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Democratizing America through Law

Cass R. Sunstein

DEMOCRATIZING AMERICA THROUGH LAW*

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Our system of government is ineffective, inefficient, and undemocratic. Current institutions are the source of these problems. Without great difficulty, legal reforms could dramatically improve these institutions.

I propose three such reforms. First, government should rely much more than it does now on the provision of information, on disclosure, and on education. Second, economic incentives should replace the command-and-control regulation that has become so characteristic of our governmental institutions. Third, the law should promote more decentralization in the private and public spheres, allowing greater flexibility for states and localities, for employers, and for workers.

In recent decades, prescriptions of this general sort have been set out by economists with considerable care and clarity. There can be no doubt that legal initiatives in these directions would increase the efficiency of contemporary government; they would also help guarantee that regulation is actually effective in accomplishing its goals. These would be large improvements, especially in a period in which American industries must compete in increasingly international markets. I will therefore devote considerable attention to explaining how efficiency and efficacy might be brought about by legal reforms.

It is important to emphasize, however, that we are in the midst of a period in which much of the world has been embarking on the task of democratization. In such a period, it would be especially odd to concentrate our regulatory efforts on efficiency and efficacy alone. This is so particularly in light of the fact that from the standpoint of democratic theory, the contemporary American system of public law is nothing to celebrate. Democratic deliberation on the central issues is discouragingly rare. Sensationalistic anecdotes often dominate public debate. Powerful interest groups—on the left, right, and center—exert excessive influence over regulatory policy. Real participation in the public and private

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spheres is at best episodic. In this light, few matters deserve higher priority than institutional changes designed to increase the democratic character of the modern state.

I claim here that the three general reforms would promote not only efficiency and efficacy, but democracy as well. Strategies of disclosure and education are the precondition for a well-functioning democratic process. Without information, people cannot carry out their roles as citizens. Economic incentives have the fortunate consequence of requiring participants in the democratic process to focus on the key question: How much reduction in (say) risk do we want, and at what price? By contrast, existing approaches tend to distract attention from that question, and to direct it toward other issues that are at once less relevant and less intelligible. Decentralization is, under current conditions, an indispensable part of any strategy for democratization. The national government is simply too remote for general citizen control.

The reforms for economic efficiency therefore go hand-in-hand with reforms for democratization. To be sure, we will at some stage have to make some difficult choices between efficiency and democracy.[1] But for the next generation, the three fundamental changes will bring about powerful movements in both directions.

In this essay I will be painting with an extremely broad brush.[2] My aim is to set out the very general contours of reform strategies. In order to do this, the discussion of particular questions will have to be greatly compressed. In the near future, of course, the particulars will deserve much greater detail. I sacrifice attention to specifics with the understanding that in thinking about reform of American public law, the general defects of the system have been lost too often, in favor of discussion of unnecessarily incremental changes.

This essay has four parts. In Part I, I discuss the rise of the modern regulatory state, with particular reference to the New Deal period. Here I explore how the New Deal attempted simultaneously to increase economic efficiency and to promote democratization—and how it failed, in important respects, on both counts. In Part II, I explore the current state of regulatory government. I attempt to show its multiple inefficiencies and to say something about the consequences of those inefficiencies for the economy. I also explain why the current system of public law fails from the democratic point of view. In Part III, I outline remedies for the current situation, arguing that across a broad range, the goals of

1. *See infra* section IV-D.

2. *See also* Sunstein, *Administrative Substance*, 1991 DUKE L.J. 607, on which I draw for some sections of this essay.

economic efficiency and democratization are entirely compatible. Part IV offers some significant qualifications to this general claim.

I. THE NEW DEAL

President Franklin Roosevelt's New Deal, undertaken in the 1930s, represented a fundamental restructuring of the American legal system. Some people think that it amounted to a kind of constitutional amendment.[3] We need not go so far in order to recognize its foundational status in modern American government.

The New Deal operated against a well-defined constitutional backdrop.[4] That backdrop included the three basic cornerstones of the American legal system: checks and balances; federalism; and individual rights. The New Dealers viewed all of these in the context of the Great Depression, which left huge numbers of Americans out of work. In that context, the New Dealers thought that the pre-existing system of individual rights protected both too little and too much. That system consisted largely of the common-law catalogue of rights "against" government, including most notably private property and freedom of contract.

For the New Dealers, this catalogue protected too much, since it immunized existing holdings of property from democratic control. Not everything that people had, under the common law, was genuinely entitled to legal protection. The pre-existing system of rights also protected too little, since it furnished no safeguards against the various hazards of the market economy, including unemployment, homelessness, disability, and disease.

The emerging conception of rights called for redistribution of various kinds and also for recognition of a novel category of protected interests. The ultimate result was President Roosevelt's second Bill of Rights, including "the right to a useful and remunerative job," "the right to earn enough to provide adequate food and clothing and recreation," "the right of every family to a decent home," "the right to adequate medical care and the opportunity to achieve and enjoy good health," "the right to adequate protection from the economic fears of old age, sickness, accident, and unemployment," and "the right to a good education."[5]

Institutional changes followed from these ideas. Against the backdrop

3. *See* B. ACKERMAN, WE THE PEOPLE (1991) (discussing the New Deal as a constitutional amendment).

4. *See* C. SUNSTEIN, AFTER THE RIGHTS REVOLUTION (1990) (describing original framework of Constitution); Sunstein, *Constitutionalism After the New Deal*, 101 HARV. L. REV. 421 (1987) (same).

5. Roosevelt, *Message to the Congress on the State of the Union*, in 13 THE PUBLIC PAPERS AND ADDRESSES OF FRANKLIN D. ROOSEVELT 41 (1969) (speech delivered Jan. 11, 1944).

of the new conception of rights, the original system of checks and balances seemed anachronistic.[6] Far from a precious safeguard of liberty from government, that system appeared an unnecessary constraint on democratic action designed to promote economic productivity and to protect the disadvantaged. The most radical attacks on checks and balances—including *The Coming American Fascism*,[7] a publication intended not as a warning but rather as an optimistic statement of the wonderful things to come—were rejected. But the attack on the system of checks and balances did have two enduring legacies. It helped produce a concentration of judicial and lawmaking power in the presidency, which was no longer restricted to execution of the laws, narrowly understood.[8] It also contributed to the New Deal enthusiasm for "independent" agencies. These novel entities combined traditionally separated functions and were immunized from direct control by any of the constitutionally specified branches.

Under the New Deal reformation, the system of federalism fared little better. Those who produced the original framework envisioned states as an obstacle to national action,[9] and also as an arena for democratic self-determination. For the New Dealers, the states were not a guarantor of freedom, but on the contrary a barrier to necessary social change. A redirection of authority from the states to the national government was indispensable if public officials were to carry out their new tasks. Greatly expanded national power, mostly under the commerce clause, was the result.

Once authority was thus redirected, there was no doubt that the presidency would be the principal beneficiary. In a single bold stroke, Roosevelt united the Hamiltonian belief in an energetic executive with the Jeffersonian belief in collective self-determination. The presidency became the focal point for democratic self-governance.

In the New Deal period, the belief in economic productivity and the belief in democracy were thoroughly merged. New institutions were necessary above all to improve the operation of the economy—increasing business confidence, providing the preconditions for stock markets, ensuring people of the stability of banks, managing the business cycle, and protecting farmers against undue economic fluctuations. Eventually spurred by Keynesian economics, the New Deal understanding of the role of the state was centered on the goal of economic prosperity. Roosevelt's program is often associated with protection of the disadvan-

6. *See* R. TUGWELL, THE BATTLE FOR DEMOCRACY (1935).

7. *See* L. DENNIS, THE COMING AMERICAN FASCISM (1939) (arguing for fascism in America).

8. *See* T. LOWI, THE PERSONAL PRESIDENT (1985) (describing changes in presidency).

9. *See* THE FEDERALIST No. 38, at 239 (J. Madison) (R. Fairfield 2d ed. 1966).

taged, and this idea was indeed central to him.[10] But government assurance of the successful performance of the economy was the principal goal of the New Deal reforms.

This idea did not conflict with democratic ideals. On the contrary, the market system that preceded the New Deal was subject to sustained challenges in this period, precisely on democratic grounds. Before the rise of modern regulatory institutions, common-law courts, which were hardly accountable to the people, created much of the basic system of governance. Thus the law of property, tort, and contract was a crucial regulatory system. It had been created by the unelected judiciary.

