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Congress, Constitutional Moments, and the Cost-Benefit State Legislative Foreword

Cass R. Sunstein

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In this article, Cass Sunstein explores the 104th Congress' attempts at regulatory reform. Professor Sunstein believes that the election of this Congress, with its distinctive approach to government, signals the dawning of a "constitutional moment" in which the role of government at all levels will be reexamined. Without full public support for sweeping changes in government, this moment has not yet materialized. When and if it does, regulatory reform will be one of its aspects. Indeed the nation has already begun to examine regulation to determine if the benefits justify the costs. Unfortunately, the 104th Congress has, thus far, failed adequately to address this burgeoning cost-benefit state. Sunstein claims that Congress' failure reflects its inability to redesign the massive federal regulatory scheme. He suggests that the executive branch should oversee regulatory reform, with Congress relegated to providing broad policy direction. Sunstein also suggests that Congress adopt an Administrative Substance Act, building upon the recent learning about the performance of regulation and modeled after the Administrative Procedure Act. Sunstein further calls for the enactment of a "substantive supermandate" requiring a general background rule of cost-benefit balancing for all federal regulation; but he contends that any description of costs and benefits should reflect the full range of diverse values expressed by the public at large.
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I. INTRODUCTION

A. A Stalled Constitutional Moment

The 104th Congress promised to change the national government in fundamental ways. Spurred by widespread popular dissatisfaction with government, the House of Representatives attempted to rethink national institutions more deeply than at any time since the New Deal; in fact the New Deal itself was a central target of the process of rethinking. America may be on the verge of a constitutional moment in which Americans answer foundational questions in novel ways.¹

The election of the 104th Congress signalled the transformation of America into a genuinely post-New Deal regulatory state. This emerging nation remains in a process of development; but it may be described as a cost-benefit state, one whose performance will be assessed, both in particular and in general, by comparing the costs of government action with its benefits. This idea requires a good deal of specification, but it unites developments not only in the national legislature, but in the executive branch, the judiciary, and state government as well.²

My purpose here is to evaluate the efforts of the 104th Congress to give legal form to this constitutional moment. My particular interest is Congress’ effort to reform the modern regulatory state. Charged by a popular mandate for reform and a high level of ambition, Congress debated both substantive and procedural “supermandates” cutting across all federal regulation.³ Thus the 104th Congress devoted a large part of its agenda to “rethinking the regulatory state.” The Contract With America also promised to address basic regulatory issues.⁴ In large-scale hearings, Congress examined problems of overregula-

¹ I borrow the idea of a constitutional moment from Bruce Ackerman, who proposes a “dualist” approach to constitutional interpretation—an approach that claims that America has witnessed two types of decisions: foundational ones made by the American people and more ordinary ones made by their representatives. ¹ BRUCE ACKERMAN, WE THE PEOPLE: FOUNDATIONS 6 (1991). A constitutional moment is a period of popular development of principles that results in revolutionary reform. Id. at 21. Ackerman identifies three such moments in American history: the Founding, Reconstruction, and the New Deal. Id. at 58; see also text accompanying notes 16-34 infra.


³ See text accompanying notes 106-176 infra.

⁴ CONTRACT WITH AMERICA: THE BOLD PLAN BY REP. NEWT Gingrich, REP. DICK Armey, AND THE HOUSE REPUBLICANS TO CHANGE THE NATION 131-35 (Ed Gillespie & Bob Schellhas eds., 1994) (proposing to require federal agencies to prepare a risk assessment for each new regulation, an annual
tion and the prospects for cost-benefit balancing. Finally, the House passed
and the Senate debated measures that, if enacted, would have represented the
largest changes to the Administrative Procedure Act since its enactment in
1946.

By the close of the first session, however, relatively little had happened.
There was no constitutional transformation for a simple reason: The public has
not (yet) called for one in the way that American institutions require. To be
sure, the House passed eleven major pieces of legislation in two months—includ-
ing the Congressional Accountability Act, the Line Item Veto Act, and
the Unfunded Mandates Reform Act. But only six of those measures were
enacted into law. The Balanced Budget Amendment passed the House but
faced defeat in the Senate, as did tax legislation, welfare reform, a new crime
bill, and term limits legislation. The Line Item Veto Act and litigation reform
passed the House and Senate in different forms, but await the work of confer-
ence committees, stalled in the case of the line item veto by the Republicans'
reluctance to give this power to President Clinton.

All in all, there was a great deal of noise and bluster—a great deal of sig-
nalling—but surprisingly little in the way of concrete results. In the end, the
enacted measures proved modest and mostly procedural. The apparently more
ambitious proposals contained some good features. But many of their provi-
sions were crude, unimaginative, and far more procedural than advertised.
Rather than reflecting new and better thinking about substantive regulation,
these provisions represented an effort to clog the administrative process with
paperwork. In fact, members of Congress sometimes appeared to misunder-
stand the content of the very legislation they were debating. Congress revealed
only a partial awareness of the recent outpouring of research on regulation—
research that could have produced the basis not only for fundamental change,
but also for a consensus cutting (more or less) across partisan lines. Congress'

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5. See, e.g., Reform of the Occupational Safety and Health Administration's Enforcement Pro-
gram: Hearings Before the Senate Comm. on Labor and Human Resources, 104th Cong., 1st Sess.
regulation on small business); Hearings on H.R. 994, "The Regulatory Sunset and Review Act of 1995,"
Before the Subcomm. on National Economic Growth, Natural Resources and Regulatory Affairs of the
Mashburn, Viking Builders) (calling for support of H.R. 994, which, among its provisions, provides for
cost-benefit analysis and review of all federal regulation).

6. Administrative Procedure Act, ch. 324, 60 Stat. 237 (codified as amended in scattered sections

discrimination and fair labor standards applicable to Congress itself).

8. H.R. 2, 104th Cong., 1st Sess. (1995) (authorizing the President to veto appropriations acts and
targeted tax benefits contained in revenue acts).

impose a burden on the private sector or on state or local governments of more than $100 million).


11. Steve Daley, GOP Agenda Moves U.S. Toward a Turning Point, CHI. TRIB., Aug. 13, 1995,
§ 1, at 1.
emphasis on cost-benefit analysis showed a healthy appreciation for balancing rather than absolutism; but it was only a start. Congress may well have laid the groundwork for future developments. But because of its own institutional weaknesses and the system of checks and balances—including above all bicameralism and the possibility of presidential veto—actual changes will take more time. As a practical matter, these institutional weaknesses significantly hamper Congress’ ability to produce a constitutional moment in the context of the modern regulatory state.

B. Lessons

Both institutional and substantive lessons will emerge from this article. On the institutional side, I claim that Congress is quite ill-equipped to produce sensible, constitution-like reform, at least if it tries to offer details. With respect to regulation, a group of generalist representatives—all with numerous issues to address, few with particular expertise in regulatory law, and many beholden to special interests—is not in a position to produce desirable, large-scale reforms, unless it restricts itself to generalities. Such a group is prone to sharp internal divisions that are not subject to reasonable mediation without a good deal of specialization in regulation. Indeed, the task of producing constitution-like change in the modern state is far more difficult than it was in the New Deal era. It is easier to create a regulatory state than it is to dismantle one, especially in an era in which every industrialized nation is committed to controlling the operation of the marketplace.

These skeptical claims about Congress’ institutional capacities are reinforced by recent experience. As we will see, the 104th Congress was split between two different sets of interests: technocratic forces seeking to discipline agency decisions with better policy analysis and forces of reaction seeking to stop agency action even when it would improve social well-being. There is thus an interesting contrast between the performances of Congress and the executive branch. Even those who reject President Clinton’s approach to regulation should recognize that his administration has shown far more sophistication and creativity in this area than Congress.12 (The same is true for the adminis-

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12. For example, Vice President Gore’s task force, which is currently conducting the National Performance Review, has produced a series of reports on “reinventing government.” See, e.g., BILL CLINTON & AL GORE, REINVENTING WORKER SAFETY AND HEALTH (May 1995) (detailing reforms of OSHA); BILL CLINTON & AL GORE, REINVENTING REGULATION OF DRUGS AND MEDICAL DEVICES (April 1995) (detailing reforms of FDA); BILL CLINTON & AL GORE, REINVENTING ENVIRONMENTAL REGULATION (March 1995) (detailing reforms of EPA). See also Exec. Order No. 12,898, 3 C.F.R. 859 (1995), reprinted as amended in 42 U.S.C. § 4321 (1995) (requiring agencies to make achieving environmental justice part of their missions); Exec. Order No. 12,866, supra note 2 (defining principles of regulation including examining the effectiveness of existing regulation, encouraging flexibility in method of compliance, and assigning costs and benefits of new regulations); Memorandum on Regulatory Reform, 31 WEEKLY COMP. PRES. Doc. 695, 695-96 (Apr. 21, 1995) (directing agencies to waive penalties in certain cases and to reduce the frequency of required reports); Memorandum on Customer Service, 31 WEEKLY COMP. PRES. Doc. 456, 456 (March 22, 1995) (directing agencies to implement steps to ensure better customer service); Memorandum on Regulatory Reform, 31 WEEKLY COMP. PRES. Doc. 363, 364 (Mar. 4, 1995) (calling on agencies to cut obsolete regulations).

On March 16, 1995, President Clinton announced governmentwide regulatory reform. White House Office of Communications, President Announces Governmentwide Regulatory Reforms, Mar. 16,
trations of Presidents Reagan and Bush. The executive branch has been highly attuned to the need to compare costs and benefits, to attend to results rather than processes, and to enlist the private sector in engineering least-cost solutions. Improvements in regulatory performance are more likely to come from the executive than from a Congress saddled with its institutional deficiencies. Perhaps Congress should give substantial discretion to administrators, allowing them to design appropriate regulatory tools and perhaps to set priorities as well. Indeed many current problems result from statutes that either produce poor incentives or forbid more imaginative, cheaper, and more effective solutions—or that ban cost-benefit balancing altogether.

On the substantive side, a cost-benefit state may well be better than what we now have: a system containing both economic and democratic failures, where priorities are not set carefully and where interest groups wield excessive power over government. Certainly it is important to provide methods for assessing regulatory performance. At least in principle, some form of cost-benefit analysis could simultaneously promote political accountability and regulatory efficiency. In this way, it could be part of a system of deliberative democracy. But any movement toward a cost-benefit state should be accompanied by an understanding of the importance of public judgments in regulatory law, the limits of the criterion of private willingness to pay, and the need to

1995 (press release), available in WESTLAW, Pres-Daily Database. The initiative to reform EPA will: (1) simplify reporting burdens; (2) allow grace periods for small business violations; (3) provide incentives for self-disclosure and correction; (4) increase the use of emissions trading; (5) consolidate air pollution rules; (6) give greater flexibility to recipients of grants; and (7) create a faster self-certification program for minor changes to pesticides. Id. The initiative to reform OSHA will: (1) switch from command-and-control to partnerships with business (which means negotiated, rather than dictated, regulations); (2) update obsolete and confusing standards; and (3) identify priorities sensibly (i.e., a ranking of hazards in order of danger). White House Office of Communications, President and Vice President Announce OSHA Reform. May 16, 1995 (press release), available in WESTLAW, Pres-Daily Database. See also Regulation: EPA, DOE, DOI Reform and Eliminate Rules, GREENWIRE, Aug. 3, 1995, available in LEXIS, News Library, Greenwire File (reporting Clinton administration announcement of reforms of twenty-eight federal agencies).

In an important recent initiative, involving toxic pollution by refineries, the EPA concluded that the benefits (at $150 million annually) would exceed the costs (at $95 million annually). Bruce Alpert, EPA Issues New Rules on Refinery Pollution, N. ORLEANS TIMES-PICAYUNE, July 29, 1995, at A8. On another front, the National Performance Review report on the FDA, REINVETING REGULATION OF DRUGS AND MEDICAL DEVICES, supra, at 4-5. 14. It follows that I reject the idea that Congress should closely limit agency discretion. See BRUCE A. ACKERMAN & WILLIAM T. HASSLER, CLEAN COAL/DIRTY AIR: OR HOW THE CLEAN AIR ACT BECAME A MULTIBILLION-DOLLAR BAIL-OUT FOR HIGH SULFUR COAL PRODUCERS AND WHAT SHOULD BE DONE ABOUT IT 4-12 (1983) (defending the New Deal model); STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION 59-61, 64-68 (calling for the creation of a new administrative group to oversee “risk regulation”) (1992); Jerry L. Mashaw, Prodelegation: Why Administrators Should Make Political Decisions, 1 J. L. Econ. & Org. 81, 95 (1985) (“[T]he decisive moment in the delegation of political authority to administrators as a device for improving the responsiveness of government to the desires of the electorate.”).

15. See text accompanying notes 49-58 infra.
create market mechanisms that do not place excessive informational demands on government.

More specifically, I suggest that a general requirement of cost-benefit analysis would indeed be a constitution-like amendment, and a highly undesirable one, if it is understood in the most ambitious possible way: as an effort to ensure that all regulatory statutes are implemented by reference to the principle of economic efficiency based on the criterion of private willingness to pay. Regulatory measures have diverse foundations, and many legitimate statutes are not rooted in the efficiency criterion at all.

If cost-benefit analysis is understood more modestly as an effort to require balancing rather than absolutism, it is a good idea and should generally be required. But so understood, cost-benefit analysis can be specified in many different ways. Congress should give appropriate guidance so that agencies can make reasonable rather than unreasonable specifications. I offer some suggestions about how these tasks might be accomplished; to this end I emphasize qualitative as well as quantitative factors, public judgments about risk, and the highly diverse foundations of regulatory enactments.

This article comes in four parts. Part I examines the popular shift in the perceived role of the national government—a shift that may yet culminate in a constitutional moment. Part I also outlines what has been learned thus far about regulation. Part II describes what the 104th Congress proposed and summarizes this failed constitutional moment. Part III explores how the principal proposals might be improved. Part IV addresses the future of the cost-benefit state.

II. THE ATTACK ON THE NEW DEAL

A. A New Constitutional Moment?

The New Deal was of course a substantial reformation of the original constitutional structure.\(^\text{16}\) It qualifies as a substantial reformation above all because it refashioned the three basic cornerstones of that structure: federalism, checks and balances, and individual rights.\(^\text{17}\)

In the 1930s the powers of the national government were expanded in an extraordinary way, in favor of a system that exercised something close to general police powers.\(^\text{18}\) The original understanding of a sharply constrained cen-
tral government was therefore repudiated by the nation. There were simple grounds for this repudiation. First, state autonomy seemed an obstacle to democratic self-government, not a crucial part of it—especially in the midst of the Depression, when states were generally perceived as ineffectual entities buffeted by private factions. As a result of the New Deal, state autonomy was very different in 1940 from what it had been in 1920.

Second, the system of checks and balances came under sharp criticism. To many observers, especially during the Depression, that system seemed dysfunctional and anachronistic in modern society. Effective businesses do not operate through checks and balances; why should government paralyze itself in this way? In response, Congress delegated enormous policymaking power to the President and created a large number of powerful executive and independent agencies. Crucially, Congress designed these agencies to limit the consequences of the system of checks and balances by allowing a high degree of administrative autonomy. Thus the new agencies had a large degree of discretionary authority under open-ended statutory standards. They also combined traditionally separated powers of adjudication, execution, and legislation.

These institutional shifts resulted from a critical national judgment made during the Depression: that individual rights, properly conceived, included not merely the common law catalogue of private interests, but also governmental protection against many of the harms and risks of a market economy. These harms and risks included unemployment, poverty, malnutrition, homelessness, lack of education, and hopelessness as a result of disability. Indeed the common law catalogue seemed overprotective as well as underprotective, for it was unduly solicitous of private property. The common law was a regulatory system enjoying no special status; it should be evaluated pragmatically and in terms of its consequences for the human beings subject to it. Here it often seemed to fail. Hence the national government was authorized to engage in a wide range of redistributive policies.

If the New Deal qualifies as a constitutional moment, it is because of its revolutionary redefinition of constitutional commitments. Indeed, an astonishing feature of the New Deal was its relative rapidity. Many changes came in

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20. See id. at 11.
21. See Personal President, supra note 17, at 1-6 (documenting the expansion of executive powers and creation of administrative agencies); Cass R. Sunstein, After the Rights Revolution: Reconceiving the Regulatory State 18-24 (1990).
23. I do not intend here to engage the debate over whether the New Deal actually qualifies as a constitutional amendment. Compare Ackerman, supra note 1, with Laurence H. Tribe, Taking Text and Structure Seriously: Reflections on Free-Form Method in Constitutional Interpretation, 108 Harv. L. Rev. 1221, 1299 (1995) (rejecting Ackerman's theory of higher lawmaking). In my view, the New Deal should not be so understood. See Cass R. Sunstein, New Deals, New Republic, Jan. 20, 1992, at 32 (reviewing Ackerman, supra note 1). The idea of a constitutional moment should, I think, be seen as a metaphor, connoting large-scale change spurred by popular wishes, rather than as a genuine constitutional amendment. Nor do I intend to specify the criteria for deciding whether the nation has exper-
the brief period from 1932 through 1936, and were clearly supported and rati-
fied by the public. Such rapid change was possible partly because it is a rela-
tively simple step for a legislature to create a range of new bureaucratic
institutions, at least if the legislature does not specify each agency’s duties in
advance. In fact, the New Deal entities operated with little statutory guidance;
Congress usually contented itself with open-ended delegations of authority.24
As we shall see, the relative simplicity of the New Dealers’ task contrasts dra-
matically with the complexity of the task faced by the 104th Congress.25 More-
over, in the early 1930s the public’s support for the New Deal was broader and
deeper than public support for fundamental change in the 1990s—though the
public may unite behind such change before long.

The New Deal reformation served as the foundation for the basic orienta-
tion of the national government until the election of President Ronald Reagan.
One development during that period has been of special importance: the
“rights revolution” of the 1960s and 1970s, which reinforced many New Deal
tendencies through the creation of a remarkable array of new agencies. These
agencies were designed to protect against threats to life, health, and safety from
consumer products, workplaces, and, above all, to protect the environment.26
Economic arguments about external harms reinforced claims for new statutory
“rights.” Hence this period saw the creation of the Environmental Protection
Agency, the Occupational Safety and Health Administration, the Consumer
Protect Safety Commission, the Council on Environmental Quality, and several
other administrative agencies.

It is notable that during both the New Deal and the rights revolution, no
mechanism was created to evaluate regulatory performance. No system as-
sessed whether agencies were making things better or worse. In the New Deal,
any such system might have seemed peculiar in light of the widespread national
enthusiasm for the President and for the possibilities of benign administration.
In addition, cost-benefit thinking was largely foreign to political actors, and
hence cost-benefit analysis played little or no role in public debate. No mecha-
nism existed to protect against the possibility that “government failure” would
replicate “market failure.”

One of the most striking features of the period since 1980 has been sus-
tained national criticism of the New Deal reformation. In light of the election
of the 104th Congress, this criticism may well be signalling the first genuinely
foundational challenge to American government since the New Deal itself. The
Contract with America clearly suggested that large-scale change was at issue.
It is worthwhile to pause over the constitution-like character of recent chal-
lenes to the current governmental structure. Critics often suggest that the na-

PUBLIC AUTHORITY 132-33 (1st ed. 1969) (describing the perceived need for broad authorizing statutes
as government expanded its powers).

