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CHOOSING HOW TO REGULATE

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In this Article, the authors survey how agencies create substantive regulations through traditional rulemaking, negotiated rulemaking and litigation. Using public choice analysis, the Article relates agency choice to the agency's incentive structure. The Article also shows how the different forms of regulatory activity influence the content of agency regulations. Using a case study of EPA's regulation of heavy-duty diesel engines, the Article examines EPA's choices over thirty years as a means of testing the proposed theory. Finally, the Article concludes with a critique of allowing agencies to choose how they will regulate because the choice allows agencies to evade constraints imposed by Congress and the President and so diminishes political accountability.

I. Introduction

Until the 1980s, administrative agencies in the United States carried out their regulatory duties almost entirely through rulemaking. Agencies issued written regulations that informed regulated entities how to conduct various aspects of their businesses.¹ Agencies created these regulations through a variety of processes² as dictated by individual statutes, but the

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¹We use the term "regulation-by-rulemaking" to mean the kind of regulation that is associated with official notices of rulemaking, public comments, and final notices of rules. This is typically associated at the federal level with the Administrative Procedure Act, 5 U.S.C. § 551-559, 701-706 (2000) ("APA"). Thus to illustrate below we use examples from the APA. Some regulatory agencies operate under other procedural requirements. At the state government level, administrative rulemaking procedures also include elements of notice and public comment that allow for the rules of due process to be met. See generally Jim Rossi, Overcoming Parochialism: State Administrative Procedure and Institutional Design, 53 ADMIN. L. Rev. 551 (2001) (describing institutional reasons for differences in federal and state rulemaking).

² We use informal rulemaking under the APA as the exemplar for regulation-by-rulemaking for two reasons. First, formal rulemaking's high costs made it an unattractive al-

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various forms of the regulation-by-rulemaking process share some important general characteristics: the regulated entities and other interest groups have the opportunity to comment on proposals;³ interested parties may seek judicial review of the agencies' procedural and substantive compliance with the relevant statutory framework as created by the legislature; and interest groups may seek action by the political branches to alter the agencies' actions.⁴ While a few agencies, most notably the National Labor Relations Board, operated through case-by-case adjudication rather than rulemaking, this was the exception rather than the norm.⁵

Dissatisfaction with the rulemaking process led to calls for procedural reforms. 6 These reforms "sought not so much to restructure the substance of regulatory policy, but instead to restructure the institutional environment of regulatory policymaking." In response, starting in the 1980s, two new means of creating regulations appeared. The first, championed as the solution to regulatory gridlock resulting from litigation over rules, was negotiated rulemaking.8 In this process agencies, regulated entities, and other interest groups negotiate the content of the rule to be imposed before the agency formally begins the rulemaking process. Proponents argued this would reduce litigation over the content of rules, speed rulemaking, and produce better rules. Although it maintains the usual regulatory process for formal adoption of the rule, regulation-by-negotiation relies on diverting at least the main interest groups from the public regulatory process to negotiations and so significantly alters the process. It substitutes negotiation for an agency-directed process, informal sharing of information for public comments, and trust for adversarial relations. 10 Most importantly, the negotiation process brings the main interest groups touched by a regulation's provisions into direct negotiations with the agency. When this process is successful, it can eliminate the public debate over a regulation's substance.

ternative for both Congress and regulators, making its use rare. See 1 Kenneth Culp Davis & Richard J. Pierce, Jr., Administrative Law Treatise § 288 (3d ed. 1994). Second, it is the most general case, since other forms of rulemaking are statute-specific. The details of each rulemaking scheme are not critical to our argument, and rulemaking generally shares the attributes we cite.

³ APA, 5 U.S.C. § 553(c) (2000).

⁴ See, e.g., Congressional Review Act, 5 U.S.C. §§ 801-808 (2000).

⁵ Joan Flynn, The Costs and Benefits of "Hiding the Ball": NLRB Policymaking and the Failure of Judicial Review, 75 B.U. L. REV. 387, 388 (1995) ("The NLRB is unique; alone among the major federal agencies, the Board makes almost all of its policy through adjudication rather than rulemaking").

⁶ Cary Coglianese, Empirical Analysis and Administrative Law, 2002 U. ILL. L. REV. 1111, 1112 (2002) ("For at least the past twenty years . . . some of the most prominent and persistent calls for regulatory reform have tended to be procedural ones.").

^{&#}x27;Id.

⁸ See infra note 79 and accompanying text.

⁹ See infra notes 87-90 and accompanying text.

¹⁰ See infra note 84 and accompanying text.

The second innovation, regulation-by-litigation, began to be used in the mid-1990s. In regulation-by-litigation, agencies use enforcement actions against regulated entities to create new substantive obligations for the regulated. Perhaps the best-known example of this new method of regulation is the 1998 settlement between the attorneys general of forty-six states and several major cigarette manufacturers. This settlement specified, among other things, how the firms would market their products and required \$246 billion in payments, to be funded from future sales, which effectively served as a massive tax increase on cigarettes. Similarly, in 1998 the major producers of heavy-duty diesel engines signed a \$1 billion settlement with the Environmental Protection Agency ("EPA"), which imposed new controls for nitrogen oxide ("NO_x") emissions.

In both cases regulators obtained substantive provisions through the settlement that they could not have imposed directly on the regulated. A tobacco tax increase was outside the scope of the authority of state attorneys general to directly impose as well as politically infeasible in many, if not all, states. The diesel engine settlement included the imposition of changes in emission standards that the Clean Air Act ("CAA") barred EPA from directly imposing. EPA

Other recent examples of regulation-by-litigation include EPA's litigation against major refinery operators, ¹⁷ electric utilities, ¹⁸ and wood prod-

[&]quot;Private parties also regularly bring suits, seeking to impose substantive limitations on others. Since private entities have no choice of means (i.e., they cannot issue regulations) and are not subject to the same incentives as government actors, we do not consider them in this Article.

¹² State attorneys general differ from the federal agencies in many respects, but we use them to illustrate the point because of the widespread knowledge of the tobacco cases. With respect to our illustration, the similarities between litigation brought by the state attorneys general and the federal agencies are sufficient to justify grouping both together. Both types of suits are brought by government agencies as an alternative method of imposing substantive constraints rather than more traditional forms of resolution. The differences lie more in the incentives that determine which suits will be brought.

¹³ See National Association of Attorneys General, Master Settlement Agreement at 14–36 (describing restrictions on defendants' behavior agreed to as part of the settlement), at http://www.naag.org/upload/1032468605_cigmsa.pdf (last visited Oct. 16, 2004) (on file with the Harvard Environmental Law Review).

¹⁴ See generally Andrew P. Morriss, Bruce Yandle & Andrew Dorchak, Regulation by Litigation: EPA's Regulation of Heavy-Duty Diesel Engines, 56 ADMIN. L. Rev. 403 (2004).
¹⁵ See infra note 151.

¹⁶ 42 U.S.C. §§ 7401-7661 (2004). See infra note 258 and accompanying text.

¹⁷ See J. Hill, Consider New Refinery Compliance Standards Now Being Set Through Litigation Actions, Hydrocarbon Processing, Aug. 1, 2002, at 2002 WL 18661916 76 (2002) ("Recently, enforcement actions against several petroleum refiners have made them subject to additional standards and regulatory supervision without the typical rule-making process."). See also Steve Cook, Settlement with Arkansas Company Expected to Reduce Emissions by 1,380 Tons, 34 Env't Rep. (BNA) 585, 585–86 (Mar. 14, 2003) (noting settlement in which firm agreed to pay a \$348,000 civil penalty and "install state-of-art emissions controls over the next eight years" including a device "so new that [the company] will be one of the first refineries in the country [to] use it").

¹⁸ See US, Power Plant Settle Up, OIL DAILY, Nov. 17, 2000, available at 2000 WL 23420173 (noting suits against seventeen utilities).

ucts firms.¹⁹ New York Attorney General Elliott Spitzer is also fast becoming a major regulator through litigation, with suits against a wide range of financial industry entities.²⁰ In each case, the firms involved have both paid or expect to pay huge fines and accepted new substantive restrictions on their conduct as part of a settlement of litigation.²¹ This means of regulation had become so prominent that former Labor Secretary Robert Reich concluded in 1999 that "Regulation is out, litigation is in . . . [T]he era of big government may be over, but the era of regulation through litigation has just begun."²²

Like regulation-by-negotiation, regulation-by-litigation substitutes quite different procedures for the processes followed in regulation-by-rulemaking. In regulation-by-litigation, litigation replaces notice and comment procedures; a complaint in a legal action replaces a notice of proposed rulemaking; courtroom proceedings and closed settlement negotiations replace a public administrative proceeding; the rules of evidence replace the open rulemaking record; and a limited list of parties largely chosen by the agency replaces open access public participation. Regulation-by-litigation alters the function of the courts in appellate review of agency action, substituting review of the terms of a settlement for a review of the agency's compliance with the substantive law the agency is charged with enforcing. This can eliminate important benefits from judicial review of agency action.²³ For example, Professor Cass Sunstein has recently suggested that judicial review of agency action under the CAA could force EPA to provide greater quantification of benefits and costs "to ensure that the government addresses the large pollution problems and does not spend significant resources on the small ones."24 Regulation-by-litigation also eliminates challenges to the agency's compliance with the APA as a basis for review.

¹⁹ See Brent Hunsberger, Boise Cascade Will Settle Suit with Government Over Clean Air Act, KNIGHT-RIDDER TRIB. BUS. NEWS, Mar. 14, 2002, available at 2002 WL 17180641 (noting settlements with five wood products companies).

²⁰ See, e.g., Carrie Johnson, SEC, Spitzer Sue Mutual Fund Firm, WASH. POST, Feb. 25, 2004, at E4 (describing suits against mutual fund firms); Jeff Leeds, Spitzer's List for Scrutiny Said to Include Record Labels, N.Y. TIMES, Oct. 22, 2004, at C1 (describing investigation of record labels); Floyd Norris, When Spitzer Speaks, Insurers Take Note, N.Y. TIMES, Oct. 16, 2004, at C1 (describing Spitzer investigation of insurance companies).

²¹ See Hunsberger, supra note 19 (noting fines from \$1.3 million to \$11 million and required environmental spending up to \$17.9 million for wood products firms); Hill, supra note 17 (noting up to \$600 million per individual refinery in additional costs); US, Power Plant Settle Up, supra note 18 (noting \$1.2 billion spending required under settlement with a single utility). Of course, these estimates may overstate the impact, since it is in EPA's interest to announce as large a fine as possible, and settlements routinely include spending on mitigation efforts that are not the result of new regulatory requirements.

²² Robert B. Reich, *Regulation is Out, Litigation is În*, THE AMERICAN PROSPECT ONLINE, at http://www.prospect.org/webfeatures/1999/02/reich-r-02-11.html (Feb. 11, 1999) (on file with the Harvard Environmental Law Review).

²³ See Coglianese, supra note 6, at 1125–28 (summarizing the literature on the benefits and costs of judicial review).

 $^{^{24}\,\}text{Cass}\,\,\text{\r{R}}.$ Sunstein, The Cost-Benefit State: The Future of Regulatory Protection (2002).