In the early part of the century, courts went so far as to interpret the Constitution as embodying common-law principles.[11] In this way they immunized the common law from democratic control. By contrast, the new entities created by the New Deal were intended to be popularly accountable. Indeed, those entities would be supervised by the people in ways that would lead to large gains in democratic self-governance. Thus it was that the belief in economic prosperity and democratic government marched hand-in-hand.

Contemporary governmental structures are best understood as an outgrowth of the New Deal reformation. Our current system is not, of course, by any means identical with what emerged from the New Deal period. There have been occasional bursts of governmental activity and retrenchment, and these have been quite important. Above all, the "rights revolution" of the late 1960s and early 1970s witnessed an extraordinary growth of new regulatory entities, rivalling the New Deal itself in scope and importance.[12] Of particular interest was the creation of institutions designed to reduce risks in consumer products, the workplace, and the natural environment.

Here the rhetoric of "rights" and "redistribution" accompanied the claims of democracy and efficiency. The new entities were supposed to protect the "right" to a safe workplace, an unpolluted atmosphere, and in clean water—and also to shift resources from (among others) employers to employees. Both economic and democratic goals were important here as well. The new institutions were supposed to remove a substantial drain on the economy, and also to reflect democratic judgments about risk reduction.

Much the same can be said about the new attack, prominent since the

10. *See* K. DAVIS, FDR: THE NEW DEAL YEARS, 1933-1937 (1986) (discussing Roosevelt's reaction to invalidation of National Industrial Recovery Act and support for child labor, minimum wage, maximum hours, and collective bargaining measures).

11. *See* Lochner v. New York, 198 U.S. 45 (1905) (invalidating law addressing maximum hours of work).

12. *See* C. SUNSTEIN, AFTER THE RIGHTS REVOLUTION (1990).

1960s, on discrimination on the basis of race, sex, and disability. Discrimination has been challenged as a barrier to economic productivity and to the political equality so crucial to democratic principles. In the area of civil rights, economic and democratic aspirations played a central and complementary role.

At least since the election of President Reagan in 1980, we have been in a period of retrenchment, in which New Deal reforms have often been rethought in favor of renewed attention to the capacities of private markets. The enforcement practices of federal agencies have been significantly changed as a result. But there has been no fundamental rethinking of current institutions. The changes have been largely incremental.

II. THE STATUS QUO

How has our system of public law actually performed? Has it promoted economic prosperity and democratic governance? We now have considerable evidence on both scores. And while there have been some significant successes,[13] much of the overall story is dismaying.

A. Inefficiency

The current system of public law has been extraordinarily inefficient. The annual net cost of regulation has been estimated at between $44 and $200 billion.[14] There is no question that we need not spend this amount for the benefits we actually receive.

So-called economic regulation—calling for price and entry controls in various sectors of the economy—produced unnecessary and exorbitant costs for American consumers. Thus it is estimated that airline deregulation yielded gains to airlines and travellers of about $15 billion annually.[15] The corresponding numbers for trucking deregulation and railroad deregulation were $30 billion and $15 billion.[16] The Natural Gas Act, which allowed government control of gasoline prices, certainly contributed to the dangerous gas shortages of the 1970s.[17] The resulting inefficiencies led to decreases in industrial production, losses of hundreds

13. *See* Sunstein, *Administrative Substance*, *supra* note 2.

14. *See* Hahn & Hird, *The Costs and Benefits of Regulation*, 8 YALE J. ON REG. 233, 247 (1991) (net cost of regulation estimated at $44 billion). For references to other studies, and a suggestion that this is far too low, see *The Total Cost of Regulation?*, REGULATION, Summer 1991, at 22-25. The Office of Management and Budget makes an estimate of between $50 and $150 billion. *See* OFFICE OF MANAGEMENT AND BUDGET, REGULATORY PROGRAM OF THE UNITED STATES—APRIL 1, 1987-MARCH 31, 1988, at xii (1987).

15. OFFICE OF MANAGEMENT AND BUDGET, REGULATORY PROGRAM OF THE UNITED STATES—APRIL 1, 1989-MARCH 31, 1990, at 6 & citations therein (1989).

16. *Id.*

17. *See* S. BREYER, REGULATION AND ITS REFORM (1982).

of thousands of jobs, and reductions in the supply of gas for millions of Americans.[18]

Nor are inefficiencies limited to the area of economic regulation. The Food and Drug Administration (FDA) has delayed the entry of beneficial foods and drugs into the market, significantly increasing risks to safety and health.[19] The Environmental Protection Agency's (EPA) fuel economy standards appear to have produced uncertain gains in light of the fact that manufacturers were in any case moving to smaller and more efficient cars; but they did lead to significant losses in lives as a result of producing more dangerous, lighter vehicles.[20] The United States spent no less than $632 billion for pollution control between 1972 and 1985.[21] Some studies suggest that alternative strategies could have achieved the same gains at less than one-quarter of the cost.[22]

So much for the facts. What is the cause of the current situation? A pervasive source of regulatory inefficiency in the United States is the use of rigid, highly bureaucratized "command and control" regulation, which dictates, at the national level, control strategies for hundreds, thousands, or millions of companies and individuals in an exceptionally diverse nation. Command and control regulation is a dominant part of American government in such areas as environmental protection and occupational safety and health.

In the environmental context, command and control approaches usually take the form of regulatory requirements of the "best available technology" (BAT), which are almost always imposed only on new pollution sources. BAT strategies are pervasive in federal law. Indeed, they are a defining characteristic of regulation of the air, the water, and conditions in the workplace.[23]

One of the many problems with BAT strategies is that they ignore the enormous differences among plants and industries and among geographical areas. In view of these differences, it is wildly inefficient to impose nationally uniform technological requirements. It does not seem sensible to impose the same technology on industries in diverse areas—regardless of whether they are polluted or clean, populated or empty, or expensive or cheap to clean up.

There are other sources of inefficiency as well. BAT strategies require

18. *Id.*

19. *See, e.g.*, H. GRABOWSKI & J. VERNON, THE REGULATION OF PHARMACEUTICALS (1983) (discussing harmful effects of FDA screening).

20. *See* R. CRANDALL, REGULATING THE AUTOMOBILE (1986).

21. *See* T. TIETENBERG, EMISSIONS TRADING 41-45 (1985).

22. *Id.*

23. *See, e.g.*, 42 U.S.C. § 7411(a)(1)(C) (1988) (Clean Air Act); 33 U.S.C. § 1316(a)(1) (1988) (Clean Water Act).

all new industries to adopt costly technology, and allow imposition of more lenient standards on existing plants and industries. Through this route BAT strategies actually penalize new products, thus discouraging investment and perpetuating old, dirty technology. The result is inefficiency in investment strategies, in innovation, and even in environmental protection.

Such strategies also fail to encourage the development of new pollution control technology, and indeed, serve to discourage it by requiring its adoption for no financial gain. Under the BAT approach, a company that innovates will simply have to invest more in pollution control. It will be punished rather than rewarded for the development of new control technology. BAT strategies are also extremely expensive to enforce, imposing on the EPA and the Occupational Safety and Health Administration (OSHA) an extraordinary monitoring burden.

Additional inefficiency stems from the fact that BAT approaches focus on the technology at the end of the pipe. This is merely a way of aiming at symptoms rather than underlying causes of pollution. For example, sulfur dioxide emissions (the major source of acid rain) are controlled by forcing coal-fired power plants to adopt costly "scrubbing" strategies. A much cheaper method of control is to encourage companies to switch to cleaner coal.[24]

In general, governmental specification of the means of achieving desired ends is a good way of producing inefficiency. Instead of permitting industry and consumers to choose the "means"—and thus to impose a form of market discipline on that question—we often select the means in advance. The governmentally-prescribed means is often the inefficient one.

Other inefficiencies in existing law stem from inadequate attention to the problem of incentives. Consider, for example, the Superfund statute, which was created to deal with the problem of abandoned toxic waste dumps. Congress' basic strategy was to impose joint and several liability on everyone connected with the dump in question—managers or owners of the site, generators of the waste, and transporters.[25] At first glance, the strategy seems both fair and efficient: fair, because it imposes cleanup duties on everyone; efficient, because it is likely to deter everyone from contributing to the problem of abandoned waste sites.

A predictable consequence of this strategy is to produce incentives, not to clean up, but instead to have protracted litigation on the liability question. If everyone is liable, it is almost as bad as if no one is. The liability

24. *See* B. ACKERMAN & W. HASSLER, CLEAN COAL/DIRTY AIR (1981) (discussing interest group pressures behind Clean Air Act).

