191 (1998) (“[B]ehind all narratives lie understandings about what is canonical, expected, and ordinary.”); P.F. STRAWSON, SCEPTICISM AND NATURALISM: SOME VARIETIES 46 (2008) (recognizing the importance and validity of “the ordinary explanatory terms employed by diarists, novelists, biographers, journalists, and gossips, when they deliver their accounts of human behaviour and human experience – the terms employed by such simple folk as Shakespeare, Tolstoy, Proust and Henry James”).


103. RICHARD H. BROWN, A POETIC FOR SOCIOLOGY: TOWARD A LOGIC OF DISCOVERY FOR THE HUMAN SCIENCES 102 (1977); see also MICHELE LAMONT, HOW PROFESSORS THINK INSIDE THE CURIOUS WORLD OF ACADEMIC JUDGMENT 6–7, 239 (2010) (describing both sympathetically and critically how anthropologists, political scientists, literary scholars, historians, and philosophers have engaged in qualitative judgments of colleagues’ works’ merit, particularly when deciding on recipients of research grants and fellowships).
may be, the work is necessary on intrinsic, non-instrumental grounds: more forms of insight than the quantitative, monetary, and relatively short-term view of CBA are needed to guide policy evaluation.\textsuperscript{104} Moreover, as a community of practice of SA practitioners develops, their professional expertise is likely to be sharpened and developed via the types of academic dialogue that have now benefited other, larger schools of policy evaluation for decades. A fledgling SA field should not be judged wanting merely because it does not now have the depth of literature and engagement now buttressing more established forms of policy evaluation.

This “uneven development” problem is a deep challenge to present comparisons of SA and CBA. But even if it did not exist, a problem of incommensurability would preclude a quick dismissal of SA. It is impossible to comprehensively demonstrate that one established policy evaluation tool will lead to better consequences than others, especially when they are based on divergent meta-ethical commitments. And even if utilitarianism were the chosen meta-ethical commitment, even CBA itself has not been convincingly subjected to CBA.\textsuperscript{105} Therefore, it would be premature to demand SA prove itself on some utilitarian metric.

Proponents of CBA cannot logically foist onto challengers an obligation to, say, perform a meta-CBA of CBA versus SA. There is no such meta-ethical tool that could demonstrate conclusively that SA, or even CBA complemented by SA, would result in greater net benefits than CBA alone or vice versa. Constructing such a burden of proof presumes the conclusion CBA’s advocates seek to demonstrate (e.g., that simple utilitarian weighing of positive and negative outcomes is a better method of evaluation (here, evaluation of policy evaluation) than rival approaches).\textsuperscript{106}

At this level of abstraction, intrinsic rather than instrumental evaluation is necessary. From an intrinsic perspective, SA is commendable because it and

\textsuperscript{104} The key Clinton-era Executive Order implementing CBA stated that “[c]osts and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider.” Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993). The recent proposed revisions to Circular A4 repeatedly reaffirms and specifies how to ensure such fair consideration of qualitative dimensions of impact analysis. See, e.g., Office of Mgmt. & Budget, Circular A-4 (Draft for Public Review) (Apr. 6, 2023), available at https://www.whitehouse.gov/wp-content/uploads/2023/04/DraftCircularA-4.pdf [https://perma.cc/FH2L-8ELB], 36 (“[A] number based on a poor-quality study is not necessarily superior to a qualitative analysis of the non-use value. Non-use values that are not quantified should be discussed qualitatively.”); “id. at 43 (“When it is not possible to quantify or monetize all of the important benefits and costs of a regulation, the most advantageous policy will not necessarily be the one with the largest quantified and monetized net-benefit estimate.”).

\textsuperscript{105} Coates, Cost Benefit Analysis of Financial Regulation, supra note 47, at 888 (“Completing a full, quantified CBA of CBA would require evidence and new research methods: studies of the degree to which CBA results in better regulations or more transparency in the regulatory process, as well as quantified estimates of the costs—delay, confusion, camouflage, partisanship—that CBA can introduce.”).

\textsuperscript{106} For a critique of “simple weighing” on a personal level that also scales up to the social level, see Charles Taylor, Responsibility for Self, in THE IDENTITIES OF PERSONS 281 (Amélie Rorty ed., 1976).
cognate tools of policy evaluation have both identified risks and opportunities missed by CBA, and, most importantly, because SA invites a much broader range of types of expertise for participation in policy evaluation. This more inclusive perspective is critical in many fields. For example, William Boyd, Douglas A. Kysar, and Jeffrey J. Rachlinski have convincingly demonstrated that “the study of environmental law and policy should be broadly inclusive of social scientific insights. Fields such as cognitive and social psychology, science and technology studies, history and philosophy of science, international relations theory, and global governance studies all offer valuable approaches to understanding and shaping environmental law,” beyond the narrow economic approaches that have long dominated policy evaluation in the field. 107 The same is true well beyond environmental law.

While useful, economics is only one of many perspectives on regulation, and CBA is only one of many economic methods. By contrast, SA can encompass not only the fields mentioned by Boyd, Kysar, and Rachlinski, but also many other forms of social science, humanistic inquiry, and even fiction. 108 SA can help us appreciate that, when the stakes are sufficiently high, we may well become a different type of country by choosing a particular path, rather than simply persisting as a static entity with more or less stuff. SA entails imagination structured by causal analysis, a richer discipline than CBA’s practice of prediction constrained by quantification.