25. See text accompanying notes 99-100 infra.

26. See SUNSTEIN, supra note 21, at 24-30.
tional government has far exceeded the appropriate limits of its authority and argue for a return to the original structure. 27 Many assert that a devolution of power to the states would promote both democratic and economic goals; 28 the Unfunded Mandate Reform Act and Congress’ recent interest in “block grants” for states to use basically as they wish reflect this criticism. 29

In this way there is a wholesale attack on the existing allocation of authority between the national government and the states. But “horizontal” issues of government structure are receiving similar attention. Concerned about the extent of policymaking discretion given to regulatory agencies, many suggest that Congress should reassert its constitutional prerogatives by narrowing administrative discretion. 30 It is urged that the New Deal’s enthusiasm for independent bureaucracy, and for a large lawmakers role for executive agencies, should be revisited, and that Congress should make the fundamental choices of policy.

Finally, and perhaps most fundamentally, pre-New Deal principles of private right have enjoyed a rebirth with the suggestion that modern regulatory programs violate liberty, rightly conceived. 31 These principles play a significant part in current debates, as reflected in arguments in favor of removing constraints from the marketplace and imposing new compensation obligations on government. 32 Thus the movement for deregulation has become far more sweeping than it was in the Reagan period. The Takings Clause has become a rallying cry for a new enthusiasm for the protection of private property—challenging such well-established federal programs as the Endangered Species Act and the Federal Water Pollution Control Act’s protection of wetlands.

Some criticisms of regulatory performance have been far narrower and more pragmatic in character, focusing less on basic theory and more on the economic consequences of regulation. It is here that cost-benefit balancing, accompanied by risk analysis, has played a special role. As I have noted, the New Deal period was accompanied by no mechanism for monitoring regulatory performance. But it is now suggested that national government has failed to perform the tasks assigned to it and has often made things worse. 33 In this

27. See Contract With America, supra note 4, at 125 (criticizing government efforts to legislate solutions to social problems); Richard A. Epstein, The Proper Scope of the Commerce Power, 73 VA. L. REV. 1387, 1388 (arguing that the Commerce Clause should not be used as a vehicle for expansive government powers).

28. See Contract With America, supra note 4, at 73 (arguing for state-based welfare programs).


31. See Richard A. Epstein, Simple Rules for a Complex World 21 (1995) (asserting that modern, complex laws “frustrate the very human talents and initiatives they are supposed to protect and foster”).

32. See text accompanying notes 127-128 infra (discussing the emphasis on property rights and compensation requirements in current bills).

view, there is no suggestion that markets are ideal; but often markets work better than the regulatory programs designed as solutions. Increasingly, assessment of regulatory performance has taken the form of cost-benefit analysis.\textsuperscript{34}

If we are indeed in the midst of a constitutional moment, it began with the election of President Ronald Reagan and was spurred by the dramatic and largely unanticipated shift in the direction and composition of the Congress in the 1994 elections. The \textit{Contract With America} presented the electorate with a set of promises for fundamental reform. The importance of the \textit{Contract} should not be understated, for it helped to organize a formerly unruly House of Representatives and provided public benchmarks against which the House would be measured. It is clear that in the 104th Congress, the House of Representatives acted in a remarkably rapid and sweeping fashion, offering the Senate a chance to make the most significant changes in the national government since the New Deal. The Senate declined the opportunity, largely because the public showed its uncertainty about such far-reaching change. If the nation follows the Senate’s course, the effort at constitutional revision will have failed. But any predictions on this count are premature. Let us turn, then, away from theory and toward more pragmatic issues involving the performance of the regulatory state.

B. Post-New Deal Learning About Regulation

In the last decade, something very close to a consensus has emerged on some of the most important problems in existing government regulation. If government were to act on this consensus, it would introduce important changes. Those changes need not amount to anything like a constitutional moment; here we are not speaking of the most basic constitutional commitments. But the changes would be far from a mere matter of tinkering. The consensus has the following features.

1. \textit{Government should engage in better priority-setting.}

As we will see, measurement of costs and benefits can be highly controversial. But under any measure, there can be no doubt that resources for risk reduction are badly allocated.\textsuperscript{35} As much as \$500 billion may be spent each year on regulation,\textsuperscript{36} and of this amount, more than \$130 billion is spent on

\begin{footnotes}
34. \textit{E.g.,} Exec Order No. 12,866, \textit{supra} note 2; Exec. Order No. 12,498, \textit{supra} note 2; Exec. Order No. 12,291, \textit{supra} note 2.
\end{footnotes}
environmental protection alone. A recent study suggests that better allocation of health expenditures could save 60,000 additional lives at no increased cost, and that, alternatively, we could maintain the current number of lives saved with $31 billion in annual savings.

This overall spending pattern includes serious and apparently unjustified asymmetries in life-saving expenditures among the areas of regulation. For example, compare transportation safety regulation, which costs a median of $56,000 per life-year saved, to occupational safety regulation, costing a median of $350,000 per life-year saved, and environmental regulation, costing a median of $4,200,000 per life-year saved. These variations are compounded by variations in the effectiveness of safety standards within each area. Annual lives saved are highly variable. In transportation, the National Highway Traffic Safety Administration’s seat cushion flammability regulation saves thirty-seven lives each year, while the Transportation Administration’s passive restraints/belts regulation saves no fewer than 1,850 lives annually; in occupational safety, OSHA’s hazard communication regulation saves 200 lives per year, OSHA’s oil and gas well service regulation saves fifty lives per year, OSHA’s grain dust regulation saves four lives per year, and OSHA’s formaldehyde regulation saves 0.010 lives per year; and in environmental safety, EPA’s asbestos regulation saves ten lives each year, while EPA’s land disposal regulation saves 2.5 lives per year.

Of course calculations of costs and benefits are somewhat speculative, and these numbers are only estimates. But with better allocation of resources and more deliberative judgments, much could be improved. Consider Table 1, which certainly does not capture all relevant factors—it does not even describe total benefits—but which is at least highly suggestive of poor resource allocations.

In addition to this apparently inconsistent structure, the goal of achieving sensible priority-setting is undermined by the fact that agencies have substantially different standards for deciding when risks are large enough to require

39. I use the word "apparently" because legitimate public judgments will support some disparities. See text accompanying notes 74-88 infra.
42. Id.
43. Office of Management and Budget, Budget of the United States Government, Fiscal Year 1992, pt. 2, at 370, tbl. C-2. This table does not prove that current allocations are inefficient or even objectionable. To know whether there is cost-effectiveness, it is necessary to know more than cost per life saved. It is necessary to know as well (at a minimum) cost per unit of benefit. Benefits might include morbidity as well as mortality gains, improvements in recreation, mortality and morbidity gains for plants and animals, and improvements in aesthetics. Table 1 does not include this information.
TABLE 1
Summary of Cost-Effectiveness of Selected Regulations

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Agency</th>
<th>Cost per Premature Death Averted ($ Millions 1990)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unvented Space Heater Ban</td>
<td>CPSC</td>
<td>0.1</td>
</tr>
<tr>
<td>Aircraft Cabin Fire Protection Standard</td>
<td>FAA</td>
<td>0.1</td>
</tr>
<tr>
<td>Auto Passive Restraint/Seat Belt Standards</td>
<td>NHTSA</td>
<td>0.1</td>
</tr>
<tr>
<td>Steering Column Protection Standard</td>
<td>NHTSA</td>
<td>0.1</td>
</tr>
<tr>
<td>Underground Construction Standards</td>
<td>OSHA-S</td>
<td>0.1</td>
</tr>
<tr>
<td>Trihalomethane Drinking Water Standards</td>
<td>EPA</td>
<td>0.2</td>
</tr>
<tr>
<td>Aircraft Seat Cushion Flammability Standard</td>
<td>FAA</td>
<td>0.4</td>
</tr>
<tr>
<td>Alcohol and Drug Control Standards</td>
<td>FRA</td>
<td>0.4</td>
</tr>
<tr>
<td>Auto Fuel-System Integrity Standard</td>
<td>NHTSA</td>
<td>0.4</td>
</tr>
<tr>
<td>Standards for Servicing Auto Wheel Rims</td>
<td>OSHA-S</td>
<td>0.4</td>
</tr>
<tr>
<td>Aircraft Floor Emergency Lighting Standard</td>
<td>FAA</td>
<td>0.6</td>
</tr>
<tr>
<td>Concrete &amp; Masonry Construction Standards</td>
<td>OSHA-S</td>
<td>0.6</td>
</tr>
<tr>
<td>Crane Suspended Personnel Platform Standard</td>
<td>OSHA-S</td>
<td>0.7</td>
</tr>
<tr>
<td>Passive Restraints for Trucks &amp; Buses (Proposed)</td>
<td>NHTSA</td>
<td>0.7</td>
</tr>
<tr>
<td>Side-Impact Standards for Autos (Dynamic)</td>
<td>NHTSA</td>
<td>0.8</td>
</tr>
<tr>
<td>Children's Sleepwear Flammability Ban</td>
<td>CPSC</td>
<td>0.8</td>
</tr>
<tr>
<td>Auto Side Door Support Standards</td>
<td>NHTSA</td>
<td>0.8</td>
</tr>
<tr>
<td>Low-Altitude Windshear Equipment &amp; Training Standards</td>
<td>FAA</td>
<td>1.3</td>
</tr>
<tr>
<td>Electrical Equipment Standards (Metal Mines)</td>
<td>MSHA</td>
<td>1.4</td>
</tr>
<tr>
<td>Trenching and Excavation Standards</td>
<td>OSHA-S</td>
<td>1.5</td>
</tr>
<tr>
<td>Traffic Alert and Collision Avoidance (TCAS) Systems</td>
<td>FAA</td>
<td>1.5</td>
</tr>
<tr>
<td>Hazard Communication Standard</td>
<td>OSHA-S</td>
<td>1.6</td>
</tr>
<tr>
<td>Side-Impact Standards for Trucks, Buses, and MPVs (Proposed)</td>
<td>NHTSA</td>
<td>2.2</td>
</tr>
<tr>
<td>Grain Dust Explosion Prevention Standards</td>
<td>OSHA-S</td>
<td>2.8</td>
</tr>
<tr>
<td>Rear Lap/Shoulder Belts for Autos</td>
<td>NHTSA</td>
<td>3.2</td>
</tr>
<tr>
<td>Standards for Radionuclides in Uranium Mines</td>
<td>EPA</td>
<td>3.4</td>
</tr>
<tr>
<td>Benzene NESHAP (Original: Fugitive Emissions)</td>
<td>EPA</td>
<td>3.4</td>
</tr>
<tr>
<td>Ethylene Dibromide Drinking Water Standard</td>
<td>EPA</td>
<td>5.7</td>
</tr>
<tr>
<td>Benzene NESHAP (Revised: Coke By-products)</td>
<td>EPA</td>
<td>6.1</td>
</tr>
<tr>
<td>Asbestos Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>8.3</td>
</tr>
<tr>
<td>Benzene Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>8.9</td>
</tr>
<tr>
<td>Electrical Equipment Standards (Coal Mines)</td>
<td>MSHA</td>
<td>9.2</td>
</tr>
<tr>
<td>Arsenic Emission Standards for Glass Plants</td>
<td>EPA</td>
<td>13.5</td>
</tr>
<tr>
<td>Ethylene Oxide Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>20.5</td>
</tr>
<tr>
<td>Arsenic/Copper NESHAP</td>
<td>EPA</td>
<td>23.0</td>
</tr>
<tr>
<td>Hazardous Waste Listing for Petroleum Refining Sludge</td>
<td>EPA</td>
<td>27.6</td>
</tr>
<tr>
<td>Cover/Move Uranium Mill Tailings (Inactive Sites)</td>
<td>EPA</td>
<td>31.7</td>
</tr>
<tr>
<td>Benzene NESHAP (Revised: Transfer Operations)</td>
<td>EPA</td>
<td>32.9</td>
</tr>
<tr>
<td>Cover/Move Uranium Mill Tailings (Active Sites)</td>
<td>EPA</td>
<td>45.0</td>
</tr>
<tr>
<td>Acrylonitrile Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>51.5</td>
</tr>
<tr>
<td>Coke Ovens Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>63.5</td>
</tr>
<tr>
<td>Lockout/Tagout</td>
<td>OSHA-S</td>
<td>70.9</td>
</tr>
<tr>
<td>Asbestos Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>74.0</td>
</tr>
<tr>
<td>Arsenic Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>106.9</td>
</tr>
<tr>
<td>Asbestos Ban</td>
<td>EPA</td>
<td>110.7</td>
</tr>
<tr>
<td>Diethylstilbestrol (DES) Cattlefeed Ban</td>
<td>FDA</td>
<td>124.8</td>
</tr>
<tr>
<td>Benzene NESHAP (Revised: Waste Operations)</td>
<td>EPA</td>
<td>168.2</td>
</tr>
<tr>
<td>1,2-Dichloropropane Drinking Water Standard</td>
<td>EPA</td>
<td>653.0</td>
</tr>
<tr>
<td>Hazardous Waste Land Disposal Ban (1st 3rd)</td>
<td>EPA</td>
<td>4,190.4</td>
</tr>
<tr>
<td>Municipal Solid Waste Landfill Standards (Proposed)</td>
<td>EPA</td>
<td>19,107.0</td>
</tr>
<tr>
<td>Formaldehyde Occupational Exposure Limit</td>
<td>OSHA-H</td>
<td>86,201.8</td>
</tr>
<tr>
<td>Atrazine/Alachlor Drinking Water Standard</td>
<td>EPA</td>
<td>92,069.7</td>
</tr>
<tr>
<td>Hazardous Waste Listing for Wood Preserving Chemicals</td>
<td>EPA</td>
<td>5,700,000</td>
</tr>
</tbody>
</table>
any regulation at all. For example, the International Commission on Radiological Protection recommends that environmental factors be regulated when calculated to cause an incremental cancer risk of about 3 in 1000, for those exposed over a lifetime. American agencies do not follow this recommendation, and national practices are highly variable. The Nuclear Regulatory Commission mandates regulation where incremental cancer risks exceed 1 in 1000; the EPA does so when the risk exceeds an acceptable range that varies from 1 in 10,000 to 1 in 1,000,000. The FDA set its standard at 1 in 1,000,000, but courts have interpreted the Delaney Clause to require a standard of essentially zero. OSHA interprets the "significant risk" requirement in its governing statute to mean that an incremental cancer risk of 1 in 1000 will initiate regulation; labor groups have sought to require regulation when the risk is 1 in 1,000,000. As we will see, a single number may not make sense in light of different contextual judgments. But in the face of these variations, good priority-setting is unlikely.

2. Government should favor flexible, market-based incentives rather than rigid commands.

Too often government regulates through rigid commands, precluding industries from using more flexible and cost-effective measures that achieve the same goals. For example, in air and water pollution control, the rigid "best available technology" approach, which mandates control technologies for hundreds or even thousands of firms, gives industries little incentive to improve existing pollution control technologies. Incentive-based systems could save billions of dollars. Yet in spite of the potential advantages, efforts to seek better regulatory tools are hobbled by the statutory status quo, which either forbids such tools or engrafts them onto a bureaucratically complex system.

45. Id. at 19-20.
48. See text accompanying notes 74-88 infra.
52. For example, the "offset" provisions of the nonattainment program of the Clean Air Act impose a "lowest achievable emissions rate" requirement in addition to the offsets. Clean Air Act, 42 U.S.C. §§ 7410(a)(2)(I), 7501(3) (1988 & Supp. V 1993).
A study based on data from 1984 suggests that the EPA's "netting" emissions trading program saves between $525 million and $12 billion each year. The Clinton Administration calculates that its market-oriented proposals for amending the Clean Water Act could save between $1 and $12 billion over alternative approaches. Thus studies show that incentive-based mechanisms for controlling air pollution could have accomplished the same result at one-quarter the cost.

Encouraging companies to disclose information is an especially valuable incentive-based approach to risk regulation. If companies offer information about risk, consumer and worker behavior will probably be affected. The national government has offered many initiatives in this direction. Consider in particular the Toxic Release Inventory of the Superfund Amendments, which requires companies to publish annual reports detailing the amount of toxics they release into the environment. This program has been highly successful, spurring voluntary reductions at relatively low costs. Reacting to public concern about the information in these mandatory disclosures, many companies have voluntarily pledged to reduce toxic releases. A great deal of work remains to be done in conceiving and designing appropriate informational approaches to risk.

3. Government should recognize and counteract harmful unintended consequences of regulations.

Many regulatory initiatives result in harmful unintended consequences. Under the existing regulatory system, there is no systematic way to ensure that those consequences receive attention. Hence regulation tends to be based on partial perspectives that emerge from close attention to mere pieces of complex problems. This myopic approach ignores the importance of ensuring that regulation does not have unexplored side-effects or increase harms or risks on bal-

55. TiETENBURG, supra note 51, at 44.
56. See Wesley A. Magat, W. Kip Viscusi & Joel Huber, Consumer Processing of Hazard Warning Information, 1 J. Risk & Uncertainty 201, 230-31 (1988) (concluding that cognitive factors must be considered when analyzing the rationality of risk-taking behavior); Pildes & Sunstein, supra note 35, at 76-80 (explaining that perceived risks will affect individual behavior); V. Kerry Smith, William H. Desvousges & John W. Payne, Do Risk Information Programs Promote Mitigating Behavior, 10 J. Risk & Uncertainty 203, 210-17 (1995).
A particular problem arises from “health-health” tradeoffs, which arise when regulation of one health risk increases another health risk. Suppose, for example, that elimination of asbestos, a carcinogenic substance, makes cars less safe because asbestos is the best substance to use in making brake linings. Or suppose that the ban on asbestos encourages companies to use even more dangerous substitutes. It is pervasively true that controls on one risk may increase another risk. Unfortunately, risk regulation is not designed with this problem in mind.

An incipient literature deals with a related issue. It suggests that regulatory expenditures can profoundly affect social well-being and actually cost health and even lives. Regulatory expenditures may produce greater unemployment by increasing production costs and decreasing profits. Unemployment breeds poverty, which, in turn, breeds poor health and increased mortality rates. A 1990 study developed a model to quantify the common sense view that “richer is safer.” The study suggests that a regulatory expenditure of $3 million to $7.5 million may cause a statistical fatality.

In a concurring opinion in a 1991 D.C. Circuit case involving an occupational safety and health regulation, Judge Williams invoked this evidence to suggest that OSHA’s refusal to engage in cost-benefit analysis might not be beneficial for workers. Judge Williams reasoned that if a fatality results from an expenditure of $12 million, some regulations might produce more fatalities than they prevent. As Table I illustrates, many regulations do cost more than $12 million per life saved. In Judge Williams’ view, an agency that fails to measure the overall social costs against benefits fails accurately to measure mortality gains against losses.

60. What constitutes an “increase” depends not merely on quantitative considerations but also on normative judgments. See text accompanying notes 74-88 infra.