25. 42 U.S.C. §§ 9601-9675 (1988).

of each person is effectively "decreased" by virtue of the sheer numbers of people who are liable as well. For each person, contemplating possible courses of action, liability must be understood in the context of a situation in which many other people will be liable too. If hundreds of people are subject to suit, one can be sure that there will be endless litigation on the liability question. Thus it is that on average, seven years and at least $4 million in transactions costs are necessary before final clean-up even begins.[26]

More generally, studies of the costs and benefits of regulatory programs show a crazy-quilt pattern, including both too much and too little regulation. Consider, for example, expenditures per life saved.[27] There is now considerable data on the amount of money spent to save lives in various government programs. Some programs pay for themselves in terms of health and related savings. The lives saved are purely a bonus, in the sense that they come for free. Other programs cost between $100,000 and $300,000 per life saved—surely an amount well worth spending. But still other programs cost $89 million per life saved, $92 million per life saved, even $132 million per life saved. To be sure, some disparities, even significant ones, might well be expected in a democracy.[28] But it is difficult to believe that these differences reflect anything but interest-group power and irrationality of various sorts. In any case, they are highly inefficient.

This brief summary should be sufficient to suggest that from the standpoint of efficiency, much of modern government is ill-directed. Some programs are not beneficial at all. Others have unnecessary and costly side-effects. We could obtain the same benefits much more cheaply.

Sometimes inefficiency in government, particularly when described by economists, seems a dry and technical matter. But the consequences of the status quo are anything but technical. They include a range of adverse effects on human beings: excessively high prices, greater unemployment, lower benefits in terms of safety and health, more poverty, and increased difficulty for American companies and workers attempting to compete in an increasingly international market.

B. Democracy

The New Deal aspired not only to greater efficiency but also to more democracy. The New Dealers hoped for a system in which citizens and representatives, operating through responsive but expert organs, would

26. *See* Elliott, *Superfund: EPA Success, National Debacle?*, NAT. RESOURCES AND ENV'T (forthcoming 1992).

27. *See* Morrall, *A Review of the Record*, REGULATION, Nov.-Dec. 1986, at 25.

28. *See* Pildes & Anderson, *Slinging Arrows at Democracy: Social Choice Theory, Value Pluralism and Democratic Politics*, 90 COLUM. L. REV. 2121 (1990).

make deliberate decisions about the basic system of public law. In place of the undemocratic; ad hoc systems of common-law ordering and judge-made constitutionalism, new regulatory institutions would be subject to political will and carry out public instructions. The new regime was to combine a high degree of accountability with a high degree of deliberation.

In practice, this democratic aspiration has often been defeated. People rarely have enough information to participate at all, or at all well, in the processes of government. The extraordinary concentration of regulation in Washington has hampered democratic deliberation both in localities and in the private sphere. The use of complex technological mechanisms, and their centrality to actual outcomes, have contributed to the power of well-organized interest groups over the regulatory process. Thus it is that the New Deal has helped bring about a kind of Madisonian nightmare of government by faction.[29]

Democratic failures have often been documented.[30] The BAT approach, for example, is severely deficient from the standpoint of a well-functioning political process. That approach ensures that citizens and representatives will be focussing their attention not on what levels of reduction are appropriate, but instead on the largely incidental and nearly impenetrable question of what technologies are now available.[31] Because of its sheer complexity, this issue is not easily subject to democratic resolution. Moreover, the issue is not the relevant one for democratic politics, which is the appropriate degree and nature of environmental protection—an issue to which the BAT question is only indirectly related.

The focus on the question of "means" also tends to increase the power of well-organized private groups, by allowing them to press environmental and regulatory law in the service of their own parochial ends. These ends include, for example, the promotion of ethanol, which is helpful to corn farmers though not necessarily to environmental protection; other fuels might well be preferable on environmental grounds. Ends favored by parochial interests also include governmentally-compelled use of coal "scrubbers," which are helpful to eastern coal, although not necessarily to air quality. The use of already-clean coal might well be better.[32]

In this respect, the BAT strategy is emblematic of a far more general

29. *See* Stewart, *Madison's Nightmare*, 57 U. CHI. L. REV. 335 (1990) (describing factionalizing of regulatory policy).

30. *See* B. ACKERMAN & W. HASSLER, *supra* note 24; R. SHEP MELNICK, REGULATION AND THE COURTS (1983).

31. *See* Ackerman & Stewart, *Reforming Environmental Law: The Democratic Case for Market Incentives*, 13 COLUM. J. ENVTL. L. 171 (1988).

32. *See* B. ACKERMAN & W. HASSLER, *supra* note 24.

problem in current regulation. Centralization at the national level diminishes opportunities for citizen participation. It promotes intense and unproductive struggles among well-organized factions. Education of citizens about the key issues—risk levels and risk comparisons—is at best episodic. In their capacity as consumers, citizens, workers, or users of the air and water, people are inadequately informed of the risks that they face. Public attention tends to be focussed on particular incidents, which are gripping and sensationalistic, but often misleading.

In these circumstances, it is difficult to ensure that citizens and representatives will be involved in deliberating about different strategies for achieving social goals, or for deciding what those goals are in the first place. By directing attention to means, the system also creates powerful incentives for interest groups to ensure that they are favored in the legislature or the bureaucracy. Thus it is that current institutions cannot carry out Roosevelt's goal of linking the Hamiltonian commitment to an energetic executive with the Jeffersonian belief in self-government. The democratic aspirations of the New Deal have largely been defeated.

III. REMEDIES

It would be most fortunate if the inefficiencies in current regulation could be remedied through reform strategies that simultaneously promoted democratic government. In this section, I argue that the same reforms that would increase efficiency would indeed promote democracy. I deal with three such reforms: disclosure and education; economic incentives; and decentralization.

A. Disclosure and Education

Many Americans are unaware of the risks that they face in day-to-day life. Often workers do not know about toxic substances in workplaces, or about the risks that they cause. Consumers of ordinary foods are unable to evaluate the dangers posed by fats, calcium, sugar, and salt. People in small communities do not know that toxic waste dumping has occurred; and if they know the facts, they do not know the risks.

Scenarios of this sort are especially likely in light of the fact that ordinary people have a difficult time obtaining information about risk. Causation is extremely complex here, and accurate inferences are extremely difficult to draw. Often risks take many years to materialize. Individual susceptibility varies. Changing technology makes learning from the past a hazardous enterprise.[33]

It would be reasonable to say that in cases of this sort, the interest in

33. *See* Rose-Ackerman, *Progressive Law and Economics—And the New Administrative State*, 98 YALE L.J. 341, 356 (1988).

freedom or autonomy—quite apart from efficiency and democracy—requires a governmental remedy. Knowing choices are a precondition for liberty. Claims from efficiency and democracy argue in the same direction.[34] Disclosure by the government itself, or by others at the government's behest, will often promote both efficiency and democracy.

1. Efficiency

When information is lacking, there may well be a conventional case of market failure under economic criteria.[35] To be sure, information—like other goods—is a scarce commodity. Perhaps the market has produced the optimal level of information. The optimal level is not complete information. If so, there is no market failure—even if there might be a problem under noneconomic criteria. But there are several reasons why the market for information may indeed fail.

First, information is sometimes a public good. Once it is available at all, or to anyone, it is available to everyone or to many people. People can thus capture the benefits of information without having to pay for its production. Once created, a report discussing the risks posed by carcinogens in the workforce may well benefit employees a great deal—but no individual employee has the right incentive to pay his proportional share for the report. Each employee has the incentive to "free ride" on the efforts of others. The result is that too little information will be forthcoming.

The point applies to materials about shared risks in general. Indeed, the point applies to materials about all information of shared importance. It suggests that there is a strong prima facie case, on economic grounds, for governmental interference in the information market.

Second, manufacturers may have poor incentives to provide information about hazardous products. Competition over the extent of danger may decrease total purchases of the product rather than help any particular manufacturer obtain greater sales. The phenomenon has sometimes played a role in discouraging competition over safety among manufacturers of tobacco products. At least in principle, the phenomenon may occur frequently.[36]

Information asymmetries may produce a "lemons" problem, in which

34. A qualification is necessary here. By offering more information than is efficient, the government may create inefficiency. By providing information, however, the government promotes a certain conception of liberty.

35. *See* P. ASCH, CONSUMER SAFETY REGULATION (1988); Rose-Ackerman, *supra* note 33, at 356.

36. There are, however, many cases in which companies compete over safety, and in this sense the market often works as an effective check on dangerous products.

dangerous products drive safe ones out of the market.[37] Imagine, for example, that producers know which products are safe, but that consumers cannot tell. Safe products may not be able to compete if they sell for no higher price than dangerous ones, if safe products are more expensive to produce, and if consumers are unable to tell the difference. In that case, the fact that sellers have information, while buyers do not, will ensure that "lemons"—here dangerous products—will dominate the market. Regulation designed to provide information is the proper remedy.