This epistemic inclusiveness is the chief, intrinsic appeal of SA. While CBA is subject to many of the same challenges leveled against SA, it has failed to match SA’s record of, and potential for, including diverse expert voices from social sciences, humanities, and beyond to consider the long-term impact of regulation. Moreover, given the systematic unpredictability of key social dynamics, even if CBA remains a cornerstone of contemporary policy evaluation, it should be structured via basic scenario analyses that better reveal contingencies of valuation. Whether it substitutes for or structures CBA, SA is a vital method and framework in policy evaluation.


IV

CONCLUSION

Contemporary social theory addressing the role of social science in policy evaluation has a largely Foucauldian **élan**, emphasizing the intertwining of power and knowledge. That is certainly the spirit of Berman’s and Chamayou’s discussions of the quantification at the core of enterprises like OIRA.\(^{109}\) But there is another vein of social thought emphasizing a tension between knowledge and power. This is the key insight motivating the tragic perspective of Max Weber in the twinned essays *Politics as a Vocation* and *Science as a Vocation*.\(^{110}\) Weber admired social scientists who abstracted their work from the immediacy of current affairs. They were capable of identifying hard truths even when such insights undermined political projects of their allies. One can only speak truth to power when the two are distinct entities.

Despite Weber’s warnings, many of today’s leading policy evaluators yearn to gild their work with the trappings of objectivity and replicability characteristic of the physical sciences. They should resist the temptation. Determinacy is overrated in policy evaluation. No science of economic prognostication can alleviate uncertainty as to the ultimate effects of many critical decisions by policymakers.\(^{111}\) Seeking the epistemic safety blanket of a quantitative determination that costs are less than benefits may merely blind the decisionmaker to factors that ultimately should have been more important.

Freeing OIRA to engage in policy evaluation without direct and immediate consequences for agency rulemaking processes would open new vistas of methodological innovation at OIRA. To be sure, relinquishing the power to reject rules may seem like a hard ask of the Office. However, by stepping away from this power, it would also be better poised to shed the methodological straitjacket now constraining so much of its regulatory impact analysis. Shifting

\(^{109}\) Berman, for instance, suggests that the development of CBA was as much influenced by the demands of government than it influenced government itself. In that way, CBA may be seen less as “speaking truth to power” than as a power-inflected theory of what counts as truth.


\(^{111}\) As Peter C. Baker eloquently explained in an essay on the indeterminacy of the economics literature on the likelihood of job losses after a hike in the minimum wage:

[M]ore and more Americans work bad jobs – poorly paid jobs, unrewarding jobs, insecure jobs – and they are willing to try voting some of that badness out of existence. This willingness is not the product of hours spent reading [a voluminous and contested] economic literature. It has much more to do with an intuitive understanding that – in an economy defined by historically high levels of worker productivity on the one hand, and skyrocketing but unevenly distributed profit on the other – some significantly better arrangement must be possible, and that new rules might help nudge us in the right direction, steering employers’ profit-seeking energies towards other methods of cutting costs besides miserably low pay. But we should not expect that there will be a study that proves ahead of time how this will work – just as [former U.S. President Franklin Delano] Roosevelt could not prove his conjecture that the US economy did not have an existential dependence on impoverished sweatshop labour.

Baker, *supra* note 78.
OIRA from a deadline-burdened veto point to a strategic planning role would also promote a much-needed long-term orientation in executive branch decision making.

Scenario analyses (such as stress tests and war gaming) may be deeply indeterminate, forecasting radically different futures based on small differences in the initial state of a system. However, they are also truer to recent experience of radical unpredictability in the social world, where, for instance, experience of roughly one hundred years without a global respiratory pandemic leading to the deaths of millions, and decades without a land war in Europe and significant inflation in the United States, was suddenly upended over the course of the first few years of the 2020s. The executive branch is designed to be flexible in response to such emergent threats. The executive orders mandating CBA may be revoked by the current or a future president, and replaced by more capacious methods of policy evaluation. They are instruments of governance capable of adapting to what William Scheuerman has called the “social acceleration of time.”

Nevertheless, familiar forms of inertia will likely keep CBA in place at OIRA for some time to come. It will be difficult to build a community of practice among scenario analysts as robust as that now extant among practitioners of CBA. Few will refine the skills necessary for SA if such a practice does not influence policymakers; however, few policymakers will consult scenario analyses if they are not backed by a community of practice capable of discerning better and worse versions of SA. For now, progress will need to be made at the margins. Schools of law and policy should promote forms of regulatory impact analysis that embrace the methodological pluralism characteristic of SA, and create opportunities for faculty to teach classes on SA itself. As they grapple with non-quantifiable costs and benefits, OMB staff should consult the work of such scholars, while developing their own forms of SA, and learning from current SA practitioners.

The melding of power and knowledge in OIRA via CBA has been a failed experiment, shackling its analysts to modes of policy evaluation that are biased against government action, ignore important benefits of regulation, and downplay deep uncertainties about the future. If the Office were instead to exemplify true interdisciplinary curiosity and openness to varied methods, including scenario analysis, such innovation would bring it closer to a truthful assessment of the range of potential long-term impacts of policy change and stasis. It may even lead to an informal influence far greater than that accompanying the rejections and watering down of rules that have been the Office’s chief—and all too often baleful—impact on the administrative state.

---