63. See id.

64. Ralph L. Kenney, Mortality Risks Induced by Economic Expenditure, 10 Risk Analysis 147, 148-50 (1990); see also Wildavsky, supra note 61, at 61-68 (explaining the correlation between health and wealth).

65. See Kenney, supra note 64, at 154, tbl. VI.

66. International Union, UAW v. OSHA, 938 F.2d 1310, 1326-27 (D.C. Cir. 1991) (Williams, J., concurring); see also New York State Ophthalmological Soc’y v. Bowen, 854 F.2d 1379, 1395 n.1 (D.C. Cir., 1988) (Williams, J., concurring) (explaining that “extravagant expenditures on health may in some instances affect health adversely, by foreclosing expenditures on items—higher quality food, shelter, recreation, etc.—that would have contributed more to the individual’s health than the direct expenditure thereon”); Building & Constr. Trades Dep’t v. Brock, 838 F.2d 1258, 1267 (D.C. Cir. 1988) (suggesting that “leaning towards safety sometimes have the perverse effect of increasing rather than decreasing risk”).

The claimed relationship between wealth reductions and mortality is controversial. But a number of studies find such a relationship and indicate that regulations may, in fact, cause more fatalities than they prevent. Consider the following summary of studies showing a causal relation between wealth and mortality:

### TABLE 2
**Summary of Selected Studies on Income and Health**

<table>
<thead>
<tr>
<th>Study</th>
<th>Data</th>
<th>Implicit income gains necessary to avert one death (millions)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Keeney (1990)</td>
<td>Used income and mortality correlations from Kitagawa and Hauser (1960) data, and others</td>
<td>$12.3</td>
<td>Cited in <em>UAW v. OSHA</em>, as $7.25 1980 dollars. Represents an upper-bound</td>
</tr>
<tr>
<td>Anderson and Burkhauser (1985)</td>
<td>4,878 male workers over 10 years, 1969-1979</td>
<td>$1.9 (wages) $4.3 (other income)</td>
<td>Older workers aged 58-63. Measured effects of wages and of value of one's home on mortality</td>
</tr>
<tr>
<td>Duleep (1986)</td>
<td>9,618 white married male workers aged 35-64 over 6 years, 1973-1978</td>
<td>$2.6</td>
<td>Controls for prior disability, and educational attainment</td>
</tr>
<tr>
<td>Duleep (1989)</td>
<td>13,954 white married male workers aged 25-64 over 6 years, 1973-1978</td>
<td>$6.5</td>
<td>Finds income effects at all income levels</td>
</tr>
<tr>
<td>Duleep (1991)</td>
<td>9,618 white married male workers aged 35-64 over 6 years, 1973-1978</td>
<td>$3.9</td>
<td>Controls for prior disability, educational attainment, and exposure to occupational hazards</td>
</tr>
<tr>
<td>Wolfson (1992)</td>
<td>500,000 Canadian workers, over 10-20 years</td>
<td>$6</td>
<td>Investigates longevity rather than mortality. Finds income effects at highest quintiles of income</td>
</tr>
<tr>
<td>National Institutes of Health (1992)</td>
<td>1,300,000 Americans, all ages, 1979-1985</td>
<td>$12.4</td>
<td>Estimate reflects effect of income changes on family mortality. Study does not use multiple regression, does not control for prior health status or education</td>
</tr>
<tr>
<td>Chirikos and Nestel (1991)</td>
<td>5,020 men, aged 50-64 studied during 1971-1983</td>
<td>$3.3</td>
<td>Uses two measures of health endowments</td>
</tr>
<tr>
<td>Chapman and Harirharan (1993)</td>
<td>5,836 older men over 10 years</td>
<td>$12.2</td>
<td>Uses four distinct controls for prior health conditions</td>
</tr>
<tr>
<td>Graham, Hung-Chang, and Evans (1992)</td>
<td>38 years of age-adjusted mortality and income data for the U.S.</td>
<td>$4.0</td>
<td>Distinguishes effects of permanent income from those of transitional income</td>
</tr>
</tbody>
</table>

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68. See Portney & Stavins, supra note 37, at 118 (arguing that slight real income losses are unlikely to translate into significant, aggregate health impacts).

This work is in its initial stages, and any findings should be taken with many grains of salt. But certainly it would be good for government to know about unintended adverse consequences and to try to counteract them to the extent feasible. Unfortunately, there is no systematic mechanism by which government regulators are made attentive to harmful unintended consequences.

4. **Government needs more information and should create better incentives to compile and provide accurate information.**

Often government lacks information about the harms that regulation is designed to counteract. Often it must act, or fail to act, in a context of considerable scientific uncertainty. Without accurate data, any exercise in quantification can be illusory, giving the impression of far more knowledge than people actually have.

In these circumstances government should place a high premium on acquiring as much accurate information as possible. Much of the relevant information can be found in the private sector, which is best equipped to determine actual emissions levels and the costs of risk control. But the current regulatory structure does not create incentives to compile accurate information about risks. Indeed, it creates incentives to distort the facts. Hence industry faces incentives to report costs that are far higher than reality and is not encouraged to compile more information than is already available.

5. **Government should respond to both expert and citizen judgments in regulating risks.**

It seems clear that government should respond to reasonable judgments about risk; but whose judgments should be counted as reasonable? Countless studies show systematic differences between expert and citizen judgments about risk. This is one of the most robust findings in an extensive litera-

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70. See Portney & Stavins, supra note 37, at 118-19 (advocating use of cost-benefit analysis because the theoretical limitations of health-health analysis make it less useful in practice).

71. See Robert A. Pollak, Regulating Risks, 33 J. ECON. LITERATURE 179, 183-89 (1995) (examining formaldehyde regulation to emphasize the difficulty of determining what poses a health risk and the degree to which regulation is necessary).


73. See Sunstein, supra note 58, at 656 (explaining that industry has little incentive to provide information about hazardous products because the information may reduce sales).

74. See Pildes & Sunstein, supra note 35, at 33-40 (discussing risk assessment differences between experts and laypersons).
The following table summarizes the results of a national opinion poll in which experts and citizens ranked environmental health risks.

### TABLE 3
**Risk Assessments of the Public and EPA Experts**

<table>
<thead>
<tr>
<th>Public Ranking of Risks</th>
<th>EPA Experts’ Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Hazardous waste sites</td>
<td>Medium-to-low</td>
</tr>
<tr>
<td>2. Exposure to worksite chemicals</td>
<td>High</td>
</tr>
<tr>
<td>3. Industrial pollution of waterways</td>
<td>Low</td>
</tr>
<tr>
<td>4. Nuclear accident radiation</td>
<td>Not ranked</td>
</tr>
<tr>
<td>5. Radioactive waste</td>
<td>Not ranked</td>
</tr>
<tr>
<td>6. Chemical leaks from underground storage tanks</td>
<td>Medium-to-low</td>
</tr>
<tr>
<td>7. Pesticides</td>
<td>High</td>
</tr>
<tr>
<td>8. Pollution from industrial accidents</td>
<td>Medium-to-low</td>
</tr>
<tr>
<td>9. Water pollution from farm runoff</td>
<td>Medium</td>
</tr>
<tr>
<td>10. Tap water contamination</td>
<td>High</td>
</tr>
<tr>
<td>11. Industrial air pollution</td>
<td>High</td>
</tr>
<tr>
<td>12. Ozone layer destruction</td>
<td>High</td>
</tr>
<tr>
<td>13. Coastal water contamination</td>
<td>Low</td>
</tr>
<tr>
<td>14. Sewage-plant water pollution</td>
<td>Medium-to-low</td>
</tr>
<tr>
<td>15. Vehicle exhaust</td>
<td>High</td>
</tr>
<tr>
<td>16. Oil spills</td>
<td>Medium-to-low</td>
</tr>
<tr>
<td>17. Acid rain</td>
<td>High</td>
</tr>
<tr>
<td>18. Water pollution from urban runoff</td>
<td>Medium</td>
</tr>
<tr>
<td>19. Damaged wetlands</td>
<td>Low</td>
</tr>
<tr>
<td>20. Genetic alteration</td>
<td>Low</td>
</tr>
<tr>
<td>21. Non-hazardous waste sites</td>
<td>Medium-to-low</td>
</tr>
<tr>
<td>22. Greenhouse effect</td>
<td>Low</td>
</tr>
<tr>
<td>23. Indoor air pollution</td>
<td>High</td>
</tr>
<tr>
<td>24. X-ray radiation</td>
<td>Not ranked</td>
</tr>
<tr>
<td>25. Indoor radon</td>
<td>High</td>
</tr>
<tr>
<td>26. Microwave oven radiation</td>
<td>Not ranked</td>
</tr>
</tbody>
</table>

A recent study in Canada shows similar results. It reveals that the Canadian public sees cigarette smoking and motor vehicle accidents as far less dangerous than do Canadian toxicologists. It also shows that the public ranks many risks higher than do toxicologists; the most dramatic disparities along this dimension involve chemical pollution, ozone depletion, nuclear waste, food additives, pesticides in goods, and PCBs.

What accounts for these differences? Some are simply attributable to citizens' ignorance of scientific facts. This ignorance has many sources, including sensationalist media reports and heuristics that produce systematic biases.

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75. See, e.g., id.; BREYER, supra note 14, at 33-39 (discussing differences in perceived risks between the public and experts); Paul Slovic, *Perception of Risk: Reflections on the Psychometric Paradigm, in Social Theories of Risk* 117, 150 (Sheldon Krimsky & Dominic Golding eds., 1992) (explaining that expert risk assessments are based on technical analysis, while public risk assessments are based on qualitative values).

76. Pildes & Sunstein, supra note 35, at 36, tbl. 3.


For example, people tend to think that an event is more likely when it is "available," that is, when previous occurrences can come readily to mind. The availability heuristic suggests also that the public's risk assessment will be partly an artifact of what the media emphasize. Notably, the media tend to emphasize unusual and provocative events rather than chronic risks. The result is substantial distortions in policy, reflected in the "pollutant of the month" syndrome that characterizes many regulatory responses.

When citizens are misinformed, government should not base regulatory decisions on their judgments. Instead, government should act on the basis of scientific realities. Public judgments should dictate regulatory policy only when they are undergirded by sound science, as opposed to sensationalist anecdotes or scare tactics. This is part of the defining creed of a deliberative democracy. Too often, however, the scare tactics have prevailed.

But the misguided fears of citizens provide only part of the story. Some of the differences between citizens' and experts' assessments of risks involve value judgments rather than factual misunderstandings. Experts focus principally on aggregate lives at stake. By contrast, citizens consider a range of other variables: whether risks are equitably distributed, likely to be faced by future generations, especially dreaded, well-understood, or voluntarily incurred. Table 4 summarizes psychological research on the effect of value judgments on risk perceptions.

82. See PETER MENELL & RICHARD STEWART, ENVIRONMENTAL LAW AND POLICY 420-22 (1994).
84. It is notable as well that race and gender influence risk perception. For example, white men tend to view risks as systematically lower and more acceptable than do females and nonwhites. In addition, while white women see risks as much greater than do white men, nonwhite men and nonwhite women share similar risk perceptions. James Flynn, Paul Slovic, & C.K. Mertz, Gender, Race, and Perception of Environmental Health Risks, 14 RISK ANALYSIS 1101, 1102 (1994).
85. See generally Aaron Wildavsky, But Is It True?: A Citizen's Guide to Environmental Health and Safety Issues (1995) (examining a variety of high-profile health and safety scares and finding scant scientific justification for the regulatory responses chosen).
Qualitative distinctions of this kind do not play a role in most expert assessments. But citizen judgments on these points are entirely reasonable. So long as those judgments are both reflective and informed, they deserve respect. Any regulatory reform should reflect these qualitative public judgments about which risks are most severe.

6. Government should concentrate on basic ends rather than means and should use performance standards rather than design standards.

Regulatory policy often deteriorates into an arena for interest-group struggle. This happened most famously with efforts in 1977 to use the Clean Air Act to promote the interests of eastern coal and, in 1990, with interest-group lobbying on behalf of ethanol producers and other parochial interests. Interest-group maneuvering is an omnipresent issue in federal regulation, especially when the issue is the “means” of promoting regulatory goals.

Government can limit interest-group power, and at the same time reduce costs, by focusing legislative attention on ends rather than on means of achiev-

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7. See Paul Slovic, Perception of Risk, Sci., Apr. 17, 1987, at 280, 285 (concluding that both public and expert risk assessments should contribute to the regulatory process); Letter from Paul Slovic, President, Decision Research & Professor of Psychology, U. of Oregon, to Sen. William V. Roth, Jr. (Mar. 6, 1995) (on file with the Stanford Law Review) (criticizing risk assessment for failure to take account of “many other dimensions of risk that are important psychologically, ethically, and politically”).

8. It is not, however, always simple to distinguish between irrational judgments resulting from sensationalism and legitimate public value judgments. For example, synthetic risks receive far more attention than natural risks in public judgments. This pattern tends to explain many apparent anomalies in federal risk regulation, as synthetic risks are more frequently and more severely regulated. See W. Kip Viscusi, supra note 86, at 51-52. Viscusi suggests that this perception reflects “bias” and “overreaction.” Id. at 54. Perhaps it does. But it is not a simple computational mistake, and it does not reflect, in any obvious way, a misunderstanding of facts. Perhaps citizens are making judgments about which risks deserve priority.

9. Ackerman & Hassler, supra note 14, at 31-33 (tracking the influence exerted by eastern coal producers in favor of mandating scrubber installation and against clean coal requirements).

ing those ends. For this reason, "performance standards" are generally better than "design standards." When a legislature is discussing "means"—ethanol, electric cars, water pollution control mechanisms—well-organized groups will see that the choice can provide large competitive benefits (or impose large competitive burdens). Hence the choice of means invites interest-group struggle with a public-spirited veneer. After all, what matters to the public is whether the level of emissions is low or high, not whether the relevant company has installed specific scrubbers.

In general, Congress should let administrators decide the appropriate means for reaching legislatively chosen ends, and administrators should, to the extent feasible, rely on market forces in selecting those means. For example, if an industry can comply with a sulfur dioxide emission standard by either using clean coal or implementing energy conservation methods, government should not command a particular method of compliance. Industry will understandably choose a method that is cheapest.

These, then, are the principal lessons of the last generation of experience with regulation: government should set better priorities for risk regulation; favor flexible, market-based incentives; establish mechanisms to counteract unintended, harmful consequences; create incentives to encourage the private sector to compile risk data; account for public and expert judgments; and use performance standards rather than design standards. In view of these lessons, we might conclude that it is well past time to enact an "Administrative Substance Act." The point of such an act would be to capture new learning with respect to regulatory successes and failures. Though the Administrative Procedure Act has been successful in many ways, it reflects the lawyer's characteristic preoccupation with procedural regularity rather than with substantive outcomes. An Administrative Substance Act would track the important question: Does regulation actually make things better for citizens?


92. The Clean Air Act Amendments of 1990 made some progress in this direction. See, e.g., Clean Air Act Amendments of 1990 § 401, 42 U.S.C. § 7651(b) (Supp. V 1993) (setting numerical goals for emissions reduction but authorizing "alternative methods of compliance"); id. at § 404(f)(2), 42 U.S.C. § 7651cf(f)(2) (authorizing allowances to electric utilities that avoid emissions through energy conservation and renewable energy methods); id. at § 403(b), 42 U.S.C. § 7651b(b) (allowing emitters to trade emission allowances for economic benefit); see also Statement on Signing the Bill Amending the Clean Air Act, 26 WEEKLY COMP. PRES. DOC. 1824, 1825 (Nov. 15, 1990) (statement by President Bush praising the Clean Air Act Amendments of 1990 for allowing market incentives to generate efficient environmental protection).
III. REGULATORY REFORM AND THE 104TH CONGRESS: A FAILED EFFORT AT FUNDAMENTAL CHANGE

Substantive regulatory issues are hardly new to Congress. Recent congressional sessions have devoted significant attention to substantive regulatory reform, usually on a statute-by-statute basis. In 1990, for example, Congress enacted a set of major changes to the Clean Air Act. Changes to the (disastrous) Superfund statute and the Federal Water Pollution Control Act have received considerable attention in recent years as well.

But the 104th Congress sought something different—far more fundamental and less piecemeal change, challenging the basic foundations of our legal order, reappraising the welfare and taxation systems, and reassessing federalism in the context of the modern state. And after the 1994 elections, it was clear that regulatory reform would be an important legislative priority. Perhaps this reform would launch a basic assault on the regulatory state and indeed on the New Deal reformation of American public law.

Note, however, that the 104th Congress faced a far more difficult and complex task than did the New Dealers. This is not only because the nation has not unambiguously endorsed such fundamental change. It is also because there is a difference between the elaborate project of reforming existing programs and the relatively simple creation of new bureaucracies acting under vague statutory guidance. Under current conditions, the task of fundamental reform calls for far more numerous and far harder judgments, especially at the legislative level.

Understanding this problem, members of the 104th Congress introduced a truly remarkable array of proposed legislation. In the regulatory arena, cost-benefit balancing dominated the debate. As we shall see, the notion of cost-benefit assessment is quite open-ended; everything depends on the relevant theory of valuation. But there is an unmistakable general trend in the direction of...
evaluating government performance in cost-benefit terms. This development may ultimately help organize and incorporate recent learning about regulatory performance.\textsuperscript{101}

\section*{A. The Contract and Two Kinds of Supermandates}

The \textit{Contract with America} expressly addresses government regulation, and it promises prompt action. In an especially good paragraph, one that deserves bipartisan endorsement, the \textit{Contract} states:

Congress is never forced to ensure that the benefits of regulation, better health and productivity, outweigh the costs, lost jobs, and lower wages. Nor does Congress pursue integrated health and safety goals. Instead, Congress and federal regulators often attack whatever health risk has caught the public's attention, even if its regulatory solution exacerbates other health risks.\textsuperscript{102}

The \textit{Contract} promised several concrete steps, including: (a) risk assessment for expensive regulations; (b) a statement of the costs accompanying regulatory initiatives; (c) a comparison of costs and benefits to accompany regulations; (d) an independent peer review panel to certify the risk assessment; and (e) an annual report detailing a regulatory budget, to be capped below the current level. This cap would require agencies to find cost-effective mechanisms and identify policies whose benefits exceed their costs.\textsuperscript{103} Taken together, these steps may or may not qualify as constitutional in character; but they certainly would amount to a large-scale revision of current practice.

We might distinguish at this point between two different possible supermandates—requirements that cut across all regulatory statutes and that, in this sense, operate like constitutional amendments. A \textit{substantive supermandate} enacts new decisional criteria that agencies must henceforth follow. A general requirement of cost-benefit balancing would fall within this category, especially if cost-benefit balancing is defined with a degree of precision. Similarly, a general ban on regulation of insignificant risks is a substantive supermandate. A \textit{procedural supermandate} is a provision that requires all agencies to follow new procedures, going beyond the APA and organic statutes. The \textit{Contract} emphasizes procedural supermandates; but its call for cost-benefit comparison moves in the direction of substance.

The \textit{Contract} was of course the focus of sustained legislative attention, especially in the House. In the Congress as a whole, there was much debate about the unnecessarily high costs of regulation, the need for better regulatory tools, and the value of balancing rather than absolutism.