All this suggests that there is frequently a market failure in the provision of information. At least as a presumptive matter, government remedies are an appropriate response. These remedies might take the form of governmentally-provided information, education campaigns, or disclosure requirements. Strictly on economic grounds, there is much to be said in favor of these remedies. They may fortify the operation of the marketplace. They may be a precondition for free choice, the background goal of free markets.

We now have a good deal of empirical information about disclosure of risks. In general, the information suggests that disclosure can be a helpful and cost-effective strategy.[38] Workers do indeed respond to new information about risks, quitting or demanding higher salaries. Consumers often react well to the disclosure about danger levels. In general, there is every reason to think that governmentally-mandated disclosure, if suitably designed, is an effective mechanism for promoting economic efficiency.

2. *Democracy*

Suppose that we wanted to increase the democratic character of contemporary government, by promoting citizen participation in, and control over, governmental processes. A good initial step would be for government to provide enough information so that people can make knowledgeable judgments.

Government might itself supply information, or require disclosure by private citizens and companies. Return, for example, to the matter of expenditures per life saved.[39] There is now considerable data on the amount of money spent to save lives in various government programs.

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37. *See* Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J. ECON. 488 (1970).

38. *See* Viscusi, Magat & Huber, *Informational Regulation of Consumer Health Risks: An Empirical Evaluation of Health Warnings*, 17 RAND J. ECON. 351 (1986); Viscusi & O'Connor, *Adaptive Responses to Chemical Labelling: Are Workers Bayesian Decision Makers?*, 74 AM. ECON. REV. 942 (1984); *see also* W. KIP VISCUSI, W. MAGAT & J. HUBER, LEARNING ABOUT RISK (1987).

39. *See* Morrall, *supra* note 27 (cataloging expenditures per life saved).

As we have seen, what emerges is a crazy-quilt. Some programs pay for themselves in terms of health and related savings; others are extremely hard to defend. At the very least, the American public should be informed of these disparities so that it can evaluate them. Provision of information about the content and expense of regulatory programs should be high on the governmental agenda.

Or consider the question of risk regulation in general. On that question, people are poorly informed.[40] For example, they appear not to know that the risks of nuclear power are substantially smaller than the risks posed by other energy sources. They appear not to have a clear sense of the relationships among different risks that are confronted in everyday life. Smoking, for example, produces 345,000 deaths per year, an annual risk of 3.0 in 10^3; all occupations produce between 11,000 and 200,000 annual deaths, an annual risk of 1.1 to 20 in 10^4; and boxing produces only three deaths a year, an annual risk of 5.4 in 10^4.

Information of this sort ought to be widely available. The fact that it is not creates a significant failure in government regulation. At least equally important, it presents a large obstacle to citizenship. The problem appears in the private sector, in local government, and at the state and national levels. Workers uninformed of risks are unable to participate usefully in the process of deciding among different possible levels of workplace safety. Local communities, deciding whether to allow toxic waste sites or plants that produce sulfur dioxide, need to be in a position to make informed choices.

A large virtue of a federal system is that it permits different states, having different values, to make different choices about social arrangements. In the context at hand, many decisions about the relations among industrial development, employment, pollution, and risk must be made at the state or local level. An absence of information is a severe obstacle to this process. The same is true at the national level, where sensational anecdotes displace reasoned analysis of the alternatives.

The most general way to put the point is to note that on the framers' view, America was to be a deliberative democracy, in which representatives, accountable to the people, would make decisions through a process of deliberation uncontrolled by private factions.[41] Without better information, neither deliberation nor democracy is possible. Legal reforms designed to remedy the situation are a precondition for democratic politics.

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40. Some of this is undoubtedly a product of heuristics of various sorts. But more information could help overcome some of the relevant biases.

41. *See* Bessette, *Deliberative Democracy: The Majority Principle in American Government* in HOW DEMOCRATIC IS THE CONSTITUTION? 102 (1980); *see also* THE FEDERALIST No. 10, at 16 (J. Madison) (R. Fairfield 2d ed. 1966).

3. *Current Steps*

The national government has started a series of steps in the right direction. Mandatory messages about risks from cigarette smoking, first set out in 1965 and modified in 1969 and 1984, are the most familiar example.[42] The FDA has long maintained a policy of requiring risk labels for pharmaceutical products.[43] The EPA has done the same for pesticides and asbestos.[44] There are numerous other illustrations. Indeed, the effort to provide information counts as one of the most striking, if incipient, developments in modern regulatory law. Three recent initiatives are especially notable.

In 1983, the OSHA issued a Hazard Communication Standard (HCS),[45] applicable to the manufacturing sector. In 1986, the HCS was made generally applicable. Under the HCS, chemical producers and importers must evaluate the hazards of the chemicals they produce or import; develop technical hazard information for materials safety data sheets, and labels for hazardous substances; and, most important, transmit this information to users of the relevant substances. All employers must adopt a hazard communication program—including individual training—and inform workers of the relevant risks.

In 1986, Congress enacted an ambitious new statute, the Emergency Planning and Community Right to Know Act (EPCRKA).[46] Under this statute, firms and individuals must report, to state and local government, the quantities of potentially hazardous chemicals that have been stored or released into the environment. Users of such chemicals must report to their local fire departments about the location, types, and quantities of stored chemicals. They must also give information about potential adverse health effects. A detailed report suggests that EPCRKA has had important beneficial effects, spurring innovative, cost-effective programs from the EPA and from state and local government.[47]

The FDA has also adopted informational strategies. In its most ambitious set of proposals, the FDA seeks: (a) to compel nutritional labelling on nearly all processed foods, including information relating to cholesterol, saturated fat, calories from fat, and fiber; (b) to require compliance with government specified serving sizes; (c) to compel companies to conform to government definitions of standardized terms, including, "reduced," "fresh," "free," and "low;" and (d) to allow health claims only if

42. 15 U.S.C. § 1331 (1988).
43. 21 U.S.C. §§ 351-360 (1988).
44. 15 U.S.C. §§ 2601-2655 (1988).
45. 29 C.F.R. 1910.1200(g) (1990).
46. 42 U.S.C. § 11,044 (1988).
47. *See* GENERAL ACCOUNTING OFFICE, TOXIC CHEMICALS, REPORT TO THE CONGRESS (1991).

they (1) are supported by scientific evidence and (2) communicate clear and complete information about such matters as fat and heart disease, fat and cancer, sodium and high blood pressure, and calcium and osteoporosis.[48]

These initiatives are simply a beginning. Broader and more ambitious programs, coordinating the general communication of social risks, are very much in order. It has been suggested that government might eventually develop a "national warnings system" containing a systematized terminology for warnings.[49] Such a system could apply to all contexts and risks, and give a uniform sense of risk levels. The existence of a uniform language would make it possible to assess risks across a wide range of social spheres.

Most important of all, such a system would perform a vital educative function, one that could complement the functioning of markets and provide a necessary precondition for democratic choice. We should ultimately aspire to go far beyond risk regulation, to promote the dissemination of information bearing on democratic affairs in general.

B. Economic Incentives

By economic incentives, I mean financial penalties imposed on harm-producing behavior or benefits conferred on harm-reducing behavior. Such penalties should supplement and even displace command-and-control regulation.

1. Efficiency

It is inefficient for government to prescribe the means for achieving social objectives. Ordinarily it would be far better, on economic grounds, for government to create incentives to engage in socially desirable conduct, and to permit the market to decide how companies respond to those incentives.

It is especially inefficient for government to dictate technology. A far better approach is to impose a tax on harmful behavior,[50] and to let market forces determine the response to the increased cost. Government should generally impose fees on those who put pollutants into the atmosphere—instead of, for example, mandating costly "scrubbing" technol-

48. *See* 56 Fed. Reg. 60,302 (1991) (to be codified at 9 C.F.R. pts. 317, 320 & 381) (proposed Nov. 27, 1991).

49. *See* W. KIP VISCUSI, W. MAGAT & J. HUBER, *supra* note 38, at 155.

50. A Coasian qualification is necessary here: Sometimes the apparent victim of the harmful conduct is in the best position to avoid the harm, and in such cases it is possible to say that the apparent victim should be charged with taking preventive or remedial measures. An example would be a case in which workers could cheaply prevent the costs of a chemical in the workplace, by wearing masks or clothing that prevent the harm from occurring.

ogy for sulfur dioxide. Consumption of the harm-producing good will decline. Producers will shift to less harmful methods of production. They may, for example, substitute clean for dirty coal.