As a result of both of these innovations in the process that creates rules, public participation is limited, oversight of agency action by Congress is reduced, and agencies can operate outside the statutory restrictions imposed upon them by Congress. Both regulation-by-negotiation and regulation-by-litigation are thus a means of imposing substantive regulatory provisions on regulated entities with significantly lessened public participation and greatly reduced checks and balances.²⁵

In this Article we use public choice26 concepts to describe and analyze the rise of regulation-by-negotiation and regulation-by-litigation as alternatives to regulation-by-rulemaking. We offer what we believe is the first attempt to provide a theory for explaining agency choice of the means of regulating. We conclude that both, but particularly regulation-by-litigation, are major new forms of government action that offer significant advantages to politicians and regulators in particular situations. Regulation-by-negotiation failed to live up to its proponents' initial enthusiastic predictions but nonetheless provides agencies with significant advantages in situations where the substance of the regulation requires the credible transmission of information between the regulated entities and other interest groups, and where the agency's preference for a particular substantive outcome is weak. Regulation-by-litigation offers agencies opportunities to obtain substantive outcomes they are barred from imposing directly by constraints created by legislatures. For example, regulators can escape substantive limits on their powers imposed by legislatures by incorporating the forbidden rules in settlement agreements.

Both are possible only under particular circumstances. Regulation-by-negotiation requires a relatively high degree of shared interest among the groups participating, the existence of gains from trade to allow parties to compromise, and a willingness by interest groups to reject the role of spoiler. Regulation-by-litigation is possible only when agencies face a concentrated industry, which allows litigation against individual firms to effectively substitute for a regulation binding on an entire industry. It also requires that agencies have some leverage against the firms involved, to

²⁵ See W. Kip Viscusi, Overview, in REGULATION THROUGH LITIGATION 1, 1 (W. Kip Viscusi ed., 2002) [hereinafter "Viscusi, Overview"] ("The policies that result from litigation almost invariably involve less public input and accountability than government regulation.").

²⁶ Public choice analysis is the application of economic analysis to political choices. It was pioneered by Nobel economics laureate James Buchanan and Gordon Tullock. See generally James Buchanan & Gordon Tullock, The Calculus of Consent (1962). For a survey of public choice analysis, see Dennis C. Mueller, Public Choice II (1989). Public choice, a sub-discipline of economics, law, and political science, applies economic logic to collective decision-making. The basic public choice model assumes that ordinary human beings, not angels, populate legislative bodies and regulatory agencies. Accordingly, these political decision makers base their decisions on a self-determined benefit-cost calculus. In short, the political decision maker attempts to maximize his or her wealth or well-being. Part of this well-being often includes garnering enough votes and campaign contributions to gain reelection.

use to induce a settlement and to disrupt cooperation among the firms. Because of the advantages for bureaucrats and politicians, however, regulation-by-litigation and regulation-by-negotiation are likely to play increasingly important roles in the regulatory landscape in the future unless elected officials (and their appointees) and courts take action to limit agencies' use of them.

In the Part II of this Article we describe the means of regulation available to agencies, focusing on the benefits and costs to the agencies of using each to provide a unique assessment of the means of regulating. In Part III we use public choice theory to explain federal agencies' choice of regulatory means through an examination of the literature explaining when agencies will choose to act.²⁷ In doing so, we provide the building blocks for a theory of choice of regulatory instrument, offering an explanation of the circumstances that encourage the use of regulation-by-litigation and regulation-by-negotiation rather than other regulatory instruments.²⁸ Part IV then draws on our recently published regulatory case study of EPA's regulation of heavy-duty diesel engines²⁹ to demonstrate how regulatory choices are made in the context of a particular set of regulations. Our conclusion then draws lessons from this analysis and focuses on the problems that allowing agencies to choose among methods of regulation cause for Congressional control of agency behavior.

II. CHOICE OF REGULATORY INSTRUMENT

We define regulation as (1) forward-looking (rather than backward-looking),³⁰ (2) substantive constraints on (3) private sector actors imposed by (4) a government actor. This considerably narrows the scope of behavior to be explained. We think our definition is uncontroversial and only one point needs elaboration. The first part of our definition limits regulation to those actions that prescribe the conditions under which particular behaviors will be permitted in the future, rather than solely dictating compensation for actions taken in the past. Thus the tobacco lawsuits constituted regulatory activity since the tobacco products that were the subject of the suit continue in use and the substantive relief embodied in the settlement addressed future behavior by the tobacco companies.³¹ By contrast, the suits filed in the late 1990s against the lead paint manufacturers

31 Id.

²⁷ For convenience, we refer primarily to federal examples. Our analysis generally applies to state level regulation as well.

²⁸ Our analysis thus attempts to respond to the call by Prof. Gary Schwartz for taking regulation-by-negotiation into account in explaining regulation-by-litigation. *See* Gary T. Schwartz, *Comment*, in REGULATION THROUGH LITIGATION 348, 350 (W. Kip Viscusi ed., 2002).

²⁹ Morriss, Yandle & Dorchak, supra note 14.

³⁰ Kenneth S. Abraham, *The Insurance Effect of Regulation by Litigation, in Regulation Through Litigation* 212, 231 (W. Kip Viscusi ed., 2002).

over harms from residential uses of their products did not constitute a regulatory activity, as lead-based paint was no longer permitted for the uses that gave rise to the litigation. There was thus no forward-looking component in the result. We limit our definition to actions intended to alter future conduct because it is the claimed superiority of proactive measures to compensation for actual harms that is used to justify prior restraint in the first place.

This is not to suggest that requiring payment of compensation for harm caused does not influence future behavior, just that there is a difference between the generalized incentive "not to be negligent" provided by tort law and specific regulatory directives to use particular equipment or follow particular procedures. Tort law leaves to the private sector the decisions about how much of an activity to engage in and how to reduce the costs of its behavior, including reducing liability costs. Regulations direct private actors to take specific actions, eliminating or greatly reducing the discretion they have to make choices. The specific directives were absent in the lead-paint litigation, taking it out of the regulation-by-litigation category.³²

Legislators and regulators must choose how they will regulate in each area. Each choice generates political costs and benefits for regulators, and for the rest of society as well. Agencies have a number of choices of how to proceed: inaction, rulemaking, negotiation, and litigation. We examine each to allow us to provide a theory of agency choice among the alternative means.

A. Agency Inaction

An important benchmark for examining regulation is considering the alternative of not using administrative agencies to regulate, but leaving a problem to individuals to resolve through market, contract, and tort institutions.³³ When a government opts to centrally regulate private behavior

³² Of course, damage suits influence future activities; a damage award against a defendant for harming a neighbor's property via air pollution emissions will create an incentive not to repeat the behavior. *See* Abraham, *supra* note 30, at 232 ("Ideally the threat of civil liability has a regulatory effect by promoting optimal deterrence . . .").

on behalf of private parties or communities, to enforce and protect property rights is not regulation-by-litigation. See, e.g., Roger Bate, Protecting English and Welsh Rivers: The Role of the Anglers' Conservation Association, in The Common Law and the Environment 86 (Roger E. Meiners & Andrew P. Morriss eds., 2000) (describing role of private lawsuits in preserving environmental quality in rivers in the U.K.). These civil suits are an alternative to legislation and regulation through rulemaking. They are not regulation-by-litigation because they seek to redress (through compensation) or prevent (through equitable relief) specific harms done to specific interests, not to address a general problem through generally applicable rules. See Keith N. Hylton, When Should We Prefer Tort Law to Environmental Regulation?, 41 Washburn L.J. 515, 515-17 (2002) (distinguishing the two approaches).

it adds to this mix of market, contract, and tort institutions that would otherwise govern the behavior of the affected entities through decentralized decision making by individuals. This is important because unregulated outcomes differ systematically from regulated outcomes. For example, they are likely to be more heterogeneous than regulated outcomes, as different individuals opt for different approaches due to the influence of local knowledge.³⁴ The crucial point for our purposes is that the choice to address a problem through the government indicates that at least some people prefer the regulated outcome to the mix of outcomes created by contract, tort and market institutions.

It is important to recognize that we know only that the regulated outcome is preferable for the decision maker, not that it is socially optimal. While regulatory measures may be imposed because their aggregate benefits to all individuals³⁵ exceed their costs, they also may be imposed because particular groups of individuals experience a net benefit and are able to persuade regulators to act despite the regulations imposing an aggregate net loss.³⁶ Political institutions³⁷ and administrative

If a faction consists of less than a majority, relief is supplied by the republican principle, which enables the majority to defeat its sinister views by regular vote. It may clog the administration, it may convulse the society; but it will be unable to execute and mask its violence under the forms of the Constitution. When a majority is included in a faction, the form of popular government, on the other hand, enables it to sacrifice to its ruling passion or interest both the public good and the rights of other citizens. To secure the public good and private rights against the danger of such a faction, and at the same time to preserve the spirit and the form of popular government, is then the great object to which our inquiries are directed

By what means is this object attainable? Evidently by one of two only. Either the existence of the same passion or interest in a majority at the same time must be prevented, or the majority, having such coexistent passion or interest, must be rendered, by their number and local situation, unable to concert and carry into effect schemes of oppression. If the impulse and the opportunity be suffered to coincide, we well know that neither moral nor religious motives can be relied on as an adequate control. They are not found to be such on the injustice and violence of individuals, and lose their efficacy in proportion to the number combined together, that is, in proportion as their efficacy becomes needful.

³⁴ See generally Friedrich von Hayek, *The Use of Knowledge in Society*, 35 Am. Econ. Rev. 519 (1945) (describing the problem of centralized decision making with dispersed knowledge).

³⁵ Defining whose interests count is an unresolved issue for centrally imposed regulations. Should Ohio regulators consider the interests of Pennsylvania residents? Should U.S. regulators consider the interests of Mexican residents? Should human regulators consider the interests of animals and plants? These issues have been debated for decades with no sign of a consensus emerging.

³⁶ See J. B. Ruhl & James Salzman, Mozart and the Red Queen: The Problem of Regulatory Accretion in the Administrative State, 91 GEO. L.J. 757, 760 (2003) (noting that "the most prevalent alleged rule defect" is that "total costs to society exceed total benefits").

³⁷ See, e.g., The Federalist No. 10 (James Madison). Madison argued that relief from the ills of faction is "only to be sought in the means of controlling its effects." Madison suggested that political institutions could be designed to control the problem of factions.

law³⁸ provide tools for attempting to ensure that as many regulatory actions as possible fall into the former category rather than the latter.³⁹ Nonetheless these are imperfect tools and regulatory outcomes may occur that impose net social losses as well as net social gains. The decision to regulate and the decision how to regulate must therefore be considered from the point of view of the decision maker rather than from the point of view of an omniscient social planner.

Our institutions that constrain decision makers considering imposition of regulations are not symmetrical with respect to the potential errors of over- and under-regulation. The decision to regulate is justifiably viewed with some suspicion because not all collective actions advance the collective good. 40 Government decisions about potential regulations therefore require a legal and political sieve to separate the welfare-enhancing decisions from the rent-seeking ones. 41 The need for this sieve is greatest when the government chooses to act, as the decision not to act does not carry with it as great a risk of governmental misbehavior and rent seeking by interest groups.