Before discussing the details, it is important to say that there were two overarching strands in the reform efforts. The first strand was technocratic. Here the reformers' goal was to bring to bear the best in the way of sophisticated policy analysis, so as to ensure better priority-setting and attention to consequences. Some of the provisions governing risk analysis, cost-benefit

\textsuperscript{101} \textit{See} text accompanying note 92.  
\textsuperscript{102} \textit{Contract With America}, supra note 4, at 131.  
\textsuperscript{103} \textit{Id.} at 132.
balancing, and the use of market-based tools reflected the technocratic strand. Those enthusiastic about some forms of regulation should endorse these provisions. Indeed, the introduction into Congress of sophisticated learning about risk regulation was the most impressive feature of the debate.

The second and much less attractive strand is best described as reactionary. Here the goal was to stall or eliminate regulation whatever its content—largely with procedural requirements so extensive as to prevent agencies from doing much at all. The reactionary strand can be found in moratorium provisions, provisions calling for multiple rounds of judicial review, and above all “look back” provisions allowing judicial review of agency failure to revise existing rules. In the 104th Congress, a special irony can be found in the combination of proposals for extensive and costly procedural and analytic requirements with proposals for dramatic decreases in appropriations, which would make it far more difficult for agencies to comply with new legislative requirements. The reactionary strand is also ill-considered insofar as efforts to slow down or stop regulations will prevent agencies from engaging in many current efforts to ease regulatory burdens through new, more flexible initiatives.

Of course the technocratic and reactionary strands could make some alliances. Good technocrats believe that overregulation is indeed a problem, and good reactionaries understand that technical tools can limit unjustified regulatory interventions. But the alliance was bound to produce difficulties, since those interested in technical improvements are unlikely to support measures that would drown agencies in paperwork requirements or increase their vulnerability to special interests.

For its part, the opposition to the reform efforts also contained two contrasting approaches. To paint with a broad brush: Moderate forces, enthusiastic about policy analysis, attempted to counter or eliminate the reactionary elements in reform proposals while endorsing the technocratic elements. By contrast, those we might describe as status quo defenders treated existing statutes as if they actually made a great deal of sense and were working well; their goal was to protect as much as possible of the existing administrative state. As we shall see, the Clinton Administration mostly belonged in the former camp, at least in its public pronouncements.

104. For example, overwhelming evidence demonstrates that cost-benefit analysis justifies a ban on lead in gasoline. R. KERRY TURNER, DAVID PEARCE & IAN BATEMAN, ENVIRONMENTAL ECONOMICS: AN ELEMENTARY INTRODUCTION 100-02 (1993). Note also that President Reagan surprised observers by supporting aggressive regulation of CFCs, largely because of a cost-benefit analysis from the Council of Economic Advisers demonstrating that “despite the scientific and economic uncertainties, the monetary benefits of preventing future deaths from skin cancer far outweighed costs of CFC controls as estimated either by industry or by EPA.” RICHARD ELLIOT BENEDICK, OZONE DIPLOMACY: NEW DIRECTIONS IN SAFEGUARDING THE PLANET 63 (1991).

105. See note 12 supra.
B. Particulars

1. Unfunded mandates.

On March 22, 1995, Congress enacted the Unfunded Mandates Reform Act, which bans Congress from mandating state action without appropriating federal resources. The Act also contains several provisions directly relevant to the subject of regulatory reform. Surprisingly, these “sleeper” provisions received almost no public attention and escaped mention during the legislative debates over the basic regulatory reform bills. This fact says a great deal about the possibility of legislative coordination of statutory reforms. If a single Congress is unable to coordinate these few reforms over a six-month period, general coordination of statutes enacted in different periods seems unlikely.

The Unfunded Mandates Reform Act contains two notable provisions relating to regulatory reform; both grow out of the Contract With America. First, the Act requires that “a qualitative and quantitative assessment of the anticipated costs and benefits of the Federal mandate” accompany significant regulatory action (those that would cost more than $100 million annually). This assessment must also include: (1) a statement of future compliance costs; (2) a description of any disproportionate budgetary effects on particular regions or segments of the private sector; and (3) estimates of the effect of its action “on the national economy, such as the effect on productivity, economic growth, full employment, creation of productive jobs, and international competitiveness of United States goods and services,” if accurate estimates are “reasonably feasible” and the effect is “relevant and material.”

This provision is largely procedural; it counts as a modest kind of procedural supermandate. It probably will not make much of a difference. President Clinton’s Executive Order on Federal Regulation imposes nearly identical requirements, and while the Order is not subject to judicial review, the “hard look” doctrine imposes requirements roughly parallel to those of the Act.

The second noteworthy provision is more ambitious. It requires that agencies “identify and consider a reasonable number of regulatory alternatives and from those alternatives select the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule.” The Act exempts agencies from these requirements if compliance would be inconsistent with the law or if the agency explains its reason for not selecting the least burdensome alternative.

107. Id. § 202(a)(2), 109 Stat. at 64.
109. Exec. Order No. 12,866, supra note 2 (requiring agencies to assess compliance costs of regulations).
112. Id. § 205(b), 109 Stat. at 66.
Despite this exemption, the provision could have significant consequences. In many cases it is questionable whether an agency has chosen the most cost-effective means of accomplishing regulatory goals. As we have seen, flexible, market-based incentives may achieve those goals at much less expense than command-and-control alternatives. While the provision may result in considerable litigation about whether existing statutes forbid its approach, it provides an opportunity for extensive rethinking of existing regulatory tools. Agencies may well be required to use economic incentives where they now use technological requirements. The provision is not, however, a genuine supermandate because it does not apply if other statutes prohibit agencies from following it.

To the extent that the Act encourages agencies to choose cheaper ways of achieving regulatory goals, it may be a modest improvement on the current situation. With these two provisions, the Unfunded Mandates Reform Act offers cautious steps in the direction of a general requirement of cost-benefit balancing.

2. Moratorium and legislative review.

House Bill 450, the Regulatory Transition Act of 1995, proposed a moratorium banning all federal regulatory rulemaking, with certain exemptions, during a specified period. The period was scheduled to begin on November 20, 1994, and to end at the earlier of two dates: December 31, 1995, or the day on which a general regulatory reform bill was enacted. On February 24, 1995, House Bill 450 was passed by a vote of 276 to 146.

In the Senate, however, the prospects for House Bill 450 were poor, and for good reason. Though popular in recent years, a general moratorium on federal regulation is reactionary in the worst way—a crude, lazy, and pandering response to current problems. Its blunderbuss quality ensures that it will stop measures that are otherwise required by law, or that would do a lot of good, as well as measures that warrant reconsideration (which a moratorium by itself fails to provide). A special problem is that the moratorium would apply to measures designed to relieve businesses of expenses and obligations; from the standpoint of business, a moratorium is only a mixed blessing. In short, a moratorium falls to make distinctions that public officials ought to make. Thus the moratorium idea never received sustained attention in the Senate.

But on March 29, 1995, the Senate passed what it self-consciously considered an alternative: Senate Bill 219, which requires agencies to submit all regulations to Congress and gives Congress an opportunity to "veto" any rule.

113. See text accompanying notes 49-58 supra.
115. Id. § 6(2).
117. See, e.g., Memorandum on Implementing Regulatory Reforms, 28 WEEKLY COMP. PRES. Doc. 728, 728-29 (Apr. 29, 1992) (discussing the success of a 90 day moratorium on regulations).
118. See note 12 supra (discussing "reinventing government" proposals aimed at easing regulatory burdens).
through the normal process of lawmaking.\textsuperscript{119} On April 7, 1995, President Clinton threatened to veto the moratorium proposal,\textsuperscript{120} but specifically voiced enthusiasm for the Senate bill.\textsuperscript{121} On May 17, 1995, the House passed Senate Bill 219 by voice vote.\textsuperscript{122} As of early December, however, no bill had emerged from the conference committee or been submitted to the President.

3. \textit{Generic reform, supermandates, and APA amendments: the House.}

By far the most important, and the most sharply contested, of the regulatory reform proposals involved so-called generic proposals, representing the most important changes to the Administrative Procedure Act since its enactment in 1946—a modest constitutional moment unto themselves. The principal theme in public debate involved the need for cost-benefit balancing; but procedural supermandates played an enormous role as well.

It is important to say here that regulatory reformers in the House and Senate argued in favor of a supermandate to be applied to a wide range of statutes. But the Clinton Administration, along with several others, urged instead a statute-by-statute approach, in which any changes would be based on a careful inquiry into the particular statute.\textsuperscript{123} On this view, Congress would investigate the Clean Air Act, the Clean Water Act, the Delaney Clause, and so forth, rather than changing the law through generic reform. There were plausible arguments on both sides. Perhaps particular statutes raise special considerations best addressed by intensely focusing on their particular features. Perhaps any generic reform would be too crude and too ill-informed.\textsuperscript{124}

On the other hand, reformers might urge, with some justification, that generic reform would have some of the virtues of across-the-board tax reform, base-closing legislation, and the Gramm-Rudman Act. That is, generic reform might prevent well-organized interest groups from mobilizing in the intense way they can on specific statutes, thus defeating reform. Generic reform would

\begin{footnotes}
\item[119] 141 CONG. REC. S4758 (daily ed. Mar. 29, 1995).
\item[120] Clinton Issues Veto Threats; Urges GOP to Compromise on Agenda, Nat'l Env't Daily (BNA) Apr. 11, 1995).
\item[121] House, Senate to Work on Moratorium Differences: Clinton Backs Senate Bill, 64 Banking Rep. (BNA) No. 16, at 776 (Apr. 17, 1995) (noting Clinton's support for the Senate Bill). Clinton released his initial statement on the matter on March 29:
\begin{quote}
I am deeply committed to regulatory reform that cuts redtape without undercutting the health and safety of the American people. Giving the Congress 45 days to consider regulations before they take effect would let lawmakers focus on the specifics of these issues and address real problems as they come up, without delaying necessary public protections. This approach, not the blunt instrument of a moratorium, is the right way to reform regulation. It's common sense.
\end{quote}
Statement on Senate Action to Reject a Regulatory Moratorium, 31 WEEKLY COMP. PRES. DOC. 496, 496 (Mar. 29, 1995).
\item[122] 141 CONG. REC. H5106 (daily ed. May 17, 1995).
\end{footnotes}
allow legislators to assemble otherwise diffuse and ill-organized public interests in support of general change; it would prevent Congress from becoming enmeshed in the self-interested struggles that emerge when particular members, with strong particular interests, are asked to change particular legislation; and it would embolden legislators to act responsibly because a wide range of interest groups would be at risk at the same time, and thus be unable to argue that any one of them had been singled out for special adverse treatment. The reformers seem to have the better of the argument, at least so long as the supermandate has sufficient flexibility. Now let us turn to the details.

The generic reform bill in the House, House Bill 1022, was referred to House committees on February 23, 1995.125 Championed by Representative David MacIntosh, this bill contained a wide range of requirements. The principal provisions would have imposed:

(1) a requirement of careful risk assessment to accompany new regulations;

(2) a system of peer review for risk assessments, with a specific provision allowing "peers" with a potential financial stake to participate on peer review panels;

(3) a codification of President Reagan's Executive Order on federal regulation, including the requirement that regulations be cost-effective and favor least restrictive alternatives;126

(4) a general, ambiguous but apparent requirement of cost-benefit balancing, including perhaps a substantive supermandate to amend all statutes that do not require or permit cost-benefit balancing;127

(5) a compensation requirement for any government action that reduces the value of property by more than ten percent; and

(6) a regulatory budget.

This was a remarkably ambitious piece of legislation, with many ambiguities and many provisions that warranted and continue to warrant sustained discussion. For example, a general requirement of cost-benefit balancing would amend many substantive statutes. Certainly it would be wise to explore the precise consequences of these amendments. As we will see, the issue became a central subject of dispute in the Senate.

A compensation requirement for any reduction in property values of ten percent or more raises even more complex issues. Such a requirement would be unprecedented, and its consequences are far from clear. The major problem with such a requirement is that it may deter valuable projects from going for-

127. H.R. 1022 incorporated by reference President Reagan's Executive Order on Federal Regulation, Exec. Order No. 12,291, supra note 2. The ambiguity stems, in part, from the fact that the requirements of that executive order—including the requirement that cost-benefit analysis be the basis for decision—applied only "to the extent permitted by law." Id. This qualification recognizes that some statutes prohibit cost-benefit analysis. Since H.R. 1022, if enacted, would be a statute, the effect of the "to the extent permitted by law" qualification is unclear.
ward. The government does not extract a benefit whenever its regulations cause an increase in property values, and in view of the expense of administering a “ten percent or more” compensation requirement, a requirement that the government compensate the relevant losers might create incentives not to introduce desirable regulations. To know whether the compensation requirement makes sense, it is necessary to develop a concrete understanding of its effects. To how many regulations would it apply? What effects would it have on the treasury? Would it deter government significantly? If so, would the deterrence be optimal or excessive? Extensive procedural requirements delaying and deterring the “reinventing government” initiatives as well as everything else, also raise many hard issues.\textsuperscript{128}

Remarkably, the House held no hearings on these and other questions, passing House Bill 1022 on February 28, 1995—just five days after its reference to committees—by the overwhelming vote of 286 to 141.\textsuperscript{129} This was irresponsible; it reflected the power of forces of reaction in the House, which had promised to act in one hundred days. The only possible justification for the speedy passage would be to spur the Senate to act in a more deliberative fashion. On April 7, 1995, President Clinton said that he would veto the compensation requirement.\textsuperscript{130}

On March 9, the House referred to the Senate House Bill 9,\textsuperscript{131} a closely overlapping bill.\textsuperscript{132} Perhaps its key provision was section 422, which outlined the criteria to be satisfied before a final rule is promulgated. The most important of these criteria included requirements (a) “[t]hat the incremental risk reduction or other benefits of any strategy chosen will be likely to justify, and be reasonably related to, the incremental costs incurred”\textsuperscript{133} and (b) “[t]hat other alternative strategies identified by the agency were found either (A) to be less cost-effective... or (B) to provide less flexibility.”\textsuperscript{134} These decisional criteria are supposed to “supplement and, to the extent there is a conflict, supersede” the otherwise applicable decision criteria.\textsuperscript{135}

H.R. 9 also contains the “Private Property Protection Act of 1995,” requiring compensation for any diminution of the fair market value of property by 20% or more,\textsuperscript{136} and the “Regulatory Reform and Relief Act,” requiring a complex regulatory impact analysis—including discussions of costs and benefits and market-based alternatives—and increased hearing requirements in notice and comment rulemaking.\textsuperscript{137} It would include as well the “Risk Management

\begin{itemize}
\item \textsuperscript{128} See text accompanying notes 199-209 infra.
\item \textsuperscript{129} 141 CONG. REC. H2372 (daily ed. Feb. 28, 1995).
\item \textsuperscript{130} Clinton Issues Veto Threats; Urges GOP to Compromise on Agenda, supra note 120.
\item \textsuperscript{131} H.R. 9, 104th Cong., 1st Sess. (1995).
\item \textsuperscript{132} 141 CONG. REC. S3743 (daily ed. Mar. 9, 1995).
\item \textsuperscript{133} H.R. 9, 104th Cong., 1st Sess. § 422(a)(2) (1995).
\item \textsuperscript{134} Id. § 422(a)(3).
\item \textsuperscript{135} Id. § 422(b)(1).
\item \textsuperscript{136} Id. § 203(a).
\item \textsuperscript{137} Id. §§ 321-331.
\end{itemize}
and Cost-Benefit Act of 1995," designed to promote careful risk analysis pursuant to detailed standards.\textsuperscript{138}


House Bills 1022 and 9 were never introduced in the Senate. Instead, the Senate debate centered around three proposals for regulatory reform. The resulting debates offered complex interactions between technocratic forces and those interested in reducing regulation whatever its content. The first bill, Senate Bill 291, introduced by Senator Roth on January 27, 1995, called for comparatively modest changes in the Administrative Procedure Act. It included two principal sets of provisions.\textsuperscript{139} The first would require detailed risk assessment, in ways comparable to House Bill 1022. The second would require agencies to favor flexible, market-based incentives rather than rigid commands in formulating regulations. The bill received broad bipartisan support and was unanimously reported out of the Governmental Affairs Committee on March 23, 1995.\textsuperscript{140}

The second bill, Senate Bill 343, championed by Senator Dole, was more ambitious. It received far more attention and became the focal point for legislative debate. The Dole bill—obviously connected with issues of presidential politics—was introduced on February 2, 1995.\textsuperscript{141} Unlike the Roth proposal, this bill contained no specific provision requiring agencies to use economic incentives. It did, however, contain several controversial provisions. Three in particular deserve mention here. First, the bill would have banned agencies from acting unless a federal statute explicitly required them to do so.\textsuperscript{142} Second, the bill included a complex supermandate requiring agencies to apply cost-benefit analysis to all regulations unless “explicit textual language” of the authorizing statute required otherwise.\textsuperscript{143}

Finally, the Dole bill would impose several layers of procedural scrutiny, including peer, congressional, and judicial review. Echoing House Bill 1022, the Dole bill’s peer review provision did not disqualify “peers” with potential financial interests.\textsuperscript{144} In addition, the Dole bill allowed any person affected by a regulation to petition agencies for review of existing rules, under the new cost-benefit criteria, and seek judicial review of the denial of any such petition. The Dole bill also called for judicial review of any risk-assessment or cost-benefit analysis. Finally, the bill provided for congressional review of major

\textsuperscript{138} Id. § 402.
\textsuperscript{141} 141 CONG. REC. S2034 (daily ed. Feb. 2, 1995).
\textsuperscript{142} S. 343, 104th Cong., 1st Sess. § 628 (1995). This was a truly remarkable provision. Most agency action is not, strictly speaking, required by statute; hence the Dole bill would ban a wide range of routine administrative acts.
\textsuperscript{143} Id. § 623(b). The desirability of this supermandate was a key question in Senate debates. E.g., 141 CONG. REC. S10,107-08 (daily ed. July 17, 1995) (statement of Sen. Johnson).
\textsuperscript{144} S. 343 § 622(c)(1)(B)(ii).
regulations through a formal submission process that gave Congress an opportunity to veto. As we have seen, this provision was enacted separately in Senate Bill 219.\footnote{See text accompanying notes 120-122 supra.}

By late June, the Dole bill had undergone four major revisions. The first was the "Grassley" substitute, which eliminated some of the most extreme proposals, including the provision saying that agencies should not act unless required to do so and the judicial review provisions, which were clarified and softened. The informally named Grassley substitute—so-called after Senator Grassley became a co-sponsor on March 22, 1995—responded to many of the sharpest criticisms of the original Dole bill.