More generally, government might adopt a simple, two-step reform policy in the area of social risks and social harms.[51] First, those who impose harm must pay for it—by purchasing permission to do so, perhaps through a licensing procedure. Second, those who obtain the resulting permission should be able to trade their "licenses" with other people. In the pollution context, this would mean that people who reduce their pollution below a specified level could trade their "pollution rights" for cash.

In one bold stroke, such a system would create market-based disincentives to pollute and market-based incentives for pollution control. Such a system would also reward rather than punish technological innovation in pollution control, and do so with the aid of private markets. Very generally, and quite outside the environmental area, it makes sense to think about programs of this sort for regulation of harmful behavior.[52]

An idea of this kind might be made part and parcel of a system of "green taxes." With such a system, we might levy taxes on people who impose externalities on others—users of dirty automobiles, farmers who employ pesticides, coal-fired power plants, gasoline that produces air pollution, products that contribute to destruction of the ozone layer or the greenhouse effect. Tax levies of various sorts are used by many nations already, though they have been slow in coming to the United States.[53]

These levies have had, or are projected to have, excellent results. Thus a higher tax on leaded gasoline in Great Britain increased the market share of unleaded gas from four to thirty percent in less than a year.[54] It is estimated that a doubling of pesticide prices would cut pesticide use in half.[55] It is also estimated that a fee of $110 per ton on carbon would decrease carbon dioxide emissions by twenty percent by the year 2005.[56]

An important advantage of such strategies is that they would dramatically increase government revenues. This is an especially worthwhile goal in a period of large deficits. The suggested carbon tax would gener-

51. Here I generalize from the helpful discussion in Ackerman & Stewart, *supra* note 31 (defending incentive systems).

52. The most controversial application would be civil rights, but even here the proposal seems plausible. *See* Mashaw, *Implementing Quotas*, 79 GEO. L.J. 1769 (1991) (discussing transferable quota requirements).

53. A study by the Organisation for Economic Co-operation and Development found over 50 environmental charges among 14 of its members. *See* L. BROWN, SAVING THE PLANET 143 (1991).

54. *Id.*

55. *Id.* at 146.

56. *Id.* at 148.

ate over $130 billion.[57] Other such taxes on polluting activity could produce billions of additional dollars in revenue.[58]

Economic incentives could be applied in other areas as well. Workers' compensation plans, for example, operate as a reasonably effective guarantee of workplace safety. According to a recent study, "If the safety incentives of workers' compensation were removed, fatality rates in the United States economy would increase by almost 30 percent. Over 1200 more workers would die from job injuries every year in the absence of the safety incentives provided by workers' compensation."[59] This contrasts with a mere two to four percent reduction in injuries from OSHA, an amount that links up well with the fact that annual workers' compensation premiums are more than 1000 times as large as total annual OSHA penalties.[60] The tax system could be used to punish employers who provide dangerous workplaces.

The Consumer Product Safety Commission could experiment with a system in which producers of harm-producing products would pay a fee into the federal treasury. Ultimately, we might hope for a coordinated system of risk regulation, one that imposed uniform fees for harm-producing activities.

2. *Democracy*

Thus far we have seen that a shift to economic incentives would be efficient and effective. What consequences would such a shift have for democratic government?

The answer is that it would have significant consequences, and that these would be extremely beneficial.[61] The current system puts public attention in the wrong places. Imagine, for example, that Congress and the citizenry—following the contemporary model—are asking the question whether ethanol, or some other gasoline substitute, should be required in new cars. It is perfectly predictable that in answering this question, well-organized groups with a significant stake in the outcome will bring their influence to bear. It is also predictable that ethanol producers may seek and actually obtain regulatory benefits, and for reasons bearing little or no relationship to environmental protection.

At the same time, the underlying substantive question—whether ethanol is actually an environmentally superior product—will have to be resolved on the basis of technological complexities not easily addressed by

57. *Id.* at 145.

58. *See* L. BROWN, *supra* note 53, at 145.

59. W. KIP VISCUSI, REFORMING PRODUCTS LIABILITY 178 (1991).

60. *Id.* at 178-79.

61. The point is treated nicely in Ackerman & Stewart, *supra* note 31, and I draw on their discussion here.

the public or its representatives. If this is the issue on which the political process focusses, we are therefore likely to have a series of laws that represent, not public-spirited deliberation with a measure of broad accountability, but instead trade-offs among well-organized private groups, or, in Madisonian terms, government by faction. By directing attention to means, this system creates strong incentives for interest groups to ensure that they are favored in the legislature or the bureaucracy.

Compare a system of economic incentives. Here the issue is not one of means, but the amount of sulfur dioxide that will be allowed into the atmosphere—an issue to be resolved in the process of deciding how many licenses should be given out, and for how much pollution. This shift would ensure that citizens and representatives would be focussing on how much pollution reduction there should be, and at what cost. The right question would be put squarely before the electorate. No longer would it be possible to pretend that environmental protection is costless. No longer would the central issue be displaced by the largely incidental question of means.

Moreover, a system of financial penalties allows far less room for interest-group maneuvering. The large question—how much environmental protection at what cost—does not readily permit legislators to favor a well-organized, narrow group, such as the agricultural lobby, or the coal lobby. Special favors cannot easily be provided through a system of economic incentives. The very generality of the question will work against narrow favoritism. To be sure, the ultimate question of pollution reduction may be answered in a way that reflects sustained political pressure rather than democratic deliberation. But the risks are minimized, certainly as compared with the existing system.

There are other democratic advantages as well. Economic incentives should simultaneously promote coordination and rationality in regulation, by giving government an incentive to attend closely, and for the first time, to how other risks are treated. This should bring a salutary measure of structure and sense to risk regulation in general. As an important by-product, the new system should create a powerful incentive to obtain information about the actual effects of pollution and pollution control. If members of Congress are deciding on the level of risk reduction, they will not want to do so in a vacuum, especially in light of the significant costs of large reductions. Affected groups will therefore be encouraged to engage in research about real-world consequences.

Information about consequences frequently remains in its most preliminary stages. The new premium placed on information should be a particularly important gain. There is every reason to design regulatory strategies that put a premium on greater research, so that when we act, we know what we are getting, and at what price.

All these considerations suggest that economic incentives—favored so firmly on economic grounds—have as one of their principal justifications a series of democracy-reinforcing, faction-limiting characteristics.

3. *Recent Initiatives*

The movement toward economic incentives is preliminary but real. Thus far, it has occurred mostly in the environmental area. An important series of administrative initiatives have brought about "emissions trading," especially under the Clean Air Act.[62] Under the EPA's policy, a firm that reduces its emissions below legal requirements may obtain "credits" that can be used against higher emissions elsewhere.

Through the "offset" policy, which is formally codified in the Clean Air Act, a company may locate in an area not in compliance with national air quality standards, if and only if it can offset the new emissions by reducing existing emissions, either from its own sources or from other firms. Through the "banking" policy, firms are permitted to store emission credits for their own future use. Companies may also engage in "netting," by which a firm modifies a source, but avoids the most stringent emissions limits that would otherwise be applied to the modification by reducing emissions from another source within the same plant. Through the use of "bubbles," existing sources may place an imaginary bubble over their plants, allowing each emitting device within the plant to discharge different emission levels so long as the total emission level is in compliance with aggregate requirements. We now have a good deal of evidence about the emissions trading program.

For various reasons, the use of the program has been quite limited.[63] A study in 1986 showed 42 federal bubbles; 90 state bubbles; 2,000 federal offsets; between 5,000 and 12,000 acts of netting; and 100 acts of banking.[64] Despite this limited activity, there is considerable evidence that this policy has been successful. Overall, the program has produced savings of between $525 million and $12 billion.[65] By any measure, this is an enormous gain.

On balance, the environmental consequences have been beneficial. Offsets must, by definition, produce environmental gains. The preliminary evidence shows favorable effects from bubbles as well.[66] There may be

62. *See* Emissions Trading Policy Statement: General Principles for Creation, Banking, and Use of Emission Reduction Credits, 51 Fed. Reg. 43,814 (1986).

63. *See* Dudek & Palmisano, *Emissions Trading: Why is This Thoroughbred Hobbled?*, 13 COLUM. J. ENVTL. L. 217 (1988).

64. *See* Hahn & Hester, *Marketable Permits: Lessons for Theory and Practice*, 16 ECOLOGY L.Q. 361, 374 table 2 (1989).

65. *See id.*

66. *Id.* at 375.

modest beneficial effects from banking and modest adverse effects from netting.[67] The overall environmental effect is therefore good, with cost entirely to one side.