Mindful of these risks, lawmakers have subjected agency decisions to act to a series of procedural and substantive constraints. The APA exemplifies the former;⁴² numerous substantive provisions in regulatory statutes embody the latter. For example, EPA is restricted in regulating mobile source emissions by statutory procedural requirements for rulemaking and by the CAA's limit on the substances EPA can regulate,⁴³ the frequency with which

³⁸ See, e.g., Jonathan R. Macey, Separated Powers And Positive Political Theory: The Tug of War Over Administrative Agencies, 80 GEO. L.J. 671 (1992); Matthew D. McCubbins, Roger G. Noll & Barry R. Weingast, Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies, 75 VA. L. Rev. 431 (1989).

³⁹ Prof. Richard Epstein lays out a simple analytical framework to answer this question. If one or a small number of people are harmed by an industry's product, then the individuals harmed have standing to sue. The government need not enter. In contrast, "if the claims are broad and diffuse, and nobody has a large enough stake to sue, then the [government] can bring action under parens patriae." Manhattan Institute for Policy Research, Regulation by Litigation: The New Wave of Government-Sponsored Litigation, Conference Proceedings 61 (1999) [hereinafter "New Wave"]. Although in this Article we are primarily concerned with explaining how agencies choose to regulate, given that they have chosen to regulate, we occasionally examine the influence of the choices of means on the decision to regulate as well as vice versa.

⁴⁰ We note that defining the "collective good" is also an unresolved problem. Should regulators act only when they can bring about Pareto improvements? Or does the looser restraint of Kaldor-Hicks optimality suffice? Or are actions justified when particularly deserving groups or individuals benefit despite net losses overall?

⁴¹ Rent seeking is "non-voting, non-criminal actions that are intended to change laws or administration of laws such that one individual and/or group gains at the same or greater expense to another individual and/or group." J. PATRICK GUNNING, UNDERSTANDING DE-MOCRACY 348 (2003), available at http://nomadpress.com/public_choice/ud-16.pdf.

⁴² See William Funk, Bargaining, 46 DUKE L.J. 1351, 1379 (1997) (The APA is "designed to constrain the discretion of agencies through procedural regularity and judicial oversight").

 $^{^{43}}$ See, e.g., CAA § 108, 42 U.S.C. § 7408 (2000) (providing for EPA to add additional pollutants to list of criteria air pollutants).

EPA may change the rules,⁴⁴ and the unpopularity of the power to impose use restrictions, which effectively cedes this method to the states.⁴⁵ At times those restrictions become binding constraints for agencies, thus making valuable the existence of alternative methods of regulation with fewer (or at least different) constraints on the agencies' power. Constraints on agencies are thus primarily intended to prevent errors from improper actions rather than improper inaction.

Nonetheless, because the regulators' choice of whether or not to regulate is not necessarily based on maximizing social welfare, there is the problem of the holes in the sieve being too small as well as too large. To prevent agencies from incorrectly screening out welfare-enhancing regulatory actions there are numerous political checks and balances on agency inaction. Congress can subject agency inaction to political review as readily as it can subject agency action to such review.⁴⁶ Congress can also require

In some cases, the restrictions are there to reduce regulatory uncertainty. The lead time rules were a constraint imposed by Congress to improve the regulatory process. In the auto industry, for example, Crandell, et al.'s study concluded that "[t]he stringent deadlines and political maneuvering cannot have been conducive to efficient pollution control. As Congress has shifted deadlines, the companies have not been able to undertake the most efficient model design and investment plan to achieve the ultimate standards." ROBERT W. CRANDALL ET AL. REGULATING THE AUTOMOBULE 30 (1986)

⁴⁴ For example, EPA cannot issue regulations tightening mobile source emissions standards without providing a four year lead time for manufacturers. CAA, 42 U.S.C. § 7521(a) (3)(C) (2000). The federal restriction does not, of course, prevent states in nonattainment areas from adopting California's standards that effectively duplicate EPA's intent. Thus, for example, when EPA missed the deadline to impose the tighter emissions controls included in the defeat device settlements (discussed infra at notes 283-305), a coalition of states representing over forty percent of the market for heavy-duty diesel engines imposed their own rules. Mobile Sources: Coalition of States Adopts California Rules to Limit Heavy-duty Diesel Engine Emissions, 3 BNA ENV'T REPORTER 728 (Apr. 5, 2002). Under the lead time and stability provisions, regulations cannot change for three years after each change and must be issued four model years ahead of their effective date. CAA, 42 U.S.C.A. § 7521(a)(3)(C) (2000). If EPA issues one change to those regulations, therefore, EPA's ability to issue additional changes is limited for a time. This happened with respect to diesel emissions in 1999. EPA issued model year ("MY") 2004 standards in 1997. They later sought to add the "not to exceed" provisions to the MY2004 standards, but failed to issue the regulation in 1999. As a result, EPA could not make the "not to exceed" rules applicable until MY2007, since the MY2004 standards had to remain stable for 3 years. See James Kennedy, Final EPA Rule on Diesel Truck Emissions Gives Industry Additional Time to Comply, 31 BNA Env't Reporter 1605, 1605 (Aug. 4, 2000).

DALL, ET AL., REGULATING THE AUTOMOBILE 30 (1986).

45 See, e.g., CAA Title II, 42 U.S.C. § 7543 (2000) (prohibiting states from establishing emissions standards for mobile sources, with the exception of California, which was allowed to adopt its own standards because it had an existing regulatory program at the time of the CAA Amendments of 1970; other states may also adopt California's standards under the 1990 amendments).

⁴⁶ For example, Prof. Jonathan Cannon describes how Democratic Congresses used their oversight power to force Republican EPA officials to be more aggressive:

[&]quot;Beating up on EPA" is a tradition on Capitol Hill. The Agency is within the jurisdiction of some 90 congressional committees and subcommittees. Agency officials appear in hearings before those committees and subcommittees dozens of times during each Congress, in addition to responding to extensive requests for documents, submitting congressionally mandated reports, and attending informal meet-

agency regulatory action⁴⁷ or simply dictate the substantive rule through statutory amendments.⁴⁸ The crucial point is that agencies are politically accountable for decisions not to regulate, even if the legal mechanisms for forcing agency action are generally more limited than those for restraining inappropriate agency action.

The primary legal mechanism for forcing agency action is litigation by interest groups to force the agency to interpret its statute differently. Thus those who disagree with an agency's decision not to regulate have generally been required to turn either to the political branches of government to force an agency to act or to the courts to seek a change in an agency's interpretation of a regulatory statute. Notable examples of where interest groups have used litigation against the government to force a reluctant agency to act include the Prevention of Significant Deterioration ("PSD") program under the CAA, largely created as a result of the privately initiated litigation that led to a federal district court's decision in *Sierra Club v. Ruckelshaus*, which in turn forced congressional action, and the regula-

ings with members or congressional staff. The hearings have often been used to chastise and correct Agency officials.

Jonathan Z. Cannon, EPA And Congress (1994–2000): Who's Been Yanking Whose Chain?, 31 ENVIL. L. REP. 10,942, 10,943 (2001).

⁴⁷ See William F. Pedersen, Contracting with the Regulated for Better Regulations, 53 ADMIN. L. Rev. 1067, 1086 n.49 (2001) (describing agency-forcing provisions of environmental law).

⁴⁸ Prof. Richard Lazarus summed up the reauthorizations of the major environmental laws between 1977 and 1990 as follows: "Each eliminated substantial EPA discretion, imposed more deadlines, and included more prescription" with the goal of minimizing "the possibility of bureaucratic neglect and compromise and of agency capture by regulated industry." Richard Lazarus, *The Tragedy of Distrust in the Implementation of Federal Environmental Law*, LAW & CONTEMP. PROBS., Autumn 1991, at 311, 320 & 341.

⁴⁹ Courts generally grant agencies substantial discretion in determining when to regulate. Aside from any formalities involved in rejecting a petition to regulate in a particular area, agencies need do little when they opt not to regulate. See Alfred C. Aman, Jr. & WILLIAM T. MAYTON, ADMINISTRATIVE LAW 375 (1993) ("For various reasons... courts will act only sparingly to compel agency action."). In environmental law, some statutes have provisions for citizen suits against agencies to force action, although these have led to considerable confusion in case law over when an agency can be sued for refusing to act. See Daniel P. Selmi, Jurisdiction to Review Agency Inaction Under Federal Environmental Law, 72 Ind. L.J. 65 (1996).

⁵⁰ Many statutes have action forcing provisions and citizen suit provisions to facilitate this behavior. See Jonathan H. Adler, Stand or Deliver: Citizen Suits, Standing, and Environmental Protection, 12 DUKE ENVIL. L. & POL'Y F. 39, 41–51 (2001) (describing use of environmental citizen suits). The Supreme Court, in its recent decision in Norton v. Southern Utah Wilderness Alliance, 124 S. Ct. 2373 (2004), rejected an attempt to force agency action under the APA, narrowing judicial review of agency inaction.

⁵¹ 344 F.Supp. 253 (D.D.C. 1972) aff'd 4 ERC 1815 (D.C. Cir. 1972), and aff'd by an equally divided Court sub nom. Fri v. Sierra Club, 412 U.S. 541 (1973).

⁵² For a history of the PSD issue in the courts and Congress, see Craig N. Oren, Prevention of Significant Deterioration: Control-Compelling Versus Site-Shifting, 74 Iowa L. Rev. 1, 10–13 (1988); N. William Hines, A Decade of Nondegradation Policy in Congress and the Courts: The Erratic Pursuit of Clear Air and Clean Water, 62 Iowa L. Rev. 643, 664–68 (1977).

tion of wetlands under the Clean Water Act, where rules were created in response to privately initiated litigation that led to another federal district court's decision in *Natural Resources Defense Council v. Callaway*.⁵³ In such cases, the legal action changes the substantive constraints imposed on the agency, which alters the agency's incentives. Regulatory action may thus occur as a result of the new constraints created by the litigation. This is not regulation-by-litigation, however, as the substantive rules are created through a separate process chosen by the agency in response to the new interpretation of the statute created by the litigation. Thus when the Sierra Club won its case in *Sierra Club v. Ruckelshaus*, EPA chose to issue regulations creating the PSD program through rulemaking.

We would expect inaction to be the choice of regulatory agencies when the expected net returns to the agency from action are negative. Agencies may: fear retribution from interest groups or political figures opposed to an action; wish to cultivate allies among interest groups for support for other initiatives through forbearance on a particular issue; or simply have higher priorities for the agency's limited resources. The PSD and wetlands cases illustrate how this can occur. In the case of the PSD program, the CAA was ambiguous⁵⁴ with respect to whether a PSD program was required.⁵⁵ Had EPA issued PSD regulations before the court action requiring it to do so, it would have angered powerful congressional figures (those representing states disadvantaged by the PSD program).⁵⁶ Thus even if individuals within EPA wanted to create a PSD program, doing so without the political cover of a court order would expose the agency to retaliation from Congress. Similarly, the Clean Water Act was ambiguous on whether wetlands were covered.⁵⁷ The federal government had spent decades destroy-

^{53 392} F. Supp. 685 (D.D.C. 1975). See Jonathan H. Adler, Wetlands, Waterfowl, and the Menace of Mr. Wilson: Commerce Clause Jurisprudence and the Limits of Federal Wetland Regulation, 29 ENVTL. L. 1, 25–26 (1999) [hereinafter "Adler, Wetlands"] (describing how litigation led to rulemaking).