At this stage President Clinton's signals were somewhat mixed. In an important speech on April 7, the President indicated that he would veto any legislation that would undermine protection of clean air and clean water; but he did not offer details. He also said that he would veto any generic bill that would lead to litigation preventing regulators from doing their work. But President Clinton did not specifically address Senate Bill 343, nor did he explain whether he believed the bill had these adverse effects. It was not clear whether the President would veto the Dole bill.\footnote{Clinton Issues Veto Threats; Urges GOP to Compromise on Agenda, supra note 120.}

On May 26, the second revision of the Dole bill was introduced. The revision eliminated interlocutory judicial review of agency determinations that a regulation was major and therefore subject to a risk assessment.\footnote{S. REP. No. 90, 104th Cong., 1st Sess. 146-47 (1995) (amending S. 343 to amend the Administrative Procedure Act by adding § 625).} The revision also added a provision that would preclude agencies from regulating "insignificant" risks, and would thereby repeal the well-known and highly controversial Delaney Clause, which forbids the use of carcinogens in food additives.\footnote{21 U.S.C. § 348(c)(3)(A) (1988). The repeal of the Delaney Clause was central to the Senate debate. See, e.g., 142 CONG. REC. S9412 (daily ed. June 29, 1995) (statement of Sen. Kerry opposing S. 343 partly because it would eradicate the Delaney Clause).} Proponents of this provision rejected the zero risk standard established by the Delaney Clause as inflexible and outdated.

The third revision to the Dole bill sprang from a joint effort between Senators Dole and Johnston. The "staff drafts" that resulted from their intense discussions continued in the direction set by the Grassley substitute. First, they reduced judicial control by limiting judicial review of agency rulemaking.\footnote{149. 141 CONG. REC. S8796 (daily ed. June 21, 1995).} Second, they broadened the definition of benefits to include environmental as well as social and economic effects.\footnote{150. Id.}

Apparently at the behest of lobbyists, a new provision was added to alter the requirements for the Toxic Substances Inventory under the Superfund statute. Under current law, all toxic chemical releases must be disclosed to the public.\footnote{151. Emergency Planning and Community Right to Know Act of 1986 § 313(a), 42 U.S.C. § 11,023(a) (1988).} Under the proposed provision, disclosure would be required only if
EPA found a reasonable basis to believe that the toxic release created a risk to human health.\textsuperscript{152} This provision became crucial to Senate debates.

After complex negotiations, a fourth version of Senate Bill 343, now called the Dole-Johnston bill, emerged.\textsuperscript{153} The bill appeared to eliminate the so-called supermandate provision of the original bill since it did not expressly amend existing statutes to mandate cost-benefit analysis. Instead, in a more ambiguous formulation, the bill proposed certain decisional criteria that would "supplement" and not "supersede" existing legislation. These criteria included requirements that benefits justify costs and that agencies choose least-cost alternatives. The Dole-Johnston bill retained the original provisions requiring agencies to review existing rules and to test them for conformity to the new criteria. To enforce this requirement, it maintained provisions permitting industries to petition an agency for review of existing rules under the new criteria and included provisions for judicial oversight of an agency's failure to respond to or to grant a petition for review.\textsuperscript{154} In addition, rules that were not promptly reviewed would expire automatically.\textsuperscript{155}

The Dole-Johnston bill also maintained the basic requirements of risk assessment and the judicial review provisions. Importantly, the bill restored interlocutory jurisdiction to the federal courts to review an agency's determination that a rule is not "major" or that a risk assessment is not required.\textsuperscript{156} The bill also restated the law governing review of agency action, though it probably would not change the law in any material way.\textsuperscript{157}

The debate intensified with Senator Glenn's introduction of the Democratic alternative, Senate Bill 1001, on June 29.\textsuperscript{158} President Clinton endorsed the Glenn bill in mid-July.\textsuperscript{159} Senator Glenn self-consciously built on Senator Roth's bill, which had received enthusiastic bipartisan support in the Governmental Affairs Committee.\textsuperscript{160} In fact the Glenn bill differed from the Roth bill in only a few particulars. Like Roth's bill, the Glenn bill clearly would not override the substantive requirements of existing laws. Responding to some of the sharpest criticisms of the Dole bill, the Glenn bill limited judicial review. It allowed agencies to review existing rules, but did not call for automatic termination of those rules that were not reviewed; and it eliminated any petition

\begin{thebibliography}{9}
\bibitem{footnote1} 141 Cong. Rec. S9549-50 (daily ed. June 30, 1995). The new language authorizes the EPA to use not only scientific, epidemiological, and population data in determining whether to add a particular chemical to the list of chemicals the release of which must be disclosed, but also "the role of reason, including a consideration of the applicability of such evidence to levels of the chemical in the environment that may result from reasonably anticipated releases." \textit{Id.}
\bibitem{footnote4} Id.
\bibitem{footnote6} The provisions were very close to modern hard look review. \textit{See} Cass R. Sunstein, \textit{Deregulation and the Hard-Look Doctrine}, 1983 Sup. Cr. Rev. 177, 181-84 (examining courts' use of the Administrative Procedure Act to require that agencies, and reviewing courts, take a "hard look" at regulations).
\bibitem{footnote8} Nancy Benac, \textit{Clinton and GOP Squabble Over Bureaucratic Reform}, \textit{Austin American-Statesman}, July 16, 1995, at A8.
\end{thebibliography}
process for those dissatisfied with existing rules. The Glenn bill did not require agencies to show that a risk is "significant"; in this way it would not have repealed the Delaney Clause. 161

On behalf of his proposal, Senator Glenn emphasized five central points. First, his proposal contained more limited judicial review of cost-benefit analysis and risk assessment than the Dole bill. Second, his proposal would be procedural rather than substantive; thus it would not affect the Delaney Clause or the Toxic Release Inventory. Third, it would not include a petition process. Fourth, it would not include a supermandate and hence would not affect existing statutory requirements. Fifth, its "sunshine" provision would ensure public disclosure of communications between agencies and the Office of Management and Budget and of information relating to the status of regulatory review. 162

From June 30 through July 20, the Senate vigorously debated the Dole-Johnston and Glenn proposals. The debate centered on several issues, including the scope of judicial review, the petition process, the supermandate issue, amendments to the Delaney Clause,163 and the Toxic Release Inventory. 164

Consider the following much-disputed language from a late draft of the Dole bill:

(a) . . . The requirements of this section [624] shall supplement, and not supersede, any other decisional criteria otherwise provided by law.
(b) . . . [N]o final major rule . . . shall be promulgated unless the agency head publishes in the Federal Register a finding that—
   (1) the benefits from the rule justify the costs of the rule;
   (2) the rule employs to the extent practicable flexible reasonable alternatives [that is, economic incentives] . . . ; and
   (3) (A) the rule adopts the least cost alternative . . .
   (B) if scientific, technical, or economic uncertainties or nonquantifiable benefits . . . make a more costly alternative . . . appropriate and in the public interest and the agency head provides an explanation of those considerations, the rule adopts the least cost alternative of the reasonable alternatives necessary to take into account such uncertainties or benefits; and
   (4) if a risk assessment is required . . .
   (A) the rule is likely to significantly reduce the human health, safety, and environmental risks to be addressed; or

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162. 141 Cong. Rec. S9447-48 (daily ed. June 29, 1995) (statement of Sen. Glenn). The disclosure requirement has an extensive background and had already been imposed by Executive Order 12,866. See Pildes & Sunstein, supra note 35, at 20-24 (discussing background and noting that the extent of disclosure required under the Administrative Procedure Act is not clear).
163. Interestingly, the executive branch has tried unsuccessfully to read a "de minimis exception" into the Delaney Clause. See Les v. Reilly, 968 F.2d 985, 990 (9th Cir. 1992) (noting criticism of Delaney Clause, but rejecting de minimis exception); Public Citizen v. Young, 831 F.2d 1108, 1110-13 (D.C. Cir. 1987) (ruling that de minimis standard violates the "legislative design" of the Delaney Clause).
(B) if scientific, technical, or economic uncertainties or nonquantifiable benefits . . . preclude making the finding under subparagraph (A), promulgating the final rule is nevertheless justified for reasons stated in writing accompanying the rule . . . .

The debate prompted Senate Republicans to make a number of significant changes to the Dole bill. On July 10, the Senate passed the Nunn-Coverdell Amendment, which requires agencies to conduct a cost-benefit analysis of any rules having a significant economic effect on small business. On July 11, the Senate adopted an amendment by Senator Dole, to clarify that the bill contained no supermandate. This was crucial to several of the holdout voters, though some apparently thought the clarification was not clear enough. The Senate also revised the threshold definition of a major rule from $50 million to $100 million. On July 13, the Senate adopted, by voice vote, a Roth-Biden Amendment designed to ensure better priority-setting and attention to market incentives. The Senate also adopted an amendment preventing those with a conflict of interest from participating on peer review panels. On the same day, the Senate tabled, by a vote of 50 to 48, an amendment to strike the provisions relating to the Toxic Release Inventory.

In this period, issues about food safety became central to the debate. Several cases of E. coli poisoning—heavily publicized in the key primary state of New Hampshire—threatened to turn the issue of regulatory reform into an obstacle to Senator Dole’s presidential hopes. Advertisements in New Hampshire included accusations by a group of parents of children sickened or killed by contaminated meat that Dole was “trying to please his big contributors instead of protecting kids.” Nonetheless, Senate Republicans, supported by medical experts, refused to amend the Dole bill’s repeal of the Delaney Clause.

On July 18, the Senate narrowly rejected the Glenn bill by a margin of 52 to 48. The same day, the Senate rejected cloture on the Dole bill by a vote of 53 to 47. And two days later, the Dole-Johnston forces again failed to close further debate, this time by only two votes. This last vote effectively killed

169. Id.
170. Id.
174. Id.
the bill, and the prospects for regulatory reform dimmed—despite the fact that a strong majority of the members favored the idea.

There were a few dying embers. Senate Democrats, led by Senators Conrad and Robb, attempted to assemble a coalition to enact some combination of the Glenn and Dole bills. Although it looked at first as if compromise might be possible, Senate Republicans rejected the compromise proposal.176 The major sticking points were the amendment of the Delaney Clause, changes in the Toxic Release Inventory, and the review of existing regulations.177 The Democrats attempted to eliminate these provisions. Dole and his allies, backed by public statements from business groups,178 firmly rejected the attempt at compromise. At this point, efforts at generic reform failed. Oddly, the failure was a result of an alliance among status quo defenders—attacking the quite sensible repeal of the Delaney Clause—and technocratic forces objecting to the Dole bill’s excessive procedural provisions.

5. Statute-by-statute reform and appropriations.

In addition to the generic reform proposals, Congress discussed at least twenty-five statute-specific proposals in an effort to produce substantive regulatory reform.179 I cannot discuss them in detail here. But it is worth noting that among the most prominent of these were dramatic proposals to reform the Endangered Species Act and the Clean Water Act. Although the Clean Water Act amendments passed in the House by a vote of 240 to 185 on May 16,180 the prospects for substantial change were essentially eliminated when President Clinton announced that he would veto the bill.181

Of particular importance was an appropriations bill containing provisions designed to limit the power of the EPA.182 The bill proposed, among other


178. Mike Hudson, Robb Trying To Keep 'Regulatory Reform' Out of Spotlight, ROANOKE TIMES & WORLD NEWS, Aug. 14, 1995, at A1 (quoting an Alliance for Reasonable Reform statement that the Robb proposal “kills prospects for real regulatory reform”); US Industry Group Slams Regulation Bill Compromise, Reuters, Aug. 7, 1995, available in LEXIS, News Library, NewsFile (quoting statement by Jerry Jasinskiwski, President of the National Association of Manufacturers, to the effect that “[w]e would be better off with no bill than adopting this proposal that takes the heat out of S. 343 and kills the prospects for real regulatory reform”). Interestingly, despite Republican assurances that no supermandate was intended, see text accompanying note 167 supra, business group opposition was based in part on the claim that the Democratic proposal would soften the supermandate. Patrice Hill, Regulatory Reform Unlikely to Pass, WASH. TIMES, Aug. 9, 1995, at A7.


182. H.R. 2099, 104th Cong., 1st Sess. (1995) (proposing a 50% reduction in EPA’s enforcement funding); see also Brian Broderick & Katherine Stimmel, Clinton Threatens to Veto EPA Money Bill, Daily Rep. for Executives (BNA) No. 146, at D-33 (July 31, 1995), available in LEXIS, News Library,
things, to halt enforcement of the Great Lakes water quality standards; prohibit enforcement of “raw sewage” rules governing beaches; prevent enforcement of a ban on illegal filling of wetlands; eliminate EPA’s ability to set standards to prevent industrial water pollution; block use of funds to limit urban air pollution through commuter trip reduction; curtail regulation of toxic air pollutants from oil refineries; prohibit EPA from gathering health risk information about oil and gas releases; forbid EPA from finalizing any proposals for drinking water protections against radon and arsenic; protect chemical manufacturers from having to report uses of chemicals; restrict EPA from setting standards for pesticides in food; and ban the addition of new species to the list of endangered species under the Endangered Species Act.183

The prospects for these provisions were dim in the Senate. Moreover, it was clear that President Clinton would veto the appropriations bill whether or not it included these provisions.184 The proposed appropriations cuts were notable (and disturbing) insofar as they suggested a desire both to reduce environmental regulation through a relatively less visible mechanism and to prevent agencies from developing the analytical capacity that would enable them to engage in good policy analysis.

The House was also able to inaugurate a new tradition: Speaker Newt Gingrich proposed a bill creating “Corrections Day” to be held on the second and fourth Tuesday of each month, on which the House would debate bills to repeal or modify agency regulations or statutes enacted by Congress.185 The House adopted the rules for Corrections Day on June 20, 1995, by a vote of 271 to 146.186 A three-fifths majority would be required for a “correction.”

Of course appropriations issues in general became, in October 1995, a central feature of the attempted revision of American government. I cannot discuss the resulting debate in detail here. But it is important to identify the most striking fact of the debate: Many diverse substantive issues—involving welfare reform, Medicaid, environmental issues, and much more—were dealt with all at once under the single heading of appropriations.

This development made crystal clear and highly visible a growing fact of American government, namely that substantive policy is made, not simply by deciding on funding levels, but also through conditions and limitations attached to funds. These conditions and limitations can move government in very new directions. Thus the principal debates between President Clinton and the 104th Congress often took the form of debates over appropriations bills.187 And the

184. See Broderick & Stimmel, supra note 182. In fact, even the House has apparently withdrawn support of such limitations on the EPA. John H. Cushman Jr., House Rejects Plan to Limit E.P.A.’s Power, N.Y. Times, Nov. 3, 1995, at A1, A8 (asserting that House defeat of limitation provisions “was the clearest signal to date of a growing reluctance in Congress to radically alter existing environmental laws”).
187. See Cushman, supra note 184, at A1, A8.
substantive changes proposed in the October 1995 bills were much more far-reaching than the substantive changes proposed in (for example) the generic regulatory reform legislation. Indeed, the appropriations bills would have a wide range of effects on regulation itself, not excluding the environmental area, where restrictions would sharply reduce EPA authority.\textsuperscript{188}

6. \textit{A note on the politics of regulatory reform.}

In the end regulatory reform failed because the public was not unambiguously committed to it. But many political factors shaped Congress’ efforts as well. Industry pressure, public sentiment, presidential veto threats, and institutional realities all steered reform efforts. I offer some brief notes here.

Interest groups played a significant role with respect to the generic statutes. For example, the Grocery Manufacturers Association helped write the Dole bill’s provision that would have repealed the Delaney Clause.\textsuperscript{189} Industry representatives also contributed substantially to specific statutes. For example, corporate lobbyists drafted proposed revisions to the Clean Water Act and the Endangered Species Act.\textsuperscript{190}

More generally, the Senate acted—as it historically has—as a “cooler” for House bills, operating in a slower and more deliberative manner.\textsuperscript{191} Recall that the House passed its generic reform bill just five days after it was introduced.\textsuperscript{192} This pattern was widely noticed in the 104th Congress. The House acted rapidly and sloppily; the Senate held hearings and took its time.

7. \textit{An evaluation: contract without (enough) deliberation.}

What are we to make of this complex set of events? The performance of the House of Representatives deserves much criticism and little praise. The House generic reform initiative, House Bill 1022, was not a good bill. It contained a number of promising ideas, and in some ways it might well have improved current regulatory practices. But it was also very much a mess: sloppy, confusing, and filled with provisions that had not been thought through. It was far too rushed and ill-considered. It was a parody of deliberative democracy.

The best that might be said for the House’s actions is that prompt passage of House Bill 1022 spurred a debate in the Senate and indeed the nation that was certainly overdue and might not have otherwise occurred. From this perspective, House Bill 1022 served less as a proposed law than as an action-forcing mechanism designed to prompt a more deliberative effort in the Senate.

\textsuperscript{188} Id.
\textsuperscript{189} Marian Burros, \textit{Congress Moving to Revamp on Food Safety}, \textit{N.Y.Times}, July 3, 1995, \$ 1 at 1, 2.
\textsuperscript{192} \textit{See} text accompanying note 129 supra.
Much proposed legislation in the 104th Congress had a similar effect. It justifies George Washington’s supposed observations about bicameralism. Thomas Jefferson is said to have asked Washington, over breakfast, why the Constitution provides for the Senate as well as the House. Washington responded: “Why did you pour that coffee into your saucer?” Jefferson responded: “To cool it.” Washington’s rejoinder was: “Even so, we pour legislation into the senatorial saucer to cool it.” Perhaps the goal of the House was to set proposals before the Senate in the hope that seeing the general direction in which the nation should move, the Senate would enact more responsible and careful proposals.

What about the Senate? A charitable observer can find much ground for enthusiasm. All of the relevant proposals incorporated an understanding that balancing is better than absolutism. Despite its symbolic value, the Delaney Clause is hard to defend; indeed, it is far from clear that the Clause promotes human health. An exemption of de minimis risks would advance the process of good priority-setting. Here technocratic learning should have produced a bipartisan consensus. Also promising was the Senate’s enthusiasm for market incentives and for least-cost solutions. Moreover, the Senate proceeded in a more or less deliberative manner. Unlike the House, it held extensive hearings and its members engaged in lengthy and sometimes productive debates. The Roth-Biden Amendment, an effort to promote better priority-setting, showed an admirable understanding of qualitative differences among diverse risks. Perhaps the 104th Congress served as a transitional one in which a great deal of learning occurred.

But an account of this sort would probably be too enthusiastic. Much of the debate dwelled on unhelpful dichotomies: whether we should have “more” rather than “less” regulation and whether the Dole bill “went too far” or the Glenn bill “did too little.” Too often Congress avoided substantive issues by focusing on procedure; too often Senators proposed procedural solutions instead of making hard choices. Many initiatives attempted to derail the administrative state through paperwork requirements.

In the next section, I spell out these criticisms and suggest some possible improvements. But for the moment a more general conclusion is appropriate. The task of fundamentally reforming the modern regulatory state is complex and unwieldy; the 104th Congress faced (and the 105th and 106th Congresses will face) a job far more complex than anything faced by New Deal Congresses—and this notwithstanding the fact that the nation is in far better shape
than it was during the Depression. We might even conclude, at least provisionally, that Congress is institutionally ill-equipped to attempt major reform, at least if it does a great deal at the micro level. Legislators are generalists, not specialists, and they have many issues to address. They lack expertise in particular areas. They are also subject to intense political pressures that can favor "lowest common denominator" solutions. Disagreements within the House and Senate can lead in similar directions.