The EPA has also permitted emissions trading for lead. Under this policy, a refinery that produced gasoline with lower than required lead levels could earn credits. These could be traded with other refineries or banked for future use.[68] Until the termination of the program in 1987, when the phaseout of lead ended, emissions credits for lead were widely traded. EPA concluded that there had been cost savings of about twenty percent over alternative systems, marking total savings in the hundreds of million of dollars.[69] There have been initial administrative efforts as well with respect to water pollution and ozone depletion.[70]

The most dramatic program of economic incentives can be found in the 1990 amendments to the Clean Air Act. The Act now explicitly creates an emissions trading system for the control of acid deposition. In these amendments, Congress has made an explicit decision about aggregate emissions level for a pollutant.[71] Whether the particular decision is correct may be disputed. But surely there are large democratic benefits from ensuring that public attention is focussed on that issue.

There are other beneficial features to the acid deposition provisions. Congress has said that polluters may obtain allowances for emissions avoided through energy conservation and the use of renewable energy sources. In this way, avoidance of this kind is turned into dollars, in the form of increased permission to pollute.[72] This provision creates an incentive to shift to conservation and renewable sources, without providing further environmental degradation.

Moreover, polluters are explicitly permitted to trade their allowances; this is a first in national legislative regulation.[73] In this way, people who are able to reduce their pollution below the specified level receive economic benefits. Again incentives are created for environmentally beneficial behavior. An especially intriguing provision allows spot and advance sales of sulfur dioxide allowances, purchasable at $1,500 per ton.[74]

67. *Id.* at 374.

68. *See* 40 C.F.R. § 80.20(d), (e) (1990).

69. ENVIRONMENTAL PROTECTION AGENCY, COSTS AND BENEFITS OF REDUCING LEAD IN GASOLINE, FINAL REGULATORY IMPACT ANALYSIS VIII-31 (Feb. 1985); *see also* Hahn & Hester, *supra* note 64, at 387.

70. On ozone depletion, see 53 Fed. Reg. 30,566 (1988) (to be codified at 40 C.F.R. pt. 82) (final rule promulgated Aug. 12, 1988); on water pollution, see Hahn & Stavins, *Incentive-Based Environmental Regulation: A New Era From an Old Idea*, 18 ECOLOGY L.Q. 1, 18-19 (1991).

71. 42 U.S.C. §§ 7651c, 7651d, 7651o (Supp. 1991).

72. *Id.* § 7651c(f)(2).

73. *Id.* § 7651b(b).

74. *Id.* § 7651o(c).

Through this route, polluters must—for the first time—pay a fee for their pollution. Even more intriguing is a provision calling for auction sales of specified numbers of sulfur dioxide allowances.[75] Here the market is permitted to set the price for polluting activity.

For the most part, however, the Clean Air Act does not require polluters to pay for their "licenses." Instead, government continues to permit them to pollute for free. This is a large obstacle to a sensible system of regulation. In the future, Congress should build on the acid deposition model, requiring payments by polluters and others who inflict social harm.

C. *Decentralization*

1. *Efficiency*

Under current law, national standards are set both for the environment and for workplace safety and health.[76] But as we have seen, the costs and benefits of regulatory activity are widely variable across both time and space. Consider, for example, the issue of clean air. To require the same level of ambient air quality in Los Angeles and Wyoming makes little sense in light of the fact that the costs (and benefits) of achieving that level vary so dramatically. Uniform controls seem implausible if Wyoming has already attained a level of X, and if Los Angeles could not do so without suffering profound economic dislocations—including, for example, ceasing use of the automobile. Such controls would be grotesquely inefficient.

Return to the area of workplace safety. It has been proposed that the current system of collective bargaining should be replaced by nationally-mandated minimum standards.[77] In fact, the OSHA now imposes a wide range of national requirements for both safety and health. But surely American workers do not agree about the appropriate tradeoffs among health, wages, medical benefits, and jobs. Some employees are willing to subject themselves to greater risks in return for greater benefits.[78] Others seek low level risks, and are willing to take lower salaries in return.[79]

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75. *Id.* § 7651o(d).

76. In the absence of federal preemption, however, states and private actors may increase protection above the national level.

77. *See* Fried, *Individual and Collective Rights in Work Relations: Reflections on the Current State of Labor Law and Its Prospects*, 51 U. CHI. L. REV. 1012 (1984).

78. *See* W. KIP VISCUSI, RISK BY CHOICE (1983).

79. It is common at this point to express concern with the decision to trade safety for a lower salary. To some extent, the concern is misplaced, since safety is not an absolute, and since tradeoffs among important social goods, including safety, are a part of any imaginable human life. To some extent the concern may point to a good argument for redistribution of resources, so that people are not faced with such hard choices. But a bar to the preferred (even if hard) choice is not the same as redistribution.

Just as consumers make safety-related tradeoffs in the purchase of consumer goods, such as cars, so workers differ in the employment market.

In these circumstances, nationally mandated standards are inefficient. They are ill-matched to the extraordinary diversity of worker values and preferences. It would be far better to allow a degree of workplace differences, matching that diversity. Decentralization would accomplish this goal.

2. *Democracy*

If our goal is increased democratization, it is indispensable to promote more decentralization. In the area of workplace safety, for example, democratic solutions cannot be achieved at the national level. The market mechanism of "exit"—permitting dissatisfied workers to leave—might well be accompanied by the political mechanism of "voice," by which workers participate in workplace governance.[80] In order for that latter mechanism to operate, it is crucial that workplace conditions be decided at the local level. Opportunities for greater decentralization are thus part and parcel of the process of democratizing the employment market.

In the area of environmental protection, it is also possible to strengthen state and local options, and precisely in the interest of democratization. We might, for example, permit dramatic variations with respect to air and water quality, accompanied by national "floors" designed to take account of interstate effects. Federal laws should be written to minimize preemption of different state solutions. Judge-made preemption doctrines should be designed to require a clear congressional statement before allowing such preemption.

Moreover, the national government might encourage the provision of information to states and localities to allow them to decide how to deal with such problems as release of toxic wastes. Through all these routes, the democratic process at the local level might be strengthened, thus promoting what is, as a practical matter, the only way to promote more citizen engagement with governmental affairs.

3. *Current Initiatives*

Here too a number of initial steps have been taken in the right direction. The "New Federalism" of the 1970s and 1980s has modestly contributed to a reinvigoration of state authority.[81] We have seen a dramatic

80. *See* A. HIRSCHMAN, EXIT, VOICE, AND LOYALTY (1970) (discussing "exit" and "voice" remedies).

81. *See generally* ADVISORY COMMITTEE ON INTERGOVERNMENTAL RELATIONS (ACIR), REGULATORY FEDERALISM: POLICY, PROCESS, IMPACT, AND REFORM 19-21 (1984) (Washington, D.C.).

growth in regulatory activity at the state level. Recycling programs are now common. Sometimes fees are required for disposal of solid waste—an application of the basic principle that "polluters pay." Six states now maintain programs for the reduction of sources of solid waste. California has been especially inventive, adopting programs for reduction of toxic substances[82] and, perhaps most dramatically, for reducing air pollution in the badly polluted Los Angeles area. The latter program will require conversion of all cars to electric power or other "clean" fuels by 2007; other provisions will encourage public transportation and limit the use of automobiles.[83]

North Carolina has adopted a "pollution prevention program" designed to prevent pollution before it occurs, rather than to impose technology at the end of the pipe. These are simply a few of the many respects in which recent initiatives have begun to implement Justice Brandeis' aspiration that the states might serve as "laboratories" experimenting with different systems for attaining social goals.[84]

Nor has the national government been inactive in this area.[85] Under EPCRKA, discussed above, information about the toxic chemical emissions must be provided to the states. The resulting information has been used as the foundation for a wide range of laws at the state level.[86] Oregon now requires pollution reduction goals, as does Massachusetts. States have used the inventory as a basis for enforcement activity. Other national initiatives might similarly act as a spur for state and local decisions.

IV. QUALIFICATIONS

There are some important qualifications to the arguments I have made thus far. Informational strategies, economic incentives, and decentralization have genuine limitations. In some cases, these approaches are inadequate. I outline some of the relevant considerations.

A. The Limits of Information

There are two problems with informational strategies. First, the provision of information is expensive. Second, the provision of information is sometimes ineffectual or even counterproductive.

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82. *See* Viscusi, *Predicting the Effects of Food Cancer Warnings on Consumers*, 43 FOOD DRUG COSM. L.J. 283 (1988).

83. *See* Lester, *A New Federalism? Environmental Policy in the States*, in ENVIRONMENTAL POLICY IN THE 1990S: TOWARD A NEW AGENDA 59, 62 (N. Vig & M. Kraft eds. 1991).