⁵⁴ We say the statutes were ambiguous because the agency's prior reading was that the program was not required by the statute while the courts determined that the programs were required. This could be because the court made an error and read a statute that unambiguously did not require agency action to read agency action. Since we are not trying to explain the behavior of courts, we will not enter into a debate over whether the courts were correct in their reading of the statutes. Thus "ambiguous" is a broad term, referring to cases in which courts read statutes differently from agencies.

⁵⁵ The ambiguity can be seen from the D.C. Circuit's affirmation of the lower court without an opinion and the Supreme Court's affirmation without opinion of the D.C. Circuit because it was equally divided. Sierra Club v. Ruckelshaus, 344 F.Supp. 253 (D.D.C. 1972) aff'd 4 ERC 1815 (D.C. Cir. 1972), and aff'd by an equally divided Court sub nom. Fri v. Sierra Club, 412 U.S. 541 (1973). Whether the statute was actually as "ambiguous" as the courts' behavior indicates is open to question.

⁵⁶ For a discussion of the politics of the PSD issue, see Oren, *supra* note 52, at 10–13. Hines notes that EPA had initially given "strong testimony in favor of a federal nondegradation policy" before the 1970 CAA Amendments but later abandoned that position. Hines, *supra* note 52, at 663.

⁵⁷ In the wetlands case, a federal district court ruled that the term "navigable waters" included wetlands even where they were not navigable. NRDC v. Callaway, 392 F. Supp.

ing wetlands,⁵⁸ viewing them as "an obstacle to progress."⁵⁹ The internal structure of the Army Corps of Engineers was thus not set up to reward protecting wetlands but to reward draining them. In both cases, however, once the courts had ruled that the programs were required, the agencies' incentive structure changed. Western senators could not punish EPA for creating a PSD program, and the Corps of Engineers' interest in development projects was overridden. In both cases, conditions had changed and inaction was no longer the optimal choice from the agencies' points of view.

B. Regulation-by-Rulemaking

Regulation-by-rulemaking typically involves a notice of a proposed rule,⁶⁰ a comment period for any and all parties to express their reactions to the agency,⁶¹ and a final notice of rulemaking that addresses the comments received from interested parties.⁶² In the process, an agency may hold hearings, and may offer more than one proposed rule before a final regulation is announced. Of course, there is great diversity in the specific processes agencies use to create rules through rulemaking,⁶³ but for our purposes these differences are less important than the similarities.

The traditional rulemaking process thus at least nominally provides significant opportunities for public participation. While it is not necessary to hold a cynical view of agency motives⁶⁴ to wonder whether agencies pay close attention to the comments they receive during rulemaking, we think these opportunities have an important substantive impact. We believe

^{685 (}D.D.C. 1975). For a summary of the debate over the reasonableness of this opinion, see Adler, *Wetlands, supra* note 53 at 25–26. The Corps declined to appeal and proceeded to exercise the jurisdiction the district court had granted it. *Id.* at 25.

⁵⁸ See Adler, Wetlands, supra note 53, at 19–20.

⁵⁹ Kent Jeffreys, Whose Lands Are Wetlands?, J. REG. & SOCIAL COSTS, Mar. 1992, at 35, quoted in Adler, Wetlands, supra note 53, at 20 n.144.

⁶⁰ See APA, 5 U.S.C. §§ 553(b) (2000) (requiring general notice be published in Federal Register) and 553(c) (requiring "concise general statement of a basis and purpose" for rulemaking). See also AMAN & MAYTON, supra note 49, at 51–54 (discussing requirements for the notice).

⁶¹ See 5 U.S.C. § 553(c) (2000) ("[T]he agency shall give interested persons an opportunity to participate in the rulemaking through submission of written data, views, or arguments."); AMAN & MAYTON, supra note 49, at 58–62 (describing requirements for rulemaking record).

⁶² See, e.g., Associated Indus. of N.Y. State, Inc. v. U.S. Dept. of Labor, 487 F.2d 342 (2d Cir. 1973) (holding that where agency action was challenged in comments on "substantial" grounds the agency "has the burden of offering some reasoned explanation"). See also AMAN & MAYTON, supra note 49, at 54 ("The courts, therefore, will not credit rulemaking as 'fully reasoned' unless the agency takes into account the data and critical analysis and identification of interests and priorities offered by public comment.").

⁶³ See Cary Coglianese, Assessing Consensus: The Promise and Performance of Negotiated Rulemaking, 46 DUKE L.J. 1255, 1331 (1997) [hereinafter "Coglianese, Promise and Performance"] ("[T]he term 'conventional rulemaking' is itself a misnomer because agencies use a wide array of procedures short of negotiated rulemaking for involving the public in the rulemaking process.").

⁶⁴ See Funk, supra note 42, at 1384 (criticizing "cynicism of public choice theory").

there is real benefit to interest groups from participating in rulemaking because we observe that interest groups regularly invest considerable resources in ensuring comments are placed in the rulemaking record, including both substantive comments⁶⁵ and simple statements of support for a particular position.⁶⁶ By revealed preference, therefore, the value of participation to a broad spectrum of interest groups appears to be well established: giving us good reason to see value in public participation. In short, if both environmental pressure groups and pollution sources see value in willingly spending resources on participating in rulemaking, it seems likely there is value in the process. That does not prove a net benefit to the public as a whole, of course, but it makes the existence of such net benefits plausible. Moreover, agencies do sometimes learn new information through rulemaking comments and modify their proposals in response. All this leads us to believe that there is a net benefit to the public as a whole of allowing public participation in shaping the substance of regulations.

The benefits of such participation need not be direct influence over the agency. Comments that do not influence an agency directly may influence political representatives exercising oversight over an agency. Comments are also an important part of the groundwork for attacks on the final rules through the courts.⁶⁷ The courts will hold agencies accountable for addressing important issues raised in comments, as failure to respond to a substantive comment can itself be grounds for the remand of a rule to the agency. Since the agencies must respond to comments in their final rules, even agencies that do not wish to do so must pay at least some attention to public participation in rulemaking. Traditional rulemaking thus provides both accessible notice to potentially affected parties and an opportunity to shape the rulemaking record for political and substantive purposes.

Agency regulatory activity is also subject to political constraints through appropriations riders, oversight hearings, and other means, ⁶⁸ embedding regulation-by-rulemaking in a broader political context. Michigan Congressman John Dingell, for example, for years has exerted great influ-

⁶⁵ See Cary Coglianese, Litigating Within Relationships: Disputes and Disturbance in the Regulatory Process, 30 Law & Soc'y Rev. 735, 740 (1996) ("[M]ost [interest] groups file comments on the rules in which they are involved.").

⁶⁶ See, e.g., Andrew P. Morriss, Roger E. Meiners & Andrew Dorchak, Between a Hard Rock and a Hard Place: Politics, Midnight Regulations, and Mining, 55 ADMIN. L. REV. 551, 590 (2003) (describing campaign to encourage public comments opposing revision of regulation in 2001 which generated over 47,000 messages that simply stated opposition to change without offering further substance).

⁶⁷ See E. Donald Elliott, Re-inventing Rulemaking, 41 DUKE L.J. 1490, 1492 (1992) (notice and comment is "primarily a method for compiling a record for judicial review"); David Wendel, Comment, Negotiated Rulemaking: An Analysis of the Administrative Issues and Concerns Associated with Congressional Attempts to Codify a Negotiated Rulemaking Statute, 4 Admin. L.J. 227, 229 (1990) ("[T]he primary means of swaying an agency's decision in hybrid rulemaking is through the record . . .").

⁶⁸ See Morriss, Meiners & Dorchak, supra note 66, at 555-58 (describing oversight process).

ence over EPA's regulatory efforts regarding mobile sources. Accountability to the political branches is not perfect, of course, but agencies must take the views of members of Congress and the President into account in shaping regulations. In particular, required internal executive branch reviews also contribute significant opportunities for informational input and for diverse points of view to be expressed. These political constraints may be used to promote rent seeking rather than the general welfare, as the Dingell example suggests. Nonetheless, even rent-seeking behavior may serve a public purpose on occasion. Dingell's relentless advocacy on behalf of the auto industry has undoubtedly reduced mobile source regulation and so possibly increased air pollution. But it has also protected a major industry from what may be considered rent-seeking behavior on the part of other interest groups (e.g., stationary sources and environmental pressure groups), and so the net effect is not necessarily negative.

Judicial review of agency compliance with procedural requirements and substantive limitations offers an additional set of constraints.⁷³ Once regulations are final, those affected by them may bring suit against the

⁶⁹ See, e.g., Paul L. Joskow & Richard Schmalensee, The Political Economy of Market-Based Environmental Policy: The U.S. Acid Rain Program, 41 J.L. & Econ. 37 (1998) (describing Dingell's role in clean air legislation in the 1980s and 1990s); Richard J. Lazarus, The Neglected Question of Congressional Oversight of EPA: Quis Custodiet Ipsos Custodes (Who Shall Watch The Watchers Themselves)?, 54 LAW & CONTEMP. PROBS., Autumn 1991, at 205 (same); John H. Cushman, Jr., Top EPA Official Not Backing Down on Air Standards, N.Y. TIMES, June 1, 1997, at 1 (describing Dingell's role in slowing acid rain controls); A. Pytte, Clean Air Stuck in Conference over Automobile Provisions, 48 CONG. Q. WEEKLY REP. 3108 (Sep. 29, 1990) (noting that Rep. Dingell, "[c]hairman of the House Energy Committee, indicated that an agreement would have to be reached on the motor vehicle portion of the legislation before House conferees would take a serious look at" the rest of the 1990 CAA Amendments). See also Arnold W. Reitze, Jr., Mobile Source Air Pollution Control, 6 ENVTL LAW. 309, 373 (2000) (Identifying Dingell as a major player in the battle over vapor recovery systems between automobile manufacturers and gasoline retailers). An excellent example of political influence is the inclusion of specific language concerning diesel emissions in the 1977 amendments to the CAA. Prof. David Currie borrowed a phrase from Justice Frankfurter when he described how the language, although adding little substantively to the CAA, nevertheless "'expressed a mood' that ought not to be lost upon administrators and reviewing courts." David P. Currie, The Mobile-Source Provisions of the Clean Air Act, 46 U. CHI. L. REV. 811, 850 (1979).

⁷⁰ Profs. Ruhl and Salzman note that critiques of rulemaking based on "the democratic deficit of the administrative state" are one of the three major types of such critiques offered in the legal literature. Ruhl & Salzman, *supra* note 36, at 761.

⁷¹ W. Kip Viscusi, *Tobacco: Regulation and Taxation through Litigation*, in REGULATION THROUGH LITIGATION 22, 51 (W. Kip Viscusi ed., 2002) [hereinafter "Viscusi, *Tobacco*"].

⁷² See, e.g., Jonathan H. Adler, Clean Fuels, Dirty Air, in ENVIRONMENTAL POLITICS: PUBLIC COSTS, PRIVATE REWARDS 19 (Michael Greve & Fred Smith eds., 1992) (discussing Congressman Dingell's efforts to force automobile companies and oil companies to stick together on air pollution issues).