In the 104th Congress, the House was able to act quickly, driven by the discipline demanded by the *Contract with America* and Speaker of the House Newt Gingrich; yet the results are nothing to celebrate. The Senate was not similarly unified, and hence the process of deliberation produced nothing at all. The executive branch has major advantages on this count. It can more easily use specialized experience.197 I will return to these issues below;198 but for the moment let us consider how Congress might have done better.

IV. TOWARD NEW INITIATIVES

A. Procedure and Paperwork: Less Is More

Part of the 104th Congress' attempt at regulatory reform involved not substantive criteria but paperwork requirements designed to delay and thwart the issuance of regulations.199 This strategy resembles the "moratorium" idea—not an effort to design good regulations and to prevent bad ones, but instead an indiscriminate strategy to stultify agencies, even though agencies might be trying to reduce regulatory burdens.

A particular problem in the relevant bills is the addition of multiple new layers of review—by courts, peers, and Congress itself. In this context, Congress should have followed a strategy of addition by subtraction. Future Congresses might build on the current proposals by making them leaner—more in the way of substance, less in the way of paperwork.

1. Existing rules and judicial review.

Much of the debate in the Senate stemmed from the Dole bill's complex provisions compelling agencies to undertake reviews of existing rules. These provisions are an understandable effort to ensure that agencies do not maintain rules that cost much and accomplish little or no good.200 Moreover, regulations can become obsolete, and a mechanism for ensuring periodic review makes a good deal of sense.

On balance, however, the proposed petition process is not easy to defend. Such a process could increase interest-group power, prevent agencies from devoting their limited resources to the most important matters, increase uncer-
tainty about existing rules, produce random agenda selection, and allow people in the private sector to divert taxpayer resources for what may well be insufficient gain. Review of existing rules requires substantial resources, and if agencies are required to revisit current rules each time an affected party raises a question, the petition process could create the very kind of rigidity that good regulatory reform strives to prevent.

In some areas, the petition process is quite unnecessary. Under Presidents Reagan, Bush, and Clinton, many agencies have already done some kind of cost-benefit analysis. For this reason, it is unclear that the petition process would do much good. To be sure, past cost-benefit analyses were done under somewhat different standards from those that would have been created by Senate Bill 343; and independent agencies were exempted from previous presidential requirements (a gap filled by Senate Bill 343). In this way, Senate Bill 343 would not be entirely unnecessary. The process could, however, cause real harm by making the status of existing rules unclear and by drowning agencies in paperwork. Critically, any right to petition would allow private parties to set the public agenda and to coopt public resources for the sake of undertaking a costly, complex, and possibly redundant analysis of existing rules. If people in the private sector could ask all agencies to undertake cost-benefit analyses under the new standards of Senate Bill 343, they would be able to use taxpayer resources for analyses that simply produce waste and delay. In light of the fact that Senate Bill 343 would apply to many hundreds and perhaps thousands of rules, the paperwork burden could be enormous.

The prospect of judicial review raises further difficulties. If courts can review denial of petitions to review existing rules, there will be high litigation costs. This is especially true since the petition process would require an agency to decide whether "reasonable questions exist" about the cost-benefit judgment and would allow judicial review of agency decisions on this point. In many cases, "reasonable questions" do "exist," and hence judicial involvement and management might well be common.

Notably, Presidents Reagan, Bush, and Clinton all decided to insulate cost-benefit analyses from the judiciary—on the theory that judicial review would produce delay, confusion, and error, especially in light of the judges’ lack of democratic accountability or factfinding competence. The executive branch and Congress both seem better equipped to use cost-benefit analysis to evaluate and correct most regulations. It probably does make sense to subject cost-benefit analysis to judicial review when the agency’s decision does, under the relevant statute, depend on that analysis. It may also make sense to include any cost-benefit or risk assessment in the whole record for review of rules. But beyond this, judicial review should not take place.

\[201. \text{See Exec. Order No. 12,866, supra note 2; Exec. Order No. 12,291, supra note 2.}\]

\[202. \text{To be sure, many agencies might respond to petitions simply by repeating a cost-benefit analysis calculated pursuant to executive orders. But the different standards of Senate Bill 343 will require agencies to recalculate some cost-benefit analyses, and new data will require the updating of others.}\]

\[203. \text{S. 343, 104th Cong., 1st Sess. (1995).}\]
2. "Peer review."

Both House Bill 1022 and Senate Bill 343 show enthusiasm for "peer review." In particular, section 640 of Senate Bill 343 would require the executive branch to develop a "systematic program for the peer review" of risk assessments. This provision moves in a sensible direction—toward a greater role for the executive branch in generating uniform risk assessment guidelines and in ranking risks and establishing priorities for Congress, agencies, and the public. No institution in government is currently charged with this important task. Peer review might well play a role in this process.

In its current form, however, a requirement of peer review for risk assessment is premature. Any "systematic program for peer review" could prove enormously expensive and produce unnecessary delay. Of course, no "peers" are entirely objective; judgments about risk necessarily depend on assumptions, and those assumptions will likely be founded on judgments of value. Since "peers" may well have their own agendas, the process of peer review could aggravate the problems raised by interest-group power over regulation.

It is also unclear whether, in light of the rest of Senate Bill 343, the peer review process is at all necessary, or whether its goals could not be promoted in other ways. Agencies now experiment with peer review when it seems to make sense, and the conventional process of notice and comment allows a high degree of peer "review" of agency proposals. In any case, both the House and Senate bills create at least the appearance of impropriety insofar as they allow participation by peer reviewers with a potential conflict of interest.

Section 640 of Senate Bill 343 should be eliminated. Certainly people with a potential financial interest should not be allowed to participate on peer review panels. Agencies should be encouraged to experiment with such panels, but any generic requirement should await the outcomes of these experiments.

3. Joint resolution of disapproval.

Both Houses of Congress passed legislation requiring certain regulations to be submitted to Congress for potential veto. Thus under section 801 of Senate Bill 343, major regulations would be submitted to Congress before taking effect, and Congress could enact a "joint resolution of disapproval" to stop such regulations from becoming law. Since these joint resolutions result from bicameral action and are submitted to the President for his signature, there is no constitutional problem with this provision.

The provision for congressional review has obvious virtues. It appears to enhance political accountability by providing a formal mechanism by which elected representatives may oversee, and eliminate, proposed regulations. The

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204. Harvard Group on Risk Management Reform, supra note 38, at 22-30 (calling for Congress to centralize "leadership of the assessment and ranking of risks in the Office of Science and Technology Policy of the Executive Office of the President"); see text accompanying notes 44-47 supra. 205. See Slovic, supra note 86, at 56; text accompanying note 86 supra. 206. House Bill 1022 provides that the peer review program "shall not exclude peer reviewers . . . merely because they represent entities that may have a potential interest in the outcome." H.R. 1022, 104th Cong., 1st Sess. § 301(a)(3) (1995).
process of congressional review might also deter agencies from submitting ill-
considered or faction-driven regulations to Congress. Moreover, agencies
might more frequently signal to Congress that some statutorily mandated regu-
lations make little sense, and the process of review might lead Congress to
change the relevant statute. It is in part for these reasons that President Clin-
ton expressed enthusiasm for congressional review.

It is unclear, however, how much this provision would add, since Congress
can already enact legislation to prevent any and all regulations from becoming
law. There are risks as well. A serious problem with congressional review is
that it might, in practice, give well-organized interest groups a chance to bring
pressure to bear on hundreds or even thousands of regulations. In this way it
might increase rather than decrease the problem of factional influence. Section
801 would also require Congress to expend limited resources reviewing a
wide range of agency rules, many of which should be uncontroversial.

The competing considerations do not lead to any obvious conclusion. But a
new statutory provision for congressional review adds nothing to Congress’
existing authority. Setting up a formal mechanism for review of regulations is
probably too costly and time-consuming to be worthwhile; narrower "report-
ing" strategies could accomplish the same goals. Hence section 801 might well
impose costs that are not justified by benefits.

B. Modest Changes

How might Congress improve the proposals mentioned above? I begin
with some modest changes designed to accomplish Congress’ apparent goals in
a more effective manner.

1. Valuation of benefits.

Some theoretical issues. If a substantive supermandate is to operate as a
kind of constitutional amendment to the regulatory state, it seems crucial to
understand what cost-benefit balancing actually entails. Much of the national
debate in the last year involved the value of cost-benefit analysis. Proponents
characterized cost-benefit analysis as a method of disciplining administrative
power through salutary balancing; opponents feared that cost-benefit analysis
cold-heartedly sacrifices human health and life for the sake of mere dollars.

207. The EPA has on several occasions signalled that it would prefer not to issue statutorily re-
quired regulation because the costs are high and the benefits low. See, e.g., Impact of Regulatory Re-
form Proposals on EPA: Hearings Before the Senate Comm. on Environment and Public Works, 104th

208. See note 121 supra and accompanying text.

209. See Stephen Breyer, The Thomas F. Ryan Lecture: The Legislative Veto After Chadha, 72
Geo. L.J. 785, 797 (1984) (arguing that congressional review of regulations favors special interests); cf.
Harold H. Bruff & Ernest Gellhorn, Congressional Control of Administrative Regulation: A Study of
Legislative Vetoes, 90 Harv. L. Rev. 1369, 1413-14 (1977) (showing that the legislative veto increased
the power exerted on committees by wealthy and well-organized interest groups).

210. I testified on issues involving regulatory reform before the Senate Judiciary Committee and
the Senate Committee on the Environment and Public Works, and I have drawn on that testimony for
some of this section.
But this is at best a caricature. By itself, the notion of cost-benefit analysis appears very close to empty; everything depends on how costs and benefits are characterized and on how underlying issues of valuation are resolved.\textsuperscript{211}

Two criticisms can be made of a proposed framework (or supermandate) for evaluating governmental performance. The first is that the framework is wrong because it ignores certain important variables, or is founded on an indefensible theory of value. The second criticism is that the framework is incompletely specified, in the sense that its meaning depends on further subsidiary judgments that have yet to be offered. Cost-benefit analysis is properly subject to the first kind of criticism to the extent that it purports to align values along the single metric of aggregated private willingness to pay—and evaluates regulation by reference to that criterion alone. Indeed, regulation might be founded on citizen judgments that have no clear parallel in aggregated willingness to pay.\textsuperscript{212} Or it may be rooted in distributive rather than allocative goals; consider the antidiscrimination laws as possible examples. To the extent that cost-benefit analysis is rooted in the technical economists' understanding, it has a great deal to offer, but it cannot capture many appropriate goals of regulation.

As a political creed, however, the principal problem with cost-benefit analysis is that it is incompletely specified. Its meaning depends on how costs and benefits are characterized and on how issues of valuation are resolved. Do equitable concerns enter the cost-benefit calculus? Suppose, for example, that a certain environmental risk is concentrated among African-Americans.\textsuperscript{213} Can a good cost-benefit analysis take this into account? Or suppose that some of the benefits of regulation are aesthetic. How will these benefits be valued? An extensive literature explores the valuation of human life.\textsuperscript{214} Though, by itself, cost-benefit analysis takes no position on the associated controversies, regulators asked to operate under cost-benefit analysis must take some such position.

2. Cost-benefit analysis as a quasi-constitutional amendment.

With these points in mind we can ask the general question: Would a general requirement of cost-benefit analysis be a sensible supermandate for the


\textsuperscript{213} See Exec. Order No. 12,898, 59 Fed. Reg. 7629 (1994) (requiring agencies to make achieving environmental justice part of their mission by identifying and addressing programs with disproportionately high adverse effects on minority populations).

\textsuperscript{214} See generally Viscusi, \textit{supra} note 41.
regulatory state? Would such a requirement be like a constitutional amendment, or would it be a modest way of disciplining agency discretion?

The most basic point here is that the modern state includes a diverse array of regulatory statutes, with diverse legitimate purposes, including but not at all limited to economic efficiency. Consider the following:

- Many important regulatory states are plausibly understood in terms of economic efficiency; they can be seen as efforts to counteract market failures. The Federal Insecticide, Fungicide, and Rodenticide Act and the Toxic Substances Control Act are examples. Such statutes may be designed to overcome an absence of sufficient information; harms to third parties; or collective action problems of various sorts.

- Some statutes are designed to eliminate illegitimate discrimination or what might be understood as caste-like features in modern society. Though some people think that such statutes can be defended on efficiency grounds, their animating impulse has little to do with economic efficiency.

- Some statutes are designed to protect cultural aspirations. Examples include measures safeguarding the national parks, encouraging high-quality programming, and protecting endangered species.

- Some statutes are designed to redistribute to the poor or to others understood as having a good claim to public help. This is so even though regulation is a poor tool for this purpose, and though redistribution may really benefit well-organized interest groups with little claim to public assistance. The Social Security Act is an obvious example of redistributive law; the Agricultural Adjustment Act can also be understood in this way, with appropriate qualifications for its interest-group dimensions.

Doubtless other possibilities could be mentioned. The point is that the highly diverse grounds for federal regulation raise many questions about cost-benefit analysis as the only ground for regulation.

215. I understand this notion in terms of wealth maximization.


218. For analysis of such objectives of regulation, see Stephen Breyer, Regulation and Its Reform 15-35 (1982); Anthony Ogus, Regulation: Legal Form and Economic Theory 15-28 (1994); Sunstein, supra note 21, at 41-55.


221. See Sunstein, supra note 21, at 57-60.


223. See Richard B. Stewart, Regulation in a Liberal State: The Role of Non-Commodity Values, 92 Yale L.J. 1537, 1537 (1983) (arguing that regulation reflects governmental ends such as "the protection of entitlements, the promotion of production, and the nurture of non-commodity values").
If it is intended as a quasi-constitutional amendment to the regulatory state, a cost-benefit supermandate could be understood in at least three different ways. In its most ambitious form, the mandate would amount to an endorsement of the principle of economic efficiency as the exclusive basis—the "decision criterion"—for interpretation and application of all statutes.\footnote{224. Epstein, supra note 31, at 30 (asserting that the efficiency approach to justice "offer[s] the best justificatory apparatus for demarcating the scope of state power from the area of individual choice"). Even when economic efficiency is not the basis for the statute, or when benefits cannot be quantified, it makes sense to require agencies to quantify costs to the extent that this is possible.} This would be a fundamental change both because it would understand cost-benefit analysis in a particular way—as a term for the criterion of economic efficiency—and because it would amend statutes that, when enacted, seemed motivated by something other than the efficiency criterion.

If this were the understanding of the supermandate, all of the statutes to which the supermandate applies would henceforth be understood in efficiency terms. To say the least, this would be a dramatic shift in national understandings. It would indeed represent a kind of constitutional amendment of the administrative state, rebuilding regulatory efforts on a new foundation. While the most ambitious reformers in the Senate and the House came close to this view, none endorsed it explicitly.

Another, less ambitious possibility is to understand the cost-benefit criteria in efficiency terms, but only for those statutes that were designed to promote economic efficiency. Under this approach, the supermandate would not alter the basic understandings of existing statutes. It would instead have a more modest but nonetheless important goal: imposing a particular understanding of technocratic rationality on statutes formerly understood and implemented in a less precise, more ad hoc, and more intuitive way. As we will see, there is much to be said in favor of this basic approach.

A third and least ambitious possibility is to understand cost-benefit criteria in a less technical and more common-sensical way, as an invitation to balance a range of variables under statutes that had formerly been thought to be absolutist and hence to forbid balancing. On this view, a supermandate would not be so ambitious as to call for the use of purely economic criteria. It would more modestly ask administrators to look at costs, or adverse effects, as well as at benefits. This was probably the goal of the majority of those members of Congress who were in favor of a substantive supermandate. And if the supermandate is understood in these terms, it makes a great deal of sense. As we will see, the principal objection to such a supermandate is that it is too open-ended. Congress can and should take steps to clarify it, though—I emphasize—without mandating the efficiency criterion outside of the context of "market failure" statutes.\footnote{225. See text accompanying notes 237-239 infra (discussing the problem of valuing life).}

3. Theory and practice.

The House and Senate bills offered almost no guidance for characterizing costs and benefits, and no guidance at all on the crucial issue of how to value...
costs and benefits. For this reason, the provisions look highly substantive but are in fact largely procedural. Without guidance to constrain valuation, a requirement of cost-benefit analysis is quite open-ended, though certainly not meaningless. It alerts agencies to the need to balance a range of considerations and as a procedural requirement, it will affect outcomes. Moreover, courts may invalidate outcomes that, by general understandings, seem either out of line with existing practice or too absolutist.\textsuperscript{226} Certainly there is a difference between agency behavior under balancing statutes and agency behavior under statutes that forbid balancing.\textsuperscript{227}

It is possible to conclude that Congress should restrict itself to a call for cost-benefit analysis and leave the details to agencies.\textsuperscript{228} Perhaps Congress lacks the detailed understanding that would enable it to answer the more specific questions. But if we are at all concerned about administrative discretion, we should urge greater guidance from the national legislature.\textsuperscript{229} In any case the generic bills introduced in the House and Senate would be much improved if they offered more direction to agencies. I offer two suggestions here.

\textit{Qualitative factors.} As I noted in Part I, people care not simply about the aggregate amount of lives saved, but also about a range of factors involving the nature of the particular risk. For most people, the most salient contextual features are: (1) whether the risk is catastrophic in nature; (2) whether the risk is uncontrollable; (3) whether the risk involves irretrievable or permanent losses; (4) whether the risk is voluntarily incurred; (5) whether the risk is equitably distributed or concentrated on identifiable, innocent, or traditionally disadvantaged victims; (6) whether the risk is well understood; (7) whether the risk would be faced by future generations; and (8) whether the risk is familiar.\textsuperscript{230}

Any cost-benefit analysis that Congress requires regulatory agencies to perform should reflect these factors. In developing a cost-benefit formula, Congress should recognize that a purely quantitative or monetary understanding of costs and benefits is inadequate. The various consequences of regulation ought not to be thought commensurable along a single metric.\textsuperscript{231} Any cost-benefit analysis should be accompanied by a disaggregated, qualitative description of the consequences of government action, so that Congress and the public can

\textsuperscript{226} See Corrosion Proof Fittings v. EPA, 947 F.2d 1201, 1215-17, 1229 (5th Cir. 1991) (rejecting an EPA asbestos regulation issued under the Toxic Substance Control Act because the agency failed to consider less burdensome alternatives).


\textsuperscript{228} See Ackerman & Hassler, supra note 14, at 5 (describing flexible agencies that can adapt to changes in science and newly discovered evidence and arguing that "Congress should content itself with the most general kinds of policy guidance").

\textsuperscript{229} See Schoenbrod, supra note 30, at 3-15 (encouraging courts to ban delegation of authority to administrative agencies and advocating that Congress enact detailed legislation to limit agencies' power). But see Mashaw, supra note 14, at 97 (arguing against greater guidance and instead advocating broad delegations of authority to administrative agencies).

\textsuperscript{230} See, e.g., Breyer, supra note 14, at 16 (noting that "people value different risks differently").