84. *See* New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

85. *See* OFFICE OF MANAGEMENT AND BUDGET, *supra* note 14, at xxviii-xxix.

86. *See* GENERAL ACCOUNTING OFFICE, REPORT TO CONGRESS, TOXIC CHEMICALS (1991).

Consider, for example, the fact that the government estimates the cost of the new FDA rules at no less $1.7 billion over twenty years. The president of the National Food Processors Association claims that the first year costs alone will exceed $2 billion.[87] In either case, the cost is high. OSHA's hazard communication policy is estimated to save 200 lives per year—a lot—but at an annual cost of $360 million.[88] The expenditure per life saved is therefore $1.8 million. This is far better than a large number of regulations, and an amount well worth spending; but it is more than many agencies spend for life-saving regulations. It is therefore not the case that the OSHA rule stands out as a means of saving lives especially cheaply.

When informational strategies are costly, there are two possible responses. The first is to do nothing. If the savings—in terms of health, life, informed choice—are relatively low, costly strategies, even informational ones, make little sense. There will therefore be circumstances in which a government remedy for an absence of information is unwarranted.

The second possibility is to impose a regulatory strategy rather than to require disclosure. By a regulatory strategy, I mean a mandatory outcome, such as a flat ban on the materials in question, or governmental specification of a particular outcome, as in a mandated maximum level of carcinogens in the workplace. Sometimes the regulatory strategy will be cheaper, because the price of disclosing information—changing packaging and so forth—is so high. This is likely to be the right response when most or all people would respond to the information in the same way. In that case, it is unnecessary to provide information, and better simply to dictate an outcome that, by hypothesis, is generally preferred. For an especially dangerous substance, one that reasonable people would not choose to encounter, a flat ban is appropriate.

Even when informational strategies are not prohibitively expensive, they may be ineffectual, and thus have low benefits. People have limited ability to process information.[89] They have a notoriously difficult time in thinking about low-probability events. Sometimes they discount such events to zero; sometimes they treat them as much more dangerous than they actually are. If people are told, for example, that a certain substance causes cancer, they may think that it is far more dangerous than it is in fact. But some carcinogenic substances pose little risk.

For example, California's Proposition 65, an initiative designed to promote citizen awareness of risk levels, requires warnings for exposure to

87. Chicago Tribune, Nov. 7, 1991, at 2.

88. *See* Morrall, *supra* note 27.

89. *See generally* JUDGMENT AND DECISION MAKING: AN INTERDISCIPLINARY READER (H. Arkes & K. Hammond eds. 1986).

carcinogens. At first glance the requirement seems unexceptionable, indeed an important advance. But it has in some cases been counterproductive. Consumers appear to think that twelve of every 100 users of a product with the required warning will die from cancer. This estimate exceeds reality by a factor of 1000 or more.[90] With respect to information, less may be more. If information is not provided in a clear and usable form, it may actually make people less knowledgeable than they were before. The Truth-in-Lending Act has suffered from this problem.[91]

The problem is aggravated by the fact that people tend to use heuristic devices that produce systemic errors. A particular problem here is the "availability heuristic," in accordance with which people tend to think an event is probable if they can readily bring to mind memories of its occurrence. Thus, for example, an airplane disaster will be thought relatively probable, whereas a death from diabetes will not be. There is a good deal of evidence that people overestimate risks from highly visible or sensational causes, but underestimate risks from less dramatic ones.[92]

There is evidence as well of another problem for informational strategies: people often believe themselves to be immune from risks that they acknowledge are significant and real with respect to others.[93] In one study, for example, ninety-seven percent of those surveyed ranked themselves as average or above average in their ability to avoid both bicycle and power mower accidents.[94] Disclosure of information may be an unhelpful tool when people do not internalize the new data.

There is also evidence that people feel frustrated and frightened by probabilistic information, and greatly prefer a certain answer. The desire to reduce cognitive dissonance may prevent people from recognizing that risks are real even when information is provided.[95] The same desire may undermine efforts to provide risk information when the truth is that people must inevitably operate under conditions of uncertainty. This desire may also prevent people from recognizing that conditions are dangerous even in the face of solid information to this effect.

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90. *See* Viscusi, *Predicting the Effects of Food Cancer Risk Warnings on Consumers*, in JUDGMENT AND DECISION MAKING: AN INTERDISCIPLINARY READER, *supra* note 89, at 283.

91. *See* Rubin, *Legislative Methodology: Some Lessons from the Truth-in-Lending Act*, 80 GEO. L.J. 233, 235-36 (1991) (consumers have difficulty processing information from required publications of annual percentage rates).

92. *See* Slovic, Fischhoff & Lichtenstein, *Informing the Public About the Risks from Ionizing Radiation*, in JUDGMENT AND DECISION MAKING: AN INTERDISCIPLINARY READER (H. Arkes & K. Hammond eds. 1986).

93. *Id.* at 116.

94. *Id.*

95. *See* Akerlof & Dickens, *The Economic Consequences of Cognitive Dissonance*, 72 AM. ECON. REV. 307 (1982).

There is a pervasive risk of information overload, causing consumers to treat a large amount of information as equivalent to no information at all.[96] Finally, initially held beliefs are not easy to modify, even when new information, undermining those beliefs, has been presented.[97]

Yet another problem is that disclosure requirements may have unanticipated adverse effects. For example, companies may respond to disclosure requirements by refusing to provide information at all (if this is an available option). The result will be the removal from the market of information that is useful overall. If industry responds to a requirement of evidentiary support for scientific claims with mere "puffing," consumers may have less information than they did to begin with. If advertisers must conduct extensive tests before they are permitted to make claims, they will be given a strong incentive to avoid making claims at all.[98]

Finally, information may be an inadequate strategy where greater safety is a public good.[99] Imagine, for example, that the replacement of carcinogen X with safe product Y would benefit all workers simultaneously. Imagine, too, that each worker is bargaining separately with the employer. In that case, no individual employee would have a sufficient incentive to decrease his demand for wages and other benefits to obtain increased safety. Because the benefits of the new substance would be provided to everyone, no individual employee would "pay" enough to obtain them, preferring instead to take a free ride on the efforts of others. The result will be too little safety on conventional economic criteria. Here a regulatory response is appropriate.

All this suggests that there are real limitations to informational strategies. These limitations should, however, be taken merely as qualifications of the broader point, or as providing helpful guidance to those seeking to design effective information requirements. They do not bear fundamentally on reform efforts.

The first and most important point is that some of these very limitations can be overcome through more and better information. An awareness of the distorting effects of current heuristics can help overcome those effects; general publicity about those effects might therefore supply a corrective. In addition, well-tailored programs would minimize the relevant risks by putting the information in its most understandable form.

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96. *See* Jacoby, Nelson & Hoyer, *Corrective Advertising and Affirmative Disclosure Statements: Their Potential for Confusing and Misleading the Consumer*, J. MARKETING, Winter 1982, at 61, 70.

97. *Id.* at 118.

98. *See* Craswell, *Interpreting Deceptive Advertising*, 65 B.U.L. REV. 657 (1985).

99. *See* Rose-Ackerman, *supra* note 33, at 356. This argument depends for its plausibility on transactions cost barriers to free mobility of labor. If labor were completely mobile, the problem should disappear.

Instead of labelling a substance a "carcinogen," a uniform system of risk regulation could give better awareness of risk levels. While informational strategies are no panacea, they would accomplish considerable good, at least if the possible obstacles are kept firmly in mind.

B. When Economic Incentives Fail

There are several possible problems with the use of economic incentives. The clearest cases arise when the appropriate response to a harm-producing activity is a flat ban. With an especially dangerous pollutant, an increased price is inadequate. The pollutant should be eliminated from the market, at least if its social benefits do not outweigh the relevant danger and less dangerous substitutes are available. But if a flat ban is not desirable, there should be a strong presumption in favor of economic incentives.

Another problem is that economic incentives might be thought to operate as a regressive tax, in the sense that they raise prices in general, and the rise will come down especially hard on the poor. An increase in the price of gasoline, or in the cost of high-polluting vehicles, will make things more difficult for poor people in particular. Indeed, any effort to require manufacturers and sellers to "internalize" the costs of their production might seem objectionable insofar as it increases prices in a way especially hard on the indigent.

In general, I do not believe that this objection is persuasive.[100] Any regulatory solution will increase prices; economic incentives are not distinctive in this regard. And if the solution is otherwise sensible, it ought not to be treated as a "regressive tax," any more than the pricing system itself is a regressive tax. Moreover, a refusal to require enterprises to bear the social costs of their activities is hardly an effective way of benefiting the poor. The class of people burdened by this refusal includes many people not poor at all; and the refusal burdens many poor people.