⁷³ See Administrative Procedure Act, 5 U.S.C. §§ 701-706 (2000) (judicial review provisions). See also Aman & Mayton, supra note 49, at 447-49 (overview of APA provisions). Agencies have, in some cases, significant discretion in some matters. See generally Peter H. Shuck & E. Donald Elliott, To the Chevron Station: An Empirical Study of Federal Administrative Law, 1990 DUKE L.J. 984 (1990) (describing federal courts' deference to agency interpretation of organic statutes).

agency if there is a legal basis for doing so. For example, the agency might be charged with exceeding its legislative authority⁷⁴ or for adopting a rule when the scientific rationale for the rule is faulty.⁷⁵ EPA, in particular, is regularly sued by interest groups over its regulation-by-rulemaking activities,⁷⁶ over allegations that EPA's regulations are too lenient, too strict, or otherwise violate federal law. As with the political constraints, judicial review is often used to pursue special interest agendas rather than a generalized public interest. It nonetheless plays an important part in the balancing of special interest pressures, keeping agencies to the regulatory bargains struck through the political process.⁷⁷

The most important characteristics of regulation-by-rulemaking are thus:

- (1) notice to the public of the agency's proposed actions;
- (2) creation of a record based on public submissions;
- (3) an opportunity for any interested party to comment on the agency's proposal;
- (4) requirement of an agency response to significant comments;
- (5) political accountability for agency action; and
- (6) judicial review of agency action to ensure procedural requirements are met and that the agency has followed the substantive law granting it regulatory authority.

These combine to provide those affected by regulatory activity with numerous means to exert pressure on agencies. Despite the self-interested nature of many, and even most, of those pressures, the combination helps prevent regulators from singling out particular industries or regions for dis-

⁷⁴ See, e.g., Solid Waste Agency of N. Cook County v. United States Army Corps of Engineers, 531 U.S. 159 (2001) (holding Army Corps of Engineers' definition of navigable waters under the Clean Water Act exceeded agency's authority under statute).

⁷⁵ See, e.g., Horsehead Res. Dev. Co. v. Browner, 16 F.3d 1246, 1269 (D.C. Cir. 1994) (holding EPA "was relying on pure speculation when it decided" on pollution control standard). See generally Christopher H. Schroeder & Robert L. Glicksman, Chevron, State Farm, and EPA in the Courts of Appeals During the 1990s, 31 Envtl. L. Rep. (Envtl. L. Inst.) 10,371 (2001) (discussing EPA's record on science issues in courts of appeal).

⁷⁶ Keith Schneider, Who's Making the Rules?, N.Y. TIMES, Feb. 8, 1986, at 7 (quoting Chris Kirtz, Director of EPA's Regulatory Negotiation Project for fact that "[e]ighty percent of [EPA's] final regulations are litigated" as justification for regulation-by-negotiation and estimating that regulation-by-rulemaking takes two or more years to create a rule). Gary C. Bryner, Blue Skies, Green Politics: The Clean Air Act of 1990 and Its IMPLEMENTATION 210, 211 (1995) ("[V]irtually every major EPA regulation has been challenged in federal courts."). But see Coglianese, Promise and Performance, supra note 63, at 1296–1301 (challenging figure that 80% of EPA's rules have been challenged in the courts).

⁷⁷ See William M. Landes & Richard A. Posner, *The Independent Judiciary in an Interest-Group Perspective*, 18 J.L. & Econ. 875, 878 (1975) ("The element of stability or continuity necessary to enable interest-group politics to operate in the legislative arena is supplied, in the first instance, by the procedural rules of the legislature, and in the second instance by the existence of an independent judiciary.").

proportionate burdens.⁷⁸ Technical flaws in agency analysis can be exposed through comments, and the open nature of the rulemaking process gives all interest groups the opportunity to test agency assumptions and analysis. Judicial review prevents agencies from ignoring flaws in their analyses identified by interest groups, and self-interest ensures that interest groups give agency analyses a hard look. The multiplicity of avenues for involvement in rulemaking—agency, Congress and courts—ensures that monopolizing the process is difficult. To be sure, rulemaking has many problems and the process can be, and often is, captured by special interests despite these checks. Our purpose is merely to show that rulemaking offers some checks on rent seeking, not that they are sufficient to prevent all rent seeking. Moreover, despite its imperfections, regulation-by-rulemaking offers features that promote accountability for agency actions. Alternatives that offer less accountability may therefore be inferior even if regulation-by-rulemaking itself has serious flaws.

C. Regulation-by-Negotiation

As the result of a number of critiques of regulation-by-rulemaking during the 1970s and 1980s,⁷⁹ regulators established an alternative means of creating a rule through negotiation among a limited set of interest groups and regulators, followed by a traditional rulemaking procedure to apply the resulting rule's provisions generally.⁸⁰ Although not formalized until the Negotiated Rulemaking Act of 1990,⁸¹ and not permanently established until the Administrative Dispute Resolution Act of 1996,⁸² regulation-by-negotiation began to be used in the 1980s and has been used since by a variety of federal agencies.⁸³

⁷⁸ We do not intend to endorse the interest representation view of the administrative process that relies on interest group participation to constrain agency actions in the absence of a definable public interest, although our approach does not appear to us to be inconsistent with that theory. See Richard B. Stewart, The Reformation of American Administrative Law, 88 HARV. L. REV. 1667, 1682–83 (1975) (describing theory).

⁷⁹ See, e.g., Philip J. Harter, Negotiating Regulations: A Cure for Malaise, 71 GEO. L.J. 1 (1982) [hereinafter "Harter, Malaise"]. Regulation-by-negotiation thus has the distinction of being a procedure based on an academic, theoretical analysis of the problems of rulemaking, rather than based on existing practices.

⁸⁰ See Funk, *supra* note 42, at 1351 for a thorough and skeptical account of the history of negotiated rulemaking.

⁸⁷ Pub. L. No. 101-648, 104 Stat. 4969 (codified as amended at 5 U.S.C. §§ 561-570 (2000)).

⁸² Pub. L. No. 104-320, 110 Stat. 3870, 3873-74 (codified at 5 U.S.C. § 561 (2000)).

⁸³ See Philip J. Harter, Fear of Commitment: An Affliction of Adolescents, 46 DUKE L.J. 1389, 1412–14 (1997) (on its use in Clinton Administration) [hereinafter "Harter, Adolescents"]; Philip J. Harter, Assessing the Assessors: The Actual Performance of Negotiated Rulemaking, 9 N.Y.U. ENVIL. L.J. 32, 37–39 (2000) (describing recent use) [hereinafter "Harter, Assessing"]. The first negotiated rulemaking was done by the Federal Aviation Administration in 1983. See Cary Coglianese, Assessing the Advocacy of Negotiated Rulemaking: A Response to Philip Harter, 9 N.Y.U. ENVIL. L.J. 386, 392 (2001) [hereinafter "Coglianese, Assessing"].

In regulation-by-negotiation, at least in theory,

the representatives of the interests that would be substantially affected by a rule, including the agency responsible for issuing the rule, negotiate in good faith to reach consensus on a proposed rule. The members of the negotiated rulemaking committee determine what factual information or other data is necessary for them to make a reasoned decision, develop that information (which often comes from workgroups comprised of knowledgeable and interested individuals), analyze the information, examine the legal and policy issues involved in the regulation, and reach a consensus on the recommendation to make to the agency. As part of the consensus, each private interest agrees to support the recommendation and resulting rule to the extent that it reflects the agreement, and the agency agrees to use the recommendation as the basis of its action ⁸⁴

One study of the process highlighted the establishment of long term relationships in the negotiation rather than the limited, single contact agency staff typically has with outsiders in notice-and-comment rulemaking. Supporters and critics of regulation-by-negotiation agree that the crucial institutional element is the requirement of unanimity in reaching a recommendation. 66

The proponents of regulation-by-negotiation claim a wide range of benefits for it over traditional regulation-by-rulemaking, including: reducing the time to develop regulations, reducing post-issuance legal challenges to regulations, and improving the quality of regulations issued.⁸⁷ Whether or

⁸⁴ Harter, Assessing, supra note 83, at 33 (citations omitted). Formally, the agency determines to use negotiated rulemaking, issues a notice of intent to do so in the Federal Register and elsewhere, describes the committee to be formed, and invites applications to join the committee. "The notice serves the important purpose of ensuring that no important interests are overlooked, and that everyone understands that the decision on the rule will, at least initially, be made in the committee, and informing interested parties that they need to come forward." Id. at 35. See also Lawrence Susskind & Gerard McMahon, The Theory and Practice of Negotiated Rulemaking, 3 YALE J. ON REG. 133, 133 (1985).

⁸⁵ Clare M. Ryan, Leadership in Collaborative Policy-Making: An Analysis of Agency Rules in Regulatory Negotiations, 34 Pol'Y Sci. 221, 226 (2001).

⁸⁶ Harter, Assessing, supra note 83, at 34 ("Thus, each participating interest has veto power over the decision."); Coglianese, Promise and Performance, supra note 63, at 1334 ("The quest for consensus has been the hallmark of negotiated rulemaking.").

⁸⁷ Philip Harter, an important figure in establishing negotiated rulemaking, summarized its advantages:

The parties participate directly and immediately in the decision. They share in its development and concur with it, rather than "participate" by submitting information that the decisionmaker considers in reaching the decision. Frequently, those who participate in the negotiation are closer to the ultimate decisionmaking authority of the interest they represent than traditional intermediaries that represent the interest in an adversarial proceeding. Thus, participants in negotiations can

not the process has produced any of these benefits is the subject of considerable debate.⁸⁸ The best empirical evidence suggests that regulation-by-negotiation does not significantly reduce either the time necessary to create a final rule⁸⁹ or the incidence of litigation over final rules.⁹⁰

make substantive decisions, rather than acting as experts in the decisionmaking process. In addition, negotiation can be a less expensive means of decisionmaking because it reduces the need to engage in defensive research in anticipation of arguments made by adversaries.

Harter, Assessing, supra note 83, at 53 (quoting Philip J. Harter, Negotiating Regulations: A Cure for Malaise, 71 GEO. L.J. 1, 28-29 (1982)).

There is some controversy over exactly what benefits were to flow from regulation-by-negotiation. Compare Coglianese, Assessing, supra note 83, with Harter, Assessing, supra note 83. Prof. Coglianese has carefully documented the claims made for negotiated rulemaking, and we rely on his work here. See Coglianese, Promise and Performance, supra note 63, at 1261-72.

⁸⁸ See Coglianese, Promise and Performance, supra note 63, at 1260-61 (contending that negotiated rulemaking increases the time needed for rulemaking and the number of legal challenges to rules); Harter, Assessing, supra note 83, at 39-52 (responding to Coglianese); Cary Coglianese, Assessing the Advocacy of Negotiated Rulemaking: A Response to Philip Harter, 9 N.Y.U. Envtl. L.J. 386, 398-415 (2001) (responding to Harter). See also Funk, supra note 42 (surveying judicial reaction to negotiated rulemaking); Jody Freeman & Laura I. Langbein, Regulatory Negotiation and the Legitimacy Benefit, 9 N.Y.U. Envtl. L.J. 60, 68-71 (2000) (describing debate).