\textsuperscript{231} See Pildes & Sunstein, supra note 35, at 65 (calling for "disaggregating costs and benefits, identifying qualitatively different effects, and taking account of effects on diverse groups").
obtain a fuller picture than the crude and misleadingly precise "bottom line" of the cost-benefit analysis.232 This is not at all to deny that it is important to be precise and quantitative when possible. It is only to say that any "bottom line" characterization and assessment of costs and benefits will involve judgments about values, not about science; Congress and the public should see what those judgments are.233

I have suggested that regulatory statutes have legitimate and diverse functions and that some of those functions do not involve economic efficiency. For this reason, the efficiency criterion is inadequate as a complete guide to the regulatory state. It is therefore best for Congress to understand costs and benefits in the economic fashion only for statutes that are designed to overcome market failures. And even here, there is room for qualifying the economic analysis—when, for example, the risk at issue is inequitably distributed, and when political actors believe that it deserves special attention for that reason.234 When the statute does not involve market failure, Congress would still require cost-benefit balancing as the general background rule; but it should understand the definition of costs and benefits to be sufficiently broad as to allow administrators to depart from purely economic criteria. Judicial review should be available to police administrative decisions for reasonableness and consistency.235 In the long run, it might be hoped, a common law of regulatory practice might emerge to create rationality and reasonableness where there is now a high degree of arbitrariness.

The issues I have discussed—the diverse grounds for regulatory statutes, problems of incommensurability, qualitative distinctions—are probably too subtle and complex to justify anything like legislative codification. Instead they suggest that Congress should: (1) enact a general background requirement

232. See ANDERSON, supra note 222, at 191-216 (arguing that consequentialist cost-benefit analysis fails to account for "the diversity of people's values").

233. To account for citizens' value judgments, Senate Bill 343 should be amended as follows:

1. Definition of "benefit." Change section 621(5) to read "the term 'benefit' means the reasonably identifiable significant benefits, including social, economic, ecological, distributional, and aesthetic benefits, that are reasonably expected to result directly or indirectly from implementation of a rule or an alternative to a rule." My italicized additions allow agencies to define "benefit" to account for citizen judgments.

2. Description of benefits and costs. Add the following sentence to section 622(e)(1)(A): "An agency shall offer a disaggregated description of the relevant costs and benefits, containing an account of the qualitative differences, if any, among the costs and benefits at stake." This provision permits a more comprehensive examination of the full cost-benefit landscape.

3. Diverse cost and benefit factors. Add the following section, 622(e)(1)(C): "Where practicable, the agency shall, in evaluating and comparing costs and benefits, consider public judgments about how best to assess relevant risks, including whether the risks under consideration are involuntarily incurred, likely to affect future generations, potentially catastrophic, especially dreaded, irreversible, or inequitably distributed." The list is not exhaustive, but does provide agencies an opportunity to account for diverse public judgments.

234. This qualification should not be used to allow private groups to skew economic analyses in their preferred directions. It should instead provide room for a formal channel to qualify the economic analysis when, for example, poor people are particularly at risk.

235. See, e.g., Corrosion Proof Fittings v. EPA, 947 F.2d 1201, 1220-22 (5th Cir. 1991) (discussing whether the EPA regulatory decision had a "reasonable basis").
of cost-benefit balancing, with a relatively open-ended understanding of both costs and benefits; (2) permit agencies to understand cost-benefit analysis in a way that best fits with the particular statutory scheme; (3) impose a cost-effectiveness or "least cost" requirement as part of the supermandate; and (4) require more technical cost-benefit balancing on a statute-by-statute basis, when there is a considered legislative judgment that the statute is a response to a market failure, economically defined. Congress should, however, attempt to impose some constraints on agency valuations and tools, as I will now discuss.

Floors and ceilings. It is of course troublesome to assign dollar values to life, partly for the reasons I have sketched. But since tradeoffs of multiple kinds are inevitable, it may be best for Congress to set out some guidelines, including floors and ceilings governing expenditures, without pretending to say how much a life is "really worth." In light of the diversity of regulated risks, no single number would make sense for valuing life. But it may make sense to set benchmark standards of, for example, $10 million per life saved as the presumptive maximum amount and $3 million as the presumptive minimum. These benchmarks might be accompanied by explicit permission for agencies to select a lower or higher amount if the agency can explain that special circumstances call for it.

There is a crudeness, however, in the very notion of "dollars per life saved." A well-functioning regulatory state should not be interested in how many lives are saved, but in how many statistical years, or how many decently liveable statistical years, are added by regulation. An agency would do better to save forty statistical years than it would to save three, even though, through both steps, it might be taken to have "saved a life." Where resources are limited, it makes sense to devote resources to saving people who have the most good years ahead. This judgment may appear controversial, but it seems supported by common sense and economic criteria. Hence Congress should probably set floors and ceilings not for lives saved but for life-years saved, with permission to depart on the basis of justifications that are articulated publicly and are reasonable on the merits. For life-years, a presumptive ceiling of $500,000 might be a reasonable place to start. Of course any floors and ceilings should be accompanied with adjustments for inflation.

Without a figure per life or life-year saved, agencies effectively have discretion to weigh costs and benefits however they wish. Congress should offer some guidelines to achieve consistency across agency lines. At a minimum Congress should require agencies to be explicit about their valuations, so that these valuations will be subject to legislative and public oversight and review.

236. Such balancing can be handled with some fairly straightforward language. See note 233 supra.

237. See VALUING HEALTH FOR POLICY (George Tolley, Donald Kenkel, & Robert Fabian eds., 1994) (discussing the diversity of valuations suggested in contingent valuation studies).

238. For a discussion of quality-adjusted life years, see Richard Zeckhauser and Donald Shepard, Where Now for Saving Lives?, 40 LAW & CONTEMP. PROBS. 5 (Autumn 1976); Pildes and Sunstein, supra note 35, at 83-86 (asserting that quality-adjusted life years is a promising method for incorporating lay perspectives into regulation).

239. Pildes and Sunstein, supra note 35, at 83-86.
4. Substitute risks.

We have seen that there is a pervasive problem in risk regulation, one that is only now receiving public attention, and one that was not adequately addressed in the proposals before the 104th Congress.\(^{240}\) The problem occurs when the diminution of one risk simultaneously increases another risk.\(^{241}\) For example, fuel economy standards, designed partly to reduce environmental risks to life and health, may make automobiles less safe, thus increasing risks to life and health. Regulations designed to control the spread of AIDS and hepatitis among health care providers may actually cost lives by increasing the costs of health care, and thus making health care less widely available.\(^{242}\) Regulation of nuclear power may make nuclear power safer; but by increasing costs, such regulation promotes reliance on other energy sources, such as coal-fired power plants, which carry risks of their own.\(^{243}\) The general problem is ubiquitous.

As I have noted, no provision in the current proposals deals directly with this problem. Congress should consider a new provision to this effect:

"(1) Agencies shall ensure, to the extent feasible, that regulations do not create countervailing risks that are greater than those of regulated risks.

(2) This section shall not apply if it is inconsistent with the provisions of the enabling statute pursuant to which the agency is acting."

Such a provision would require agencies to ensure that overall risks are not increased. It would not fundamentally change current law. But it would be a modest step toward a more coordinated treatment of risk.\(^{244}\)

C. Ambitious Goals

Thus far I have offered modest suggestions that build on existing proposals. Three more ambitious strategies would accomplish a great deal more.

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240. H.R. 1022 does contain a reference to substitute risks in section 105, but agencies are required only to 'consider' such risks. H.R. 1022, 104th Cong., 1st Sess. § 105(4).

241. See Breyer, supra note 14, at 17 (explaining that the ban on EDB, a grain fumigant, could lead farmers to switch to other, more dangerous fumigants); Graham & Wiener, supra note 61, at 5-25; Sunstein, supra note 61; text accompanying notes 59-70 supra (discussing harmful, unintended consequences of regulations).

242. In American Dental Ass'n v. Martin, 984 F.2d 823 (7th Cir. 1993), the court upheld an OSHA regulation, but commented on OSHA's failure to follow the "universal precautions" requirement. Id. at 825. Judge Posner explains:

OSHA also exaggerated the number of lives likely to be saved by the rule by ignoring lives likely to be sacrificed by it, since the increased cost of medical care, to the extent passed on to consumers, will reduce the demand for medical care, and some people may lose their lives as a result.

Id. at 826.

243. See Kathleen C. Reilly, Global Benefits Versus Local Concerns: The Need for a Bird's Eye View of Nuclear Energy, 70 Iow. L.J. 679, 705-06 (1995) (noting that emissions from coal-fired power plants contribute significantly to greenhouse gases and to the air pollution which causes acid rain).

244. For a more detailed discussion, see Jonathon Baert Wiener & John D. Graham, Resolving Risk Tradeoffs, in Risk Versus Risk, supra note 61, at 220-40.
1. **Rank risks and reallocate resources to the most severe problems and increase the executive’s role in priority setting.**

As Justice Breyer suggests, a statute could give the executive some degree of authority to divert public and private resources from small environmental problems to large ones, ensuring greater cost-effectiveness in government and better priority-setting.245 There are some dangers with this proposal—a small group of bureaucrats should not have the authority to decide on basic social priorities. Nonetheless, a greater degree of executive priority-setting would make sense.

Justice Breyer's approach should be qualified by remembering that people are legitimately concerned with the various contextual factors discussed above—the voluntariness of the risk, its potentially catastrophic character, whether it is especially dreaded, whether it is equitably distributed, and so forth.246 Efforts at better priority-setting received some modest attention in the 104th Congress; but the proposals were not very ambitious.247

2. **Allow plans from the private sector that show greater and more cost-effective reductions.**

Often the problem with federal regulation is that the government lacks knowledge of the least expensive means of producing the preferred regulatory end. If the private sector were permitted to select the means, it could do so far more cheaply. This point has been recognized in Europe and Japan, under the general rubric of “environmental contracting.”248 In the Netherlands, for example, the government has experimented with comprehensive, multimedia environmental targets for pollution reduction and has developed strategies to work with industry groups to achieve overall goals.249 As part of the agreement with industry groups, the government agrees to waive otherwise applicable pollutant-by-pollutant regulations, and to limit changes in requirements during the length of the contract period.

In the United States, the EPA has taken modest steps in the same direction. For example, the EPA and Amoco concluded that a plantwide approach would better decrease chemical releases than the existing command-and-control system.250 Similarly, under the Clean Air Act, companies can, in essence, “contract out” of technology-based regulations for six years if they achieve a 90
percent reduction in toxic pollutants before the EPA promulgates relevant regulations.\textsuperscript{251}

Under most federal statutes, however, the EPA cannot approve private plans as substitutes for public mandates, even if the plans promise better results for less money. Congress should move in the direction of allowing private substitutes, so long as government monitoring is maintained.\textsuperscript{252} A provision of the June discussion draft of the Dole bill endorsed this strategy, but because its relationship to other statutes was quite ambiguous, it was unclear whether the provision would enable agencies to waive existing statutory requirements.\textsuperscript{253}

3. \textit{Regulate with incentives.}

We have seen that command-and-control regulation can be highly dysfunctional. Sometimes relevant statutes forbid agencies from choosing incentive-based strategies even where such strategies would be more effective. Congress might move away from command-and-control regulation by enacting a statute stating: "Notwithstanding any other provision of law, an agency shall be permitted to use economic incentives to induce industries to eliminate or reduce risks, if it can show that these methods will produce at least equivalent benefits in a more cost-effective manner."\textsuperscript{254} Of course, such a provision could increase the risk of litigation initiated by self-interested private groups seeking to stall desirable regulation.\textsuperscript{255} It could also allow agencies unenthusiastic about regulatory mandates to proceed with less effective means of achieving compliance. But despite the potential for abuse, the problems with existing command-and-control processes—excessive costs and insufficient regulatory benefits\textsuperscript{256}—are probably sufficient to make it worthwhile to move in this direction.

V. \textbf{Possible Futures}

In the area of regulatory reform, and particularly in the context of health, safety, and the environment, a number of creative ideas are percolating throughout the nation. These ideas have already had effects on legislation; they will have increasingly significant consequences in the coming years. Using

\begin{itemize}
\item \textsuperscript{251} Clean Air Act, 42 U.S.C. § 7412(i)(5)(A) (Supp. V 1993).
\item \textsuperscript{253} 141 \textit{Cong. Rec.} S9542-43 (daily ed. June 30, 1995) (containing performance-based standards which allow the regulated entity discretion to determine the best method of compliance with specific requirements).
\item \textsuperscript{254} \textit{Prepared Statement of Jonathan B. Wiener, Associate Professor, School of Law & School of the Environment, Duke University, Before the Committee on Governmental Affairs, United States Senate, Fed. News Serv.,} Mar. 8, 1995, \textit{available in LEXIS, News Library, Curnws File} (discussing the role of market-based performance incentives in the reform of health, safety, and environmental regulatory policy).
\item \textsuperscript{255} \textit{See, e.g.,} Sidney A. Shapiro & Thomas O. McGarity, \textit{Not So Paradoxical: The Rationale for Technology-Based Regulation,} 1981 \textit{Duke L.J.} 729, 737-38, \textit{available in WESTLAW, JLR Database} (discussing a situation in which eleven asbestos manufacturers found it more cost-effective to pay $640 per hour in legal fees to challenge OSHA's air quality standards than to comply with the standards).
\item \textsuperscript{256} \textit{See} text accompanying notes 49-58 \textit{supra.}
\end{itemize}
environmental regulation as an example, I organize those ideas into four general frameworks: cost-benefit analysis, pollution prevention, free market environmentalism, and democratic environmentalism. The following table is designed to provide capsule descriptions:

**TABLE 5**

*Five Approaches to Regulatory Reform*

<table>
<thead>
<tr>
<th></th>
<th>1970s Environmentalism</th>
<th>Cost-Benefit Analysis</th>
<th>Pollution Prevention</th>
<th>Free Market Environmentalism</th>
<th>Democratic Environmentalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived Problems</td>
<td>excessive pollution; power of industry</td>
<td>refusal to balance; absolutism</td>
<td>technological fixes; end of the pipe controls; power of industry</td>
<td>absence of well-defined property rights; environmentalism as a form of socialism; factionalism</td>
<td>command-and-control; poor priority-setting; absence of public deliberation; interest group power</td>
</tr>
<tr>
<td>Approved Measures</td>
<td>national ambient air quality standards; technological requirements</td>
<td>Toxic Substances Control Act; FIFRA</td>
<td>elimination of lead (CAA); asbestos rule (TSCA)</td>
<td>common law; the taking approach to environmental regulation; cf. wetlands protection and endangered species act reform</td>
<td>Emergency Planning and Consumer Right to Know Act; National Environmental Policy Act; acid deposition provisions of CBA</td>
</tr>
<tr>
<td>Disapproved Measures</td>
<td>common law national ambient air quality standards; technology-based regulation</td>
<td>Delaney Clause; national ambient air quality standards; technological fixes for water pollution</td>
<td>tinkering with current cars; technological fixes for water pollution</td>
<td>Clean Air Act, especially unholy coalitions</td>
<td>best available technology in CAA and CWA; Superfund; common law</td>
</tr>
<tr>
<td>Preferred Solutions</td>
<td>command-and-control; best available technology; technology forcing</td>
<td>balancing requirements</td>
<td>solar energy; electric cars; clean fuels; eliminating &quot;root cause&quot;</td>
<td>create property rights; watch the market work</td>
<td>economic incentives in the form of &quot;polluters pay&quot; and emissions trading</td>
</tr>
<tr>
<td>Attitude Toward CBA</td>
<td>hostility</td>
<td>of course favorable</td>
<td>suspicion, since CBA need not produce pollution prevention</td>
<td>better than status quo, but worse than real markets; threatens to be government dictation of outcomes based on inadequate information</td>
<td>potentially favorable, but emphasizes that analysis should be based on judgments, not just aggregated willingness to pay; points to differences between lay and expert judgments</td>
</tr>
<tr>
<td>Attitude Toward Economic Incentives</td>
<td>hostility</td>
<td>favorable insofar as they minimize costs</td>
<td>suspicion</td>
<td>favorable, but many questions, since there is a large government role in setting prices and/or quantities; understands &quot;economic&quot; incentives as creation of real markets</td>
<td>favorable insofar as they limit factional power, focus democracy on right questions, and put a premium on acquiring information</td>
</tr>
<tr>
<td>Normative Ideal</td>
<td>strict enforcement of statutory mandates</td>
<td>good balancing of relevant variables; maximizing social welfare</td>
<td>clean pollution-free technologies, with &quot;deep&quot; ecology and spiritual values as possible animating ideals; nature as a source of value</td>
<td>consumer sovereignty, based on maximizing welfare through aggregating private preferences for environmental and other goods</td>
<td>well-informed public judgments based on people's ideals and convictions</td>
</tr>
</tbody>
</table>

A. Cost-Benefit Balancing

One possibility, captured in many of the current proposals, is to shift in the direction of cost-benefit balancing for all statutes. Many current statutes forbid balancing and call for absolutism. Such an approach is not easy to justify.\textsuperscript{257} Thus the various statutes that are defined in terms of health or technology might be amended to call for cost-benefit analysis.\textsuperscript{258} As we have seen, this shift—in the direction of a cost-benefit state—responds to several current problems with regulation. Moreover, it is important to offer some criteria by which to monitor regulatory performance, and cost-benefit analysis is probably the best available technique for embarking on a form of "national performance review."

By itself, however, a shift towards cost-benefit analysis would be only a modest improvement over the status quo. We have seen that, as an abstraction, cost-benefit analysis lacks a theory of value. If this defect is remedied in the economist’s fashion, by rooting cost-benefit analysis in the economic criterion of private willingness to pay, it becomes quite controversial and indeed hard to defend as a global approach. Environmental amenities are not best valued by aggregating private willingness to pay.\textsuperscript{259}

Apart from the question of valuation, engrafting a cost-benefit requirement onto current law is only a modest shift; it does not represent a sufficiently fundamental change from the system of command-and-control regulation. Because the calculation of both costs and benefits can be enormously difficult, requiring agencies to make the necessary inquiries will impose large informational burdens on government. A general requirement of cost-benefit analysis allows legislators to take credit for "getting the regulators under control" without making the hard choices. Such a credit-claiming device hardly substitutes for reinvented government.

Imagine—to take a rough analogy—that the Soviet Union had decided in, say, 1986 to replace an "absolutist" five-year plan for producing wheat with another five-year plan, one that better recognized the need for balancing competing variables. This step might have been an improvement; but a five-year


\textsuperscript{258} Critics charge cost-benefit analysis with assuming a misleading wealth of knowledge. See Howard Latin, \textit{Ideal Versus Real Regulatory Efficiency: Implementation of Uniform Standards and "Fine-Tuning" Regulatory Reforms}, 37 STAN. L. REV. 1267, 1273-75, 1279 (1985) (criticizing proponents of cost-benefit analysis for their unrealistic assumption that all environmental conditions and control strategies can be known). It is of course possible that cost-benefit analysis would itself fail cost-benefit analysis; thus technology-based approaches could be justified as a response to government's lack of information and proper incentives. Similarly, it is possible that health-based standards can be justified by their aspirational and political values—providing a benchmark to which even dirty places may aspire. These ideas do not, however, argue against the background rule I defend above. See text accompanying notes 226-244 supra.