It is certainly correct, however, to worry about the consequences of price increases, produced by market forces or by government, for poor people. The point suggests that the taxes or fines produced by economic incentives might be accompanied by subsidies or transfer payments to people who are needy. Some of these subsidies might be funded out of the very revenues produced by the program itself.

It is also possible to argue, as against economic incentives, that they improperly "commodify" certain interests. Perhaps some such interests—the right to bodily integrity, the right to freedom from pollution—ought not to be traded on markets at all. Perhaps such trading debases and diminishes the interests in question, with harmful consequences for

100. *See* Sunstein, *Administrative Substance*, *supra* note 2.

social attitudes.[101]

In some settings the objection seems plausible. Thus there is reason to question a decision to allow trading of body parts, or of gestational capacities. But in the general context of regulatory law, it is doubtful that the argument takes one very far. It seems implausible to suggest that social attitudes would be materially changed by a system in which polluters and others who cause harm must pay. Indeed, a shift of the entitlement from the polluter to the pollutee might have desirable effects on social attitudes, by establishing the correct starting point.[102] In any case, it seems far better to require people who cause harm to pay, rather than to allow them to do so for free.

Any incentive-based system must confront a range of practical problems. In the environmental context, for example, there is a risk that polluters will cluster in a particular area, thus subjecting people in that area to unacceptably high danger.[103] Determining the amount of any tax or fine is not a simple scientific exercise. It entails a democratic judgment about appropriate risk levels, and that decision will pose great difficulties. But these sorts of questions should be treated as matters of detail. They do not bear fundamentally on the shift to economic incentives.

C. *National Commitments*

Decentralization is not a preferred approach in at least three categories of cases. The first involves national moral commitments that cut across local boundaries. The most obvious candidates here are the prohibition on discrimination on the basis of race and sex. Here decentralized solutions are inadequate. The whole point of the national commitment is to ensure adherence to a principle that transcends state boundaries. The Civil War, establishing a prohibition on slavery and a requirement of racial equality, is the core example.

The second category involves interstate spillovers, of which air pollution is the most conspicuous example. Because air pollution in California will affect Nevada, we cannot rely entirely on intrastate controls. There are inadequate political safeguards in one state against the imposition of harms on another. In such cases, national intervention is necessary.

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101. In the environmental context, see S. KELMAN, WHAT PRICE INCENTIVES? (1981); on commodification in general, see Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849 (1987).

102. On the relationships between preferences and initial allocations of entitlements, see, *e.g.*, Kahneman, Knetsch & Thaler, *Experimental Tests of the Endowment Effect and the Coase Theorem*, 98 J. POL. ECON. 1325 (1990); *see also* Knetsch, *The Endowment Effect and Evidence of Nonreversible Indifference Curves*, 79 AM. ECON. REV. 1277 (1989); Knetsch & Sinden, *Willingness to Pay and Compensation Demanded: Experimental Evidence of an Unexpected Disparity in Measures of Value*, 99 Q.J. ECON. 507 (1984).

103. *See* S. BREYER, *supra* note 17.

Even here, however, such intervention should take the form of "floors"—minimum standards—rather than nationally dictated outcomes.

The third category is the most interesting. In a federal system, states compete with each other for revenue-attracting business and industry. This competition creates an important "race to the bottom" with respect to regulatory controls. In many respects this is entirely healthy. The right of exit is a critical check against oppressive law. Indeed, the right of exit is probably a more important constraint on oppressive legislation than the Supreme Court's decisions under the dormant commerce clause, even if all these are taken together.

But the "race" can have unfortunate consequences as well. Suppose, for example, that state A wishes to impose occupational safety and health controls—or even disclosure requirements—on industries within its borders. Suppose that such industries are free to leave. It may well be that in such circumstances, no state will impose the relevant controls, even though all states, if agreement were possible, would choose to do so. President Roosevelt made precisely this argument in supporting child labor legislation at the national level.

In some cases, then, the race to the bottom will put states in a prisoners' dilemma, requiring a cooperative solution in the form of a binding agreement through the national government. Through legislation at the national level, states can prevent the mutually destructive competition to attract business and industry.

This argument does not prove as much as might appear. Sometimes national legislation will not be in the interests of the states' own people, since it will drive down profits in a way that will have adverse effects on (among other things) poverty, employment, and the general availability of goods and services. But national legislation will sometimes be justified on this ground.

D. Democracy and Markets: Potential for Conflict

In most of this essay, I have argued that economic and democratic goals can march hand-in-hand. Across a wide range, we can attempt precisely the same reforms to bring about both of these goals. For this reason, there is no need to choose between efficiency and democracy, at least for most of our efforts in the next generation.

It would be a mistake, however, to pretend that there is no potential for conflict. An exploration of that potential of course raises extremely large and complex issues. I make only a few brief observations.

The most important point is that efficiency is a function of aggregated private willingness to pay, a criterion that is, to say the least, problematic from the democratic point of view. A system is efficient if entitlements

have been allocated so as to "maximize value," with reference to private willingness to pay. For believers in a democratic system, however, this criterion is distorted, and in two ways. First, a democratic system operates on the principle of one person, one vote. By contrast, a market allocates "votes" in accordance with how much people are willing to pay for things. Since willingness to pay is a function of ability to pay, rich people will be willing to pay far more than poor people. Indeed, the indigent can pay nothing at all. The principle of political equality, so central to democratic theory, is violated by the efficiency criterion.

Second, a democratic system, at least in America, is not supposed to represent an effort to aggregate private preferences.[104] Instead the process is a deliberative one, in which different information and perspectives are brought to bear. In that deliberative process, preferences are supposed to be transformed into values.[105] Markets do not have this function.

The notion of aggregating private willingness to pay accurately captures the economic ideal of "consumer sovereignty." But whatever its value in some contexts, this is a caricature of the American conception of sovereignty. That conception aspires not to aggregated consumption choices, but instead to a transfer of the power of governance from the King to "We the People." Insofar as markets accurately capture private willingness to pay, they are a powerful tool of prosperity, and on a certain, not wholly implausible view, of liberty as well. But this salutary function is not the same as democratic self-governance. The considered judgments of the citizenry may well diverge from aggregated consumption choices.[106] And when there is such a divergence, the former should generally prevail.

These objections to the willingness to pay criterion, invoking democratic principles, are hardly irrelevant to the reform of American public law. They suggest that exclusive use of the principle of cost-benefit analysis is highly objectionable. They suggest that there will indeed be conflicts between democratic aspirations and the goal of economic efficiency. But if what I have said is persuasive, a great deal can be done before reaching those conflicts.

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104. As social choice theorists have shown, it could not do so even if we wanted it to, because of the paradoxes created by multimember bodies. *See* K. ARROW, SOCIAL CHOICE AND INDIVIDUAL VALUES (1955) (discussing these paradoxes).

105. *See* Pitkin, *Justice: Relating Public to Private*, in 9 POLITICAL THEORY 327 (1981) (discussing transformation of preferencing in politics).

106. *See* Anderson, *Values, Risks, and Market Norms*, 17 PHIL. & PUB. AFF. 54 (1987) (discussing divergence between democratic outcomes and market choices).

V. CONCLUSION

Throughout its history, American government has benefited from its democratic features and from structural characteristics that promote effectiveness and efficiency. The benefits are especially conspicuous when viewed in comparison to other governmental systems. But in its current incarnation, it suffers from significant failures. The modern regulatory state is often ineffective. It has not been efficient. It is hardly a model of democratic self-governance. In a period in which nations all over the world are seeking to promote both efficiency and democracy, it would be unfortunate indeed if we did not subject our own institutions to skeptical scrutiny.

In this essay, I have suggested three reforms in contemporary public law. Information-based strategies, increasing disclosure and education, should supplement or even displace regulatory systems. Economic incentives, including taxes and fines, should substantially displace command-and-control regulation. Decentralization, allowing bargaining and participation in the private and public spheres, should in many contexts be substituted for centralized dictates from Washington. All of these proposals would respond simultaneously to inefficiencies in modern government and to severe problems from the democratic point of view—most notably factional influence and absence of opportunities for the exercise of political influence.

I do not contend that reforms of this sort would accomplish all that is now required, from the standpoint of either efficiency or democracy. There are genuine limits to all three strategies. At some point, moreover, it will be necessary to reconcile some serious conflicts between efficiency and democracy. But we now have both the information and the tools by which to accomplish an enormous amount of reform. We need not rest content with the paradoxes and failures of existing institutions.