⁸⁹ See Coglianese, Promise and Performance, supra note 63, at 1309 ("Negotiated rulemaking saves no appreciable amount of time . . ."); Coglianese, Assessing, supra note 83, at 398-414. Prof. Harter contests Prof. Coglianese's conclusions. See Harter, Assessing, supra note 83, at 40-41 ("Properly understood, negotiated rulemaking has been remarkably successful in fulfilling its promise. In particular, EPA's experience with reg-neg has produced a one-third reduction in time . . ."). Part of the conflict appears to be definitional: Coglianese counts as negotiated rulemakings instances that Harter does not. The sample selection issues discussed by Coglianese seem to us to resolve this point in his favor.

⁹⁰ See Coglianese, Promise and Performance, supra note 63, at 1286–1309 (reviewing litigation record of traditional and negotiated rulemaking by EPA and concluding that, "[a]s a means of reducing litigation, negotiated rulemaking has yet to show any demonstrable success"). See also Coglianese, Assessing, supra note 83, at 416 (finding six of twelve EPA negotiated rulemakings resulted in legal challenges, "a litigation rate higher than that for all significant rules under EPA's major statutes and almost twice as high as that for EPA rules generally"). This somewhat counterintuitive finding is likely due to the creation of additional issues for litigation, such as exclusion from a negotiating committee. See id. at 427–28. Overall litigation rates for EPA are between 19% and 35% depending on the source of data and definition of major rule used. Coglianese, Promise and Performance, supra note 63, at 1298–1300 (describing methods of calculating challenge rates). See generally id. at 1296–1309 (reviewing challenges to various EPA rules and disputing widely held figure of 80% of rules challenged).

The most notable defects of rulemaking-by-negotiation in this regard are the introduction of conflict over the membership of the negotiating committee (which appears to be a significant problem, with 12% of the respondents in one survey saying that they had to "press" EPA to allow them to participate), disputes over the meaning of the final agreement, and disputes over whether the agency has lived up to the final agreement in the subsequent rulemaking. *Id.* at 1322–25. As with the conclusions on time saved, Prof. Harter disagrees with Prof. Coglianese. *See* Harter, *Assessing*, *supra* note 83, at 41 ("no rule that implements a consensus reached by the committee in which the parties agree not to challenge it has ever been the subject of a substantive judicial review ..."). As with the time saved issue, sample selection again is the key to determining who is correct, and Coglianese's approach is, we think, the more appropriate means of addressing sample selection.

Critics of regulation-by-negotiation argue that regulation-by-negotiation has perverse incentive effects for agencies and other participants in the process, leading to inferior outcomes. These include: selection of issues for inclusion based on likelihood of success,⁹¹ reduced willingness by participants to raise important issues that would hinder reaching consensus, 92 encouragement of ambiguity in rules to foster consensus, 93 heightening "the sensitivity of the parties to adverse portions of the rule."94 a "lowestcommon-denominator problem" that makes rules less likely to promote technological innovation,95 and an incentive to take positions on issues parties consider minor for use in negotiations. 96 Critics also find regulationby-negotiation to be "inconsistent with the theory and principles of the APA."97 Professor Cary Coglianese, the leading critic, summarized his conclusions about the defects of the process by terming regulation-by-negotiation as "not really even like a house of cards, but rather like the addition of an extra room to a house with an unsteady foundation. Negotiated rulemaking adds an early attempt at consensus building to a regulatory process designed to make it difficult to sustain interest group bargains."98

Regardless of the relative merits of the proponents' and the critics' positions, negotiated rulemaking presents agencies and outside groups with a different set of costs and benefits than other forms of rulemaking. Judge Patricia Wald, for example, concludes that regulation-by-negotiation "restricts, in some measure, through its insistence on face-to-face negotiations, the intrusion of political and extra-substantive considerations at all levels of rulemaking, agency and White House, and from all sources, identified and unidentified."99 The "precommitment" of the agency is thus, in Wald's view, the primary benefit of the process for participants, even if this commitment is not legally enforceable if the agency decides to alter the proposed rule after the negotiations conclude. 100 Other proponents of the procedure argue agencies use regulation-by-negotiation because of the value

⁹¹ Coglianese, Assessing, supra note 83, at 439.

⁹² Id. at 439-40 (describing how during "the equipment leaks negotiated rulemaking ... an EPA official knew industry was overlooking issues related to an entire category of equipment in developing the rule, but never said a word about it during the negotiations").

⁹³ Id. at 440-41 ("Adopting a vague rule may serve to secure agreement for its own sake, but doing so can constrain the effectiveness of any resulting public policy.").

⁹⁴ Coglianese, Promise and Performance, supra note 63, at 1325.

⁹⁵ Coglianese, Assessing, supra note 83, at 441.

⁹⁶ Coglianese, Promise and Performance, supra note 63, at 1331. Indeed, the critics even argue that alleged advantages, such as the lack of conflict, may play an important role in creating inferior rules, because "[t]he full articulation of opposing views, even structured in an adversarial process, may yield more useful information on which to construct public policy than a truncated discussion between individuals who are striving to achieve consensus." Coglianese, Assessing, supra note 83, at 440.

97 Funk, supra note 42, at 1374.

⁹⁸ Coglianese, *Promise and Performance*, supra note 63, at 1329 (emphasis omitted).

⁹⁹ Patricia Wald, ADR and the Courts: An Update, 46 DUKE L.J. 1445, 1471 (1997).

¹⁰⁰ Id. at 1470.

of the process.¹⁰¹ Research suggests, however, that "agency staff appear not to perceive [the purported] benefits as a singularly motivating factor,"¹⁰² and one study found that "the negotiation process has not been as popular with EPA employees as it was originally anticipated for resolving crucial rulemaking problems."¹⁰³ In addition, in light of the lack of a demonstrated empirical record of success for the procedure in reducing the time to the final rule or post-rulemaking litigation, this explanation appears unlikely. Even when they do adopt regulation-by-negotiation, agencies do not do so for their most important rules. According to Professor Coglianese's comprehensive review: "Agencies have eschewed negotiated rulemaking for federal rules having the broadest and most substantial impacts on industry and the public."¹⁰⁴ Again, this suggests agencies are not choosing regulation-by-negotiation because it is a clearly superior method for rulemaking in general but because of specific advantages in particular cases.

On the cost side, there is good reason to think that regulation-by-negotiation is often more costly for agencies in terms of their own resources than regulation-by-rulemaking. In part, this conclusion can be derived from the hybrid nature of regulation-by-negotiation: agencies must both negotiate and conduct a traditional notice and comment rulemaking after the negotiations conclude. Moreover, as Professor Coglianese summarized, "Whatever one makes of the impact of negotiation on the duration of rulemakings, there is no disputing that negotiated rulemaking is much more burdensome, in terms of the overall time and expense, than conventional rulemaking." Only when the reduced effort required for the notice-and-

Negotiated rulemaking has proven enormously successful in developing agreements in highly polarized situations and has enabled parties to address the best, most effective, or most efficient way of solving a regulatory controversy. Agencies have therefore turned to it to resolve particularly difficult, contentious issues that have eluded closure by means of traditional rulemaking procedures.

¹⁰¹ Harter, Assessing, supra note 83, at 38:

¹⁰² Coglianese, Promise and Performance, supra note 63, at 1276.

¹⁰³ Coglianese, *Promise and Performance*, *supra* note 63, at 1276–77 (quoting Brian Polkington, The Influence of Regulatory Negotiations on the U.S. Environmental Protection Agency as an Institution (1995) (unpublished paper presented at the 1995 American Political Science Association meeting)).

¹⁰⁴ Coglianese, Assessing, supra note 83, at 439. The rules chosen for regulation-by-negotiation

have stood at least a notch below [EPA's] large programmatic rules in terms of their scope and importance. Each of the negotiated rules has affected only a limited number of parties, at times just a single industry, precisely as the agency's own guidelines suggest. Instead of selecting the most challenging rules, the agency has used negotiated rulemaking for what an earlier EPA report called "second-tier rules" or those rules "affecting program implementation—rather than rules establishing program structure."

Coglianese, *Promise and Performance*, supra note 63, at 1319 (footnotes omitted).

105 Coglianese, *Assessing*, supra note 83, at 415. See also Coglianese, *Promise and*

comment portion of the process, if any, increased quality of the outcome, if any, and benefits to the agency, if any, outweigh the added costs of the negotiations will regulation-by-negotiation be preferred by agencies to regulation-by-rulemaking.

Agencies choose which regulatory method to apply to each regulatory proceeding. Rules are "purposely selected [for regulation-by-negotiation] in most cases by the very same agency managers who conduct or overs[ee] the rulemaking proceedings." Agencies also control which regulations continue through the negotiated rulemaking process, sometimes pulling regulations back onto the traditional rulemaking track. Agency decisions on the relative merits of regulation-by-negotiation in particular cases may differ from those of interest groups. For example, Ellen Siegler, commenting from an industry viewpoint on the American Petroleum Institute's participation in two regulation-by-negotiations, concluded that "environmental group participants have an advantage" in regulation-by-negotiation over industry participants because "they were not required to educate other participants [and so] did not have to establish their credibility as experts [and] also enjoyed the advantages of having well-developed negotiating skills and experience [and] did not have to check back with their constituencies at every turn." 108

EPA quickly became one of the most aggressive users of regulationby-negotiation, completing twelve negotiated rulemakings through 1996, a total greater than that of any other agency. ¹⁰⁹ As this relatively small total suggests, regulation-by-negotiation makes up a tiny fraction of all regulatory activity—less than one-tenth of one percent of all agency regulations. ¹¹⁰ The record seems clear: Agencies sometimes choose to use regu-

Performance, supra note 63, at 1285 ("by most accounts negotiated rulemaking demands much more concentrated amounts of time on the part of the agency and non-agency participants") and 1286 ("Even those who are otherwise positively inclined toward regulatory negotiation acknowledge that the process demands a considerable amount of time and resources up-front."); Coglianese, Assessing, supra note 83, at 415 ("Even if the overall duration of negotiated rulemakings could be shown to be shorter, the intensity of negotiated rulemakings still translates into additional time.").

¹⁰⁶ Coglianese, *Promise and Performance*, supra note 63, at 1312. Prof. Coglianese made this observation in the course of discussing the problem for his empirical study that rules were not randomly allocated between methods of rulemaking. He further noted that "the nonrandom assignment of rules to negotiated rulemaking introduces the possibility that the rules chosen for negotiated rulemaking were ones that already had either a greater or lesser need for time, or a greater or lesser propensity to be litigated, at least when compared with the average rule implemented through informal rulemaking." *Id.*

¹⁰⁷ See id. at 1312 n.256 (listing instances of rules EPA withdrew from negotiated rulemaking).

¹⁰⁸ Ellen Siegler, Regulatory Negotiations and Other Rulemaking Processes: Strengths and Weaknesses from an Industry Viewpoint, 46 DUKE L.J. 1429, 1436 (1997). See also Freeman & Langbein, supra note 88, at 63 (negotiated rulemaking disadvantages "smaller groups with comparatively fewer resources").

ios See Coglianese, Assessing, supra note 83, at 392. See also Ryan, supra note 85, at 225 ("EPA has initiated more negotiation activities than other federal agencies.").