\textsuperscript{259} See ANDERSON, supra note 222, at 195-96 (noting difficulty in using private willingness to pay); text accompanying notes 272-276 infra.
plan based on governmental balancing is no less a five-year plan than one based on governmental absolutism. Governmental dictation of outcomes based on cost-benefit analysis is better than governmental dictation based on absolutism, but neither is ideal. A system in which agencies decide what is to be done only after considering all costs and benefits is likely to be time-consuming and will inevitably produce large-scale errors. Such a system imposes enormous data collection requirements on agencies and also forces them to make difficult, and hardly scientific, judgments about basic values. This approach may well be attractive to members of Congress seeking reelection, but it is not a great deal better than the status quo.

In fact it would be easy to imagine a generation of dreary cycles with respect to regulatory reform. In those cycles, conservatives might call for more balancing of costs and benefits, more procedures, and fewer deadlines for administrators; liberals would then argue against cost-benefit analysis and for health-based or technology-based standards, fewer procedures, citizen suits for regulatory beneficiaries, and stricter deadlines; conservatives, a few years later, would seek greater procedural requirements and more attention to costs; liberals would respond with the familiar litany; and so on until, say 2050.

Although this cyclical model is not a bad description of the regulatory debates since 1980, its continuation would represent an enormous failure of imagination and creativity. It would fix American policy in the outmoded debates of the early 1970s, before the outpouring of learning that makes the “more” or “less” debate seem so unhelpful. A cost-benefit state ought not to content itself with governmental specification of outcomes after governmental cost-benefit judgments have been made. It ought instead to create incentives for nongovernmental actors to generate information and to produce outcomes based on incentives generated by democratic judgments.

B. Pollution Prevention

In the last decade many people have enthusiastically embraced “pollution prevention” as the regulatory strategy of choice. On this view, government should eliminate pollutants from the market rather than require pretreatment or impose technological requirements to reduce the harmful effects of pollutants. Prominent examples of pollution prevention include the elimination of lead from gasoline; the phaseout of chlorofluorocarbons; government bans on DDT,

260. This is a Hayekian point based on the government’s informational limitations. Thus markets can be justified partly on the ground that individuals have far better relevant information than does government. See F.A. Hayek, The Constitution of Liberty 106-120 (1960).

261. See Barry Commoner, Making Peace With the Planet 189-90 (1990) (asserting that pollution prevention is the only effective environmental strategy); Barry Commoner, Failure of the Environmental Effort, 18 Env'tl. L. Rep. 10,195, 10,195 (1988) (noting that the lesson of the environmental effort is that pollution can be prevented). See also Symposium, Pollution Prevention, 29 Ga. L. Rev. 313 (1995) (surveying issues in pollution prevention); Remarks of President at Rego Event, Mar. 16, 1995, available in WESTLAW, Pres-Daily Database (President Clinton’s statement announcing the launch of EPA project to reduce pollution).
PCBs, and asbestos; the shift from high-polluting fossil fuels to clean, renewable energy sources; and restrictions on mercury pollution in the Great Lakes and phosphate pollution in local rivers.

Why is pollution prevention so attractive to so many people? Enthusiasts contend that by preventing the production or use of certain pollutants, government can make much more progress in reducing pollution than it can by imposing technological controls or fixes. The proper analogy, it is said, is to the contrast between prevention and cure. We know that cures tend to be both more expensive and less effective than preventive measures. American government has focused on cures; it should shift to prevention. From this perspective, the basic cause of environmental degradation is current technology, above all fossil fuels and modern cars. At the same time, the capacity of technology to diminish its own environmentally damage is rapidly becoming exhausted. Instead of imposing increasingly effective technological fixes, would it not be better to take steps to ensure that environmentally harmful substances are not produced at all?

Often the answer to this question is affirmative; often pollution prevention is both feasible and appropriate. But as a global approach, pollution prevention is inadequate. In some cases pollution prevention would impose extremely high costs—including environmental costs—for little environmental or other gain. Recall here that a federal court of appeals invalidated one of the most ambitious of the recent pollution prevention strategies—the ban on the manufacture and use of asbestos—on the ground that: (a) the benefits of the ban could not, in many sectors, be shown to justify the costs and (b) the ban on asbestos could itself produce a variety of environmental and health-related problems stemming from the use of environmentally inferior substitutes.

This example can be duplicated in many other contexts. Indeed the goal of pollution prevention, if taken literally, would be a social disaster. For example, an immediate and wholesale shift to electric cars might seem the best way to prevent air pollution from motor vehicles. But electric cars are now extremely expensive, and the costs, for workers and consumers, of a ban on contemporary automobiles would plainly be excessive. In fact, electric cars produce environ-

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262. But see Corrosion Proof Fittings v. EPA, 947 F.2d 1201, 1215-17 (5th Cir. 1991) (invalidating EPA ban on "for all practical purposes, all present and future uses of asbestos").

263. See Commoner, supra note 261, at 41-44 (concluding that the best environmental results are achieved by pollution prevention rather than control technologies).


265. See Wildavsky, supra note 214, at 77-103 (arguing for a version of cure rather than prevention).

266. Corrosion Proof Fittings v. EPA, 947 F.2d 1201, 1220-22 (5th Cir. 1991) (finding that EPA presented insufficient evidence to justify asbestos ban).
mental harms of their own—a potential problem for many pollution prevention strategies.

In these circumstances, pollution prevention is sometimes worse than cost-benefit analysis or economic incentives. By imposing a direct cost on polluting activity, economic incentives can identify the circumstances in which prevention or cure makes the most sense. For example, fees imposed on the production of sulfur dioxide may lead some companies to eliminate sulfur dioxide; in any case the judgment would be left to (appropriately constrained) market forces. Alternatively, cost-benefit analysis might show that pollution prevention is not worthwhile.

The appropriate conclusion is that pollution prevention is often a good regulatory strategy, but that it cannot be adopted in all or even most contexts. Whether it is the best solution depends on the pollutant in question, the available substitutes, and the effects of the preventative approach.

C. Free Market Environmentalism

Much creative thought has been dedicated to using "free markets" as a mechanism for promoting environmental and other goals. To free market advocates, the problem of environmental degradation stems from a simple fact: the absence of secure property rights in environmental amenities. The creation of secure property rights tends to reduce environmental problems.

There is much truth to this suggestion, and there is considerable promise to the resulting proposals. If environmental assets were owned, so that owners faced the full costs of excessive development, it is likely that excessive pollution would be prevented. In many settings, free market environmentalism points in promising directions. Consider, for example, possible amendments to the Endangered Species Act, related to proposals introduced in the 104th Congress. In its current form, the Act creates difficult problems for any landowner who discovers that his land contains a critical habitat for an endangered or threatened species. Discovery of such a habitat subjects the property to a range of limitations. Hence a landowner has an incentive either to lie about the facts or to proceed with development as rapidly as possible to avoid the constraints of the Endangered Species Act. It would be far better to use market approaches so that landowners are rewarded rather than punished by a discovery that threatened or endangered species need their land.

270. See Epstein, supra note 31, at 291-93.
271. See Endangered Species Act: Hearings Before the Senate Comm. on Environment and Public Works, 104th Cong., 1st Sess. (1995) available in LEXIS, Legis Library, Cngst File (statement of Gregg Easterbrook, author) (advocating the creation of private preservation firms that would operate on a free market basis); see also Incentives for Private Landowners Under the Endangered Species Act:
For two reasons, however, free market environmentalism is an incomplete solution. First, it is not always possible to assign ownership rights. Consider, for example, the problems posed by acid deposition, the greenhouse effect, and the destruction of the ozone layer. Economic incentives, based on market thinking, may be preferable to command-and-control measures; but it is difficult to imagine a system in which private ownership rights are fully allocated.

The second reason is more theoretical. Free market environmentalism depends on the view that the market paradigm should be deemed normative for purposes of environmental protection. Thus the key question becomes how much people, as consumers, would pay for environmental amenities. The answer to that question defines people's "choices" and "values." Indeed, for free market environmentalists it is hard to imagine how choices and values might otherwise be understood.

But it is wrong to take private choices, expressed in the market domain, as definitional of preferences. Private willingness to pay in the market domain reflects a particular setting; it does not reflect global choices or valuations. The choices people make are a function of the particular role in which they find themselves. As consumers, people make choices that diverge from those they make as citizens. The appropriate kind and degree of environmental protection raise issues that should be discussed by citizens offering reasons for one or another view. This democratic conception of environmental protection competes with the market-oriented view. Of course, a democratic approach to environmental law will use market incentives in many contexts, partly because of the advantages of market incentives on simple democratic grounds.

Moreover, private willingness to pay is undergirded by social norms and existing habits, and these should probably be changed; indeed, in the environmental context they had better be. Consider, for example, the issues posed by littering and recycling. Social norms with respect to these issues have shifted dramatically in the last generation. Thus the act of recycling is now, in many communities, taken for granted, where a decade ago that same act was perceived as odd or fanatical. Or consider smoking. A principal issue here is whether smoking is promoted or undermined by social norms. Large reductions in smoking among African-American teenagers appear to have been

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272. ANDERSON & LEAL, supra note 269, at 3, 147-51; see also VISCUSI, supra note 41, at 19-23 (exploring private willingness to pay as a method of valuation).

273. See Sen, supra note 212, at 23-24 (questioning the view that the individual in a free market best addresses environmental evaluation).


275. See generally Lawrence Lessig, The Regulation of Social Meaning, 62 U. CHI. L. REV. 943 (1995) (exploring how law helps to construct social reality and the techniques used by government to construct social meaning); Sunstein, supra note 274.
brought about by changes in social norms. A prime purpose of environmental law is to shape norms and habits. The central weakness of free market environmentalism is that it removes this issue from the agenda.

D. Democratic Environmentalism

A final approach would base regulatory law on people’s reflective judgments, as citizens, about their basic goals. On this view, the most significant problems in the current system consist of interest-group power, myopic responses to sensationalist anecdotes, and inadequate information. A market-oriented understanding of the regulation is inadequate because it fails to provide a forum for public deliberation. Similarly, a purely technocratic conception is inadequate because it devalues the need to rely on people’s reflective judgments. More specifically, the technocratic approach fails to reflect the various qualitative factors that influence public judgments about risk—whether a risk is voluntarily incurred, equitably distributed, potentially catastrophic, especially dreaded, and so forth. And as we have seen, there is a difference between the judgments people make as citizens and those they make as consumers; in principle, the former are the relevant judgments with respect to public policy.

A good model for democratic environmentalism is the Emergency Planning and Community Involvement Right-to-Know Act, which requires the creation and publication of a list of release levels for each of more than three hundred toxic chemicals that exceed threshold quantities. The result is a Toxic Release Inventory, an annual EPA report of toxic chemical releases that summarizes the relevant information. The publicity has two desirable consequences. First, the Toxic Release Inventory gives states and localities the information needed to decide whether to act at the governmental level. The Toxic Release Inventory thereby spurs decentralized political action. Second, public reaction to the publication leads many companies to pledge to make voluntary reductions. Thus the Monsanto Corporation pledged a ninety percent cut within four years, and AT&T established a goal of eliminating all toxic air emissions by the turn of the century; many other companies have produced new waste reduction initiatives as well.


277. This is the drawback of Breyer’s proposal, which offers a “better-government or bureaucratic solution” to the problem of risk regulation. Breyer, supra note 14, at 59

278. See Pildes & Sunstein, supra note 35, at 88.


280. Id. at § 11,023.

For democratic environmentalists, much of the promise of economic incentives lies in the fact that they promise to reduce interest-group power by removing attention from the question of means, which is so clearly a recipe for interest-group struggle. Economic incentives also have the advantage of focusing the public's attention on the right questions. Hence the acid deposition provisions of the 1990 Clean Air Act are a model for the future because they reflect a democratic judgment about outcomes. The much-criticized (and internationally much-imitated) National Environmental Policy Act is also a model from the democratic point of view, insofar as it requires the disclosure of environmental consequences before the government can act, and in that sense spurs political (but not judicial) safeguards. It is especially important to ensure that public judgments are adequately informed. A system in which the public responds to misleading and sensationalistic anecdotes only parodies democratic aspirations.

Of course these are stylized discussions of abstractions that must be applied to complex policy initiatives. It is best to approach particular problems in a pragmatic and experimental manner. All four approaches have something to offer, and they can be combined in different ways to arrive at the best solution. In cases involving dangerous substances with good substitutes, the argument for pollution prevention is overwhelming. Where private ownership is possible, free market environmentalism may well be preferable to the alternatives, notwithstanding the theoretical objections offered above. In some situations, cost-benefit balancing at the government level is unavoidable. We may believe that for reasons associated with democratic environmentalism, a strong commitment to the protection of endangered species makes sense. But even if this is so, it may be best to use market-like instruments to accomplish democratic goals—through, for example, "habitat credits" that reward rather than punish landowners who discover that their land supports the continued existence of an endangered species.

Some of the most promising modern initiatives are rooted in democratic judgments, but at the same attempt time to harness private initiative and market forces in the interest of those very judgments. In this way it may be possible to


283. See id. at 1353.


286. Id. § 4332(C).

287. See Strycker's Bay Neighborhood Council, Inc. v. Karlen, 444 U.S. 223, 227 (1980) (per curiam) (holding that so long as an agency follows NEPA's procedural requirements, the only role for a court is to make sure that the agency considered environmental consequences).

288. See WILDAVSKY, supra note 85, at 151, 375-94. For example, Superfund is a product of the less than fully informed public outcry surrounding the Love Canal scandal. Subsequent studies suggest that the risks to humans from hazardous waste dumps are actually very low. See id. at 160.

289. See HEARINGS, supra note 271.
accommodate both free market and democratic environmentalism, nominally opposed foundations that could make a creative rapprochement. This is the direction in which the most productive reforms might lead. They would produce a kind of cost-benefit state, but one that is neither purely technocratic nor entirely founded on the willingness-to-pay criterion. In such a state, regulatory outcomes would be founded on value judgments that are reflective, reasoned, and democratically developed. An approach of this kind would synthesize emerging enthusiasm for technocratic tools and for decreased cost with the basic American commitment to deliberative democracy.

VI. Conclusion

The election of the 104th Congress, together with the Contract with America, signals that the nation may be in the midst of a constitutional moment. At the very least the 104th Congress raised more fundamental questions about the national government than at any time since the New Deal. Most of the key initiatives were passed by the House but floundered in the Senate. The public never authoritatively committed itself to such fundamental change, and hence the constitutional moment, though signalled, failed to occur. Whether it will happen in the future depends on the judgments of the American people—on whether those judgments will be made with the firmness that American institutions require.

Even if regulatory reform does not become part of a constitutional moment, the nation is embarking increasingly on the project of assessing government performance by asking whether the benefits justify the costs. The regulatory state is becoming something like a cost-benefit state; this is an unmistakable feature of public life in many institutions of American government. In light of the chaotic and uncoordinated character of modern regulation, this is in many ways a salutary development. But it is only a start, above all because the abstract ideas of “cost” and “benefit” need to be specified by some theory of value. In the 104th Congress, legislative debates over regulatory reform were mostly procedural and unimaginative, trapped in an increasingly pointless discussion of whether “more” or “less” regulation is desirable. In the end, almost nothing happened.

To be sure, some proposals would have improved the modern regulatory state by reducing regulatory excesses and encouraging better priority-setting. In addition, the deliberative process of the Senate reflected a learning process in which poorly conceived provisions were deleted and better alternatives were proposed. But for the most part, these proposals were far less sophisti-

290. See for example, the Glenn bill, which preserved the EPA’s Toxic Release Inventory program in its entirety; this bill was defeated by Senate Republicans. Ronald Begley, Frustrations Mount in Effort to Scale Back Regulations, CHEMICAL WK., July 26, 1995, at 9. See also Proposal to Revive Regulatory Bill Gets Cool Reception from Dole, Industry, Daily Lab. Rep. (BNA) No. 152, at D-16 (Aug. 8, 1995).

cated and creative than those that emerged from the executive branch, including the "reinventing government" working groups.

A general lesson emerges from this phenomenon. In the last fifteen years, the executive branch has embraced a form of cost-benefit analysis for specific purposes—to promote better priority-setting, to move towards market-oriented tools, to exempt *de minimis* risks, to attend to informed public judgments, to foster voluntary and least-cost compliance, and to focus on ultimate results rather than methods and processes. To be sure, there is much to criticize in the efforts of the executive branch. But all in all, they are quite promising—certainly more so than the various bills that attracted so much attention in the 104th Congress.

As we have seen, balancing is preferable to absolutism. The point is especially important in light of the fact that with respect to the protection of human health, absolutism may actually be counterproductive and hence far from what it seems. But cost-benefit balancing is an abstract idea that needs specification, and it is insufficient to graft a supermandate of "balancing" on top of a structure of command-and-control regulation. Future congressional debate over the regulatory state should not remain frozen in a discussion of whether regulation imposes excessively high costs (it surely does) or whether more should be done to protect people from a range of harms, including risks to life and health (it surely should). Too many proposals in the 104th Congress reflected too little of the learning of the last twenty years of experience. Embodying instead the unhelpful (though accurate) judgment that there is "excessive" regulation, they attempted to clog the administrative process with paperwork.

There is an institutional lesson from all this: Congress is not well-equipped effectively to redesign the regulatory state. The executive branch, with its cadre of experts in numerous substantive areas, is in a better position. For this reason it may be best for Congress to limit its efforts to providing broad signals about what is wrong and to allow the executive branch, within limits, to provide solutions. Statutes that permit or require economic incentives, and that call for suitably constrained balancing, may be the best that Congress can do.

But there is a substantive lesson as well. If there is to be an Administrative Substance Act, it should build on the foundation laid by recent learning about regulatory performance. In the process it would be possible not only to save billions of dollars unnecessarily wasted on current programs, but also to save many thousands of lives.

A constitutional moment of the sort signaled by the 104th House of Representatives deserves far more reflection and scrutiny than the House itself was willing to give it. And a cost-benefit state will have many questions to answer,

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293. See notes 59-70 supra and accompanying text.
especially on underlying questions of valuation. I have suggested that a general background requirement of cost-benefit balancing—a substantive supermandate—should be enacted. I have also suggested that this background rule can and should be rejected through clearly expressed legislative judgments in particular statutes. In describing costs and benefits, Congress should allow room for a diverse array of values, and not limit agencies to the criterion of private willingness to pay. Many statutes require or permit agencies to promote goals independent of economic efficiency, and such statutes are entirely legitimate. Legislation that would amend all such statutes in favor of the efficiency criterion would indeed be quasi-constitutional in nature. But in a well-functioning deliberative democracy, such legislation would be hard to defend on the merits.

More modestly, an Administrative Substance Act, amending the regulatory state, should include the background requirement I have described and also require agencies to act in a cost-effective fashion. Congress should move as well in the direction of requiring economic criteria where the underlying statute is best understood as remedying a market failure, economically defined. A cost-benefit state, understood in these terms, could make large improvements, without embarking on foundational reform and without answering the hardest questions, by offering initiatives that make sense under any reasonable theory of value.