¹¹⁰ See Coglianese, Promise and Performance, supra note 63, at 1276.

lation-by-negotiation over regulation-by-rulemaking; they just do not choose to do so very often.

The scholarly consensus thus is that regulation-by-negotiation is superior only under certain circumstances, even if proponents and critics disagree on how often those circumstances occur. As one government lawyer put it: "a reg-neg is not used for an average rule. There is usually something special about it that warrants a reg-neg." It Identifying these criteria, which may differ from the criteria the agencies announce as their decision criteria, "ill will tell us a great deal about why agencies sometimes choose regulation-by-negotiation and sometimes do not.

What advantages accrue to an agency from choosing regulation-bynegotiation over regulation-by-rulemaking? First, agencies receive benefits based on factors outside the scope of the particular regulatory issue. For example, agencies could value being perceived by the public, particular interest groups, or Congress as interested in negotiations. EPA has gone to some length to encourage the public perception that regulation-bynegotiation is successful at the agency, including altering which regulations it considered to have been conducted by negotiation to present a more favorable picture of the process.¹¹³ Second, agencies may need to modify an existing regulatory structure to accommodate a limited set of special circumstances, affecting only a small number of regulated entities and other interests, making regulation-by-negotiation genuinely cheaper to implement than regulation-by-rulemaking. Third, agencies may need the negotiation process to allow one set of interests to make credible commitments or disclosures to another set of interests that enable the regulation to be recognized as a Pareto improvement. The negotiation process itself may, therefore, serve as a means for interests to explicitly bargain over the "price" for agreeing to a new regulatory initiative or changes in rules, allowing a more explicit deal than would be possible with indirect negotiations through the notice and comment process. 114

Harter, Assessing, supra note 83, at 45 n.65 (quoting Neil Eisner, Assistant General Counsel for Regulation and Enforcement, United States Department of Transportation, and Chair, President's Committee on Negotiated Rulemaking). Even advocates for negotiated rulemaking, such as Philip Harter, have argued that it should be used only under the circumstances that improve the likelihood of success. Harter, Malaise, supra note 79, at 31 ("Negotiation must be carefully analyzed to determine not only whether it can work at all in the regulatory context, but also to identify those situations in which it is appropriate.").

¹¹² See EPA, Negotiated Rulemaking Fact Sheet, at http://www.epa.gov/brownfields/html-doc/negrefs.htm (Apr. 2003) (on file with the Harvard Environmental Law Review).

¹¹³ See, e.g., Coglianese, Assessing, supra note 83, at 403–04 (describing how EPA altered the public list of negotiated rulemakings to remove a particular rulemaking from the list after Prof. Coglianese published a study critical of EPA's record).

¹¹⁴ See, e.g., Beth Foster Hesse, An Update on Negotiated Rulemaking at U.S. EPA, 6 CORP. ENVIL. STRATEGY 302, 305-06 (1999) ("The negotiation process itself emerges as a powerful tool for learning what the participants in the process value. Many types of information are exchanged. [EPA] believes it is a great regulatory development tool that helps foster positive relationships among affected parties ...").

An alternative possibility is that agencies were originally mistaken about the new procedures' costs and benefits. For example, the Reagan Administration focused on the potential of regulation-by-negotiation to keep issues out of the courts. After agencies learned how the procedure actually worked, and after the development of the empirical evidence described above that called into question the proponents' claimed advantages for rulemaking-by-negotiation, agencies would then be expected to reduce their use of the procedure. This explanation is consistent with EPA's sharp drop off in use of the technique after 1993, 116 although it does not account for why agencies chose to select particular rulemakings for regulation-by-negotiation before changing their view of its value.

In sum, regulation-by-negotiation had an auspicious beginning, with a wide range of benefits claimed by its proponents based on reasonable theoretical speculation. Its practice, however, casts some doubt on the benefits' ability to be realized. The key characteristics of regulation-by-negotiation are:

- (1) early and continuous negotiation amongst included affected interests over the substance of the rule;
- (2) the requirement of unanimous consent to the final negotiated rule proposal;
- (3) increased costs for the agency involved; and
- (4) continuation of the notice and comment procedures for those not participating in the negotiation.

These characteristics create a situation in which the agency has relatively low bargaining power over the interest groups participating in the negotiation process relative to its position in regulation-by-rulemaking, since any participant can veto the outcome or challenge the result in court. Indeed, the great failing of regulation-by-negotiation from the point of view of the agency is that institutionally negotiated rulemaking reduces the agency's power relative to the regulated entities and other interest groups by granting them a veto over the consensus required. Nonetheless it may offer agencies important benefits in some circumstances, such as gaining "buy-in" from particular interest groups to a solution to a regulatory problem.

¹¹⁵ See Coglianese, Assessing, supra note 83, at 418 (quoting the former chair of the Administrative Conference of the United States at the time it adopted a report favoring negotiated rulemaking as saying that "the Reagan Administration's whole purpose on negotiated rulemaking was to keep things out of the courts").

¹¹⁶ Id. at 392 (noting no new negotiated rulemakings begun by EPA after 1993 through 2001 date of article). This is consistent with Prof. Coglianese's conclusion to his original empirical study, in which he noted that while the investment in the extra effort required by negotiated rulemaking "might once have been thought sound in light of the benefits promised from a speedier, less contested regulatory process, [i]n the absence of these promised benefits, agencies' continued reliance on public participation methods which do not depend on consensus would appear the more sensible approach to making regulatory decisions." Coglianese, Promise and Performance, supra note 63, at 1336.

D. Regulation-by-Litigation

Regulation-by-litigation operates quite differently from the other two means of creating regulation. Rather than issue a proposed rule or invite affected parties to negotiate, an agency sues one or more regulated entities, 117 charging them with violation of an existing statute, regulation or common law rule. The lawsuit is often based on a novel interpretation of the statute or regulation and may concern behavior that the regulated entities believe the agency has accepted in the past. Using the threat of substantial liability for the alleged breach, the agency then persuades or coerces the regulated entity to agree to a consent decree or injunctive relief that includes imposition of substantive regulatory provisions.

Regulation-by-litigation is not simply a lawsuit by a government agency. To regulate requires the agency to seek substantive relief beyond mere compliance with existing law or compensation for damages¹¹⁸ and to

In the wake of the [Clinton] Administration's . . . failures to get gun control legislation enacted, Executive Branch officials [began] utilizing a different mechanism: litigation. The government, specifically the Department of Housing and Urban Development (HUD), is organizing a class action lawsuit against gun makers by requesting [that] federally-funded housing authorities take legal action. The goal is to achieve changes in the firearms industry that were not obtained through legislation.

Id

The gun control suit is interesting for a number of reasons. First, like other regulation-by-litigation examples, the effort seeks to use the judiciary as a means to regulate an industry. The suit is not about violation of law or recovery of damages. It is about regulation. If successful, the resulting remedy will alter the economic landscape for the industry without altering any fundamental legislation or regulation. A second aspect of the suit relates to who is paying for it. Taxpayer money allocated to housing authorities nationwide will be used to fund the suit. But the suit will not be brought in the name of the United States. Instead, a regulatory agency, HUD, may be using purchased litigation to accomplish a policy goal that could not be achieved through the legislative process.

118 Prof. Viscusi offers a useful functional distinction: "Regulatory policies by the fed-

¹¹⁷ Regulation-by-litigation comes in different forms. In some cases, the Department of Justice brings an action on behalf of a federal agency that has the power to regulate but is seeking to undertake substantive steps it cannot do directly, as in the diesel litigation. For a brief account of the diesel litigation, see Diesel Industry Confronts the Emission Settlement, DIESEL PROGRESS, Dec. 1998, available at 1998 WL 13067704. In other cases, state attorneys general bring suit against firms or an industry, where the state officials do not represent an entity that itself has the power to regulate directly. (Most state attorneys general are independent officers, not representatives of state regulatory agencies.) At times, the state may contract out its litigation to private attorneys who work on a contingency fee basis rather than having the state attorney general handle the legal work. New Wave, supra note 39, at 5. The tobacco industry litigation is an example of this type of regulation-by-litigation. For discussion of tobacco litigation, see id. at 1-24. In still other cases, government agencies arrange for grant recipients to bring suit. Efforts by the U.S. Department of Housing and Urban Development ("HUD") to generate gun control regulation fall into this last category of cases. See Center for Regulatory Effectiveness, Circumventing Congress: The HUD Gun Suit, at http://www.thecre.com/litigation/hud.html (last visited Nov. 13, 2004) (on file with the Harvard Environmental Law Review). Noting that HUD would not be a party to the taxpayer-funded suit, the Center for Regulatory Effectiveness described the action this way:

seek to impose new regulatory obligations.¹¹⁹ For example, in the tobacco cases, state attorneys general sought agreement by the defendant companies to wide ranging limitations on their marketing of their products, and in the heavy-duty diesel engine cases, EPA sought to impose more stringent emissions requirements than required by the CAA and then-existing regulations. A regulatory agency or citizen group bringing an enforcement action against an entity that has allegedly violated a pre-existing rule is thus not regulation-by-litigation.¹²⁰ In such cases the agency is simply seeking compliance with a rule created through traditional rulemaking, statute, or common law.¹²¹ Even traditional antitrust litigation¹²² is not regulation-by-litigation as antitrust is itself an alternative to regulation because it seeks to create market conditions that render other regulatory actions unnecessary (e.g., the price regulations necessary to constrain regulated monopolies).¹²³

Asking for substantive relief is not enough to transform litigation into regulation-by-litigation, however. If an agency asked a court in an enforcement action for relief not authorized by, or expressly forbidden by, its organic statute, the court would refuse to grant the requested relief. It is only when the defendant agrees to the substantive relief demanded that the agency can exceed the unambiguous authority it has under its organic statute. (An ambiguous statute creates additional opportunities for agencies to stretch the boundaries of their authority, as in EPA's New Source Review litigation.) Regulation-by-litigation thus requires settlement as an element. Settlement is critical because, as Professor Paul Carrington and Derek Apanovitch noted in commenting on mass tort negotiated settlements, "it is the nature of

eral government usually do not provide any insurance compensation for victims but instead are focused almost exclusively on establishing regulatory standards for health and safety In contrast, litigation often has as its principal purpose an effort to transfer income to those who have suffered injuries." Viscusi, *Overview*, *supra* note 25, at 6.

¹¹⁹ Common law nuisance suits are thus excluded by the adjective "new."

¹²⁰ Whether or not a particular enforcement action is an attempt at regulation-by-litigation can be difficult to determine on the margin. For example, the FDA has great flexibility in enforcing its rules on medical devices. "This flexibility to punish (or, presumably, not to punish) fraud on the agency was especially important in the context of the MDA because of Congress' consistent refusal to allow FDA to regulate the practice of medicine." Thomas O. McGarity, Beyond Buckman: Wrongful Manipulation of the Regulatory Process in the Law of Torts, 41 WASHBURN L.J. 549, 553 (2002).

¹²¹ See, e.g., Federal Officials Sue New York City for Underground Tank Violations, 34(1) SOLID WASTE REPORT (Jan. 10, 2003) (describing suit against New York City for failing to put pollution control equipment on underground storage tanks required by 1988 regulations), available at 2003 WL 11081156; TVA Faces Federal Lawsuit Over Alleged Emissions Violations at Colbert Plant, UTIL. Env't Rep., July 26, 2002, at 3 (noting citizen suits to be filed over alleged violations of CAA opacity standards), available at 2002 WL 11408777.

¹²² The Microsoft and VISA/MasterCard antitrust suits brought by the federal and state governments certainly appear to have regulatory elements in the relief sought by the governments. To exclude such extraordinary cases we used the adjective "traditional" here.

¹²³ Of course, such regulations would themselves have to be statutorily authorized. Our point is merely that by engaging in antitrust actions, the government attempts to create a competitive market, which then renders unnecessary a variety of regulatory activity traditionally justified by the lack of competition in particular markets.

a settlement to sublimate questions of right and duty and to silence further consideration of the merits or the policies advanced by the agreed result." ¹²⁴ Importantly, the role of interest groups in settlement approval proceedings is significantly more restricted than their role in regulation-by-rulemaking ¹²⁵ and agencies receive substantial deference from the courts in regulatory settlements. ¹²⁶

The legal system generally favors settlements, so we must explain why they are problematic here. Settlements occur because they offer the parties an alternative preferable to the cost and uncertainty of litigation.¹²⁷ In the context of private litigation, settlements are often considered welfare-enhancing because they represent a contractual resolution voluntarily agreed to by the parties.¹²⁸ In the regulatory context, however, the presumption that settlements are welfare-enhancing is not always justified. A regulated entity may, of course, simply be conceding the inevitable when confronted

125 For an overview of the issues in approval of settlements in environmental litigation involving the government, see Carol E. Dinkins, Settlement Issues in Federal Enforcement Actions, SF97 ALI-ABA 1525 (2001); David L. Callies, The Use of Consent Decrees in Settling Land Use and Environmental Disputes, 21 STETSON L. REV. 871 (1992).

126 The First Circuit, in approving a CERCLA case settlement, noted:

[The] policy of the law to encourage settlements . . . has particular force where, as here, a government actor has pulled the laboring oar in constructing the proposed settlement. . . . Respect for the [executive branch] agency's role is heightened in a situation where the cards have been dealt face up and . . . sophisticated players, with sharply conflicting interests, sit at the table. . . . The relevant standard, after all, is not whether the settlement is one which the court itself might have fashioned, or considers as ideal, but whether the proposed decree is fair, reasonable, and faithful to the objectives of the governing statute.

United States v. Cannons Eng'g Corp., 899 F.2d 79, 84 (1st Cir. 1990). Agencies with particular expertise in a technical field are also due considerable deference from the courts in reviewing settlements. *See* United States v. Akzo Coatings of America, Inc., 949 F.2d 1409, 1436 (6th Cir. 1991).

¹²⁷ See Robert D. Cooter & Daniel L. Rubenfeld, Economic Analysis of Legal Disputes and Their Resolution, 27 J. Econ. Lit. 1067, 1075-76 (1989).

128 This is not always the case even here, however. For example, the FTC and DOJ are concerned that settlements in intellectual property disputes can diminish competition. Robert P. Taylor, Practicing Law Institute, *Patent Settlements as Antitrust Conspiracies*, 617 PLI PAT. 151, 157 (2000), quoting U.S. DEPT. OF JUSTICE AND FED. TRADE COMM'N, ANTITRUST GUIDELINES FOR THE LICENSING OF INTELLECTUAL PROPERTY § 5.5 (1995).

¹²⁴ Paul D. Carrington & Derek P. Apanovitch, The Constitutional Limits of Judicial Rulemaking: The Illegitimacy of Mass-Tort Settlements Negotiated Under Federal Rule 23, 39 ARIZ. L. REV. 461, 464 (1997). A similar criticism of negotiated rulemaking has been made by Prof. William Funk. In rulemaking, "[t]he statute is not just a brake or anchor on agency autonomy; it is the source and reason for the agency's action." In negotiated rulemaking, by contrast, Funk writes, "[t]he law is now merely a limitation of the range of bargaining. The parties to the negotiation are not serving the law, and the outcome of the negotiation is not legitimized by its service to the law." Funk, supra note 42, at 1374–75. The rulemaking that follows negotiated rulemaking provides a check on this, although if no one challenges the negotiated rule in the rulemaking process or in court, then the agency could exceed its statutory mandate as Funk suggests. Because of the potential check offered by the rulemaking after the negotiation, however, we believe that this is less of a concern than the problems with regulation-by-litigation.

by the agency with proof of the regulated entity's wrongdoing and so settle to save litigation costs or as part of a strategy of seeking leniency. 129 Such settlements increase net welfare compared to litigation because the ultimate outcome is not in doubt and the settlement saves both parties the litigation costs. Where there are hotly contested issues of law or fact, 130 however, the net welfare effect of settlements is ambiguous. Regulators can change the regulated entity's decision through actions unrelated to the merits of their legal or factual claims. By threatening sufficiently large liability, even a tiny probability of the regulator's success on the merits can produce an expected liability so great that the regulated entity has no choice but to settle. 131 Regulators need not simply threaten massive fines—they can also tip the balance by threatening retaliation on other fronts (denying required permits, taking additional time to process requests from the firm, closely examining the firm's records, creating bad publicity for the firm). Moreover, because settlements, unlike generally applicable rules, can vary the terms for different entities, holdouts risk being offered less favorable terms than those who settle early. 132 In these cases settlements are not entitled to the presumption that they are welfare increasing.

Finally, to constitute regulation, litigation must deal with a sufficient proportion of the regulated entities that could be covered by regulation-by-rulemaking such that the substantive provisions are an effective substitute for a generally applicable rule. Because settlements are not binding on nonparties, either the settlement itself must serve as a barrier to entry

¹²⁹ See, e.g., SEC Imposes Minimum Penalty on Reliant for Wash Trades, Cites Company's Cooperation, Power Markets Wk., May 19, 2003, at 9 (noting SEC imposed a lower penalty on an energy trading company because the company cooperated with the agency).

¹³⁰ There often are such issues. As Profs. Ruhl and Salzman note, "One need not toil long in any regulatory field before finding that agencies often produce rules that are complicated, difficult to understand, ambiguous, or contradictory." Ruhl & Salzman, *supra* note 36, at 761. Under such rules, there are often major differences between agency and outsider views of how to read the law and facts.

with a fine of \$1,000,000. Even if the company estimates EPA's chance of prevailing and imposing the fine as only 0.0001, with a probability of 0.9999 that the company will prevail, and ignoring the possibility of lesser fines and litigation costs, the expected value of the fine equals \$1,000,000 * 0.0001 + \$0 * 0.9999 = \$100. Similar criticisms have been made of the impact of the increased negotiating power given to prosecutors under the federal Sentence Reform Act of 1984. See, e.g., Albert W. Alschuler, Departures and Plea Agreements under the Sentencing Guidelines, 117 F.R.D. 459 (1988) (describing how sentencing guidelines enhance prosecutors' "leverage"); Robert G. Moruillo & Barry A. Bohrer, Checking the Balance: Prosecutorial Power in an Age of Expansive Legislation, 32 Am. CRIM. L. REV. 137, 151 (1995) (describing consequences of Sentencing Reform Act as "enhancing prosecutors' ability to establish the parameters of plea bargaining and to force persons to cooperate").

¹³² See, e.g., Jeffrey R. Parsons & David K. Williams, Considerations Regarding Consolidated Defense Arrangements in Environmental Litigation, 432 PLI Ltt. 523, 531 (1992) (noting that plaintiffs will often settle against some defendants to fund litigation and gain assistance against others). See also Lisa Bernstein & Daniel Klerman, An Economic Analysis of Mary Carter Settlement Agreements, 83 Geo. L.J. 2215 (1995) (explaining how plaintiffs can use agreements with individual defendants to fund litigation).

or some other barrier to entry must exist or be erected to prevent new entrants not bound by the settlement's terms from using their freedom from the substantive provisions to out-compete the settling entities.¹³³

Regulation-by-litigation also differs from other forms of regulation because it often combines large transfers of money to the government and others with substantive regulation. The diesel engine settlements, for example, included payments of a billion dollars in fines and agreed-upon offsetting actions. 134 Agencies do, of course, sometimes fine regulated entities for violations of rules. Such fines can be substantial. 135 Imposition of a fine alone, or a fine in combination with an agreement to correct clear violations of existing regulatory regimes, differs from combining the imposition of new substantive rules and payment of substantial fines. When an agency is negotiating jointly the imposition of substantive rules and financial provisions, the negotiations at least implicitly become a process of trading off the payment and the substance, with concessions in one area likely to imply a need for reciprocation in the other. In the tobacco case, for example, agreement to the massive payments to state governments would have been impossible without simultaneous agreement to the pseudo-tax structure to shift those payments from the tobacco companies to smokers. 136

Sometimes a portion of the money is used directly to reward non-governmental actors through attorneys' fees and mandatory payments. For example, the Hudson Institute estimated that the tobacco litigation settlement will produce payments of \$500 million per year to 200 to 300 lawyers, perhaps in perpetuity. As Professor Viscusi notes, the tobacco settlement "establishe[d] a tax on the product payable to the plaintiff and paid for almost entirely by the consumer rather than a damages payment paid for by

¹³⁴ The fines and cost of mandated actions imposed in the diesel litigation were based on sales of engines alleged to violate the rule and totaled:

Caterpillar	\$60,000,000
Cummins	\$60,000,000
Mack Trucks	\$31,000,000
Detroit Diesel	\$24,500,000
Volvo	\$14,000,000
Navistar International	\$ 2,900,000

Jeff Johnson, EPA Fines Engine Makers, TRANSPORT TOPICS, Oct. 26, 1998, at 120.

¹³³ See Schwartz, supra note 28, at 351. These factors raise important questions about the settlements' impact on antitrust laws. *Id.*

¹³⁵ See, e.g., Kevin Pang, Sara Lee Unit to Pay a Record Fine, CHI. TRIB., Aug. 2, 2003, at 1 (noting EPA's imposition of a \$5.25 million civil fine to resolve ozone regulation violations).

¹³⁶ Viscusi, Tobacco, supra note 71, at 46-48.

¹³⁷ JOHN FUND & MARTIN MORSE WOOSTER, THE DANGERS OF REGULATION THROUGH LITIGATION 9 (2000) (quoting Michael Horowitz of the Hudson Institute). See also Effective Tobacco Reduction Programs and the Use of Tobacco Revenues from the Settlements for This Purpose: Hearing Before the Senate Commerce, Science & Technology Comm., 106th Cong. 1 (2000) (statement of Sen. John McCain, Chairman, Senate Commerce, Science & Technology Comm.).

the defendant."¹³⁸ Other settlements have required defendants to fund interest group activities.¹³⁹ Campaign contributions from those who receive these payments are another potential benefit to politicians of choosing regulation-by-litigation, creating, at a minimum, a perceived corruption problem.¹⁴⁰

Agencies cannot use regulations to extract cash legitimately from regulated entities, although the regulatory process often offers opportunities for corruption.¹⁴¹ Regulation-by-litigation, on the other hand, differs in kind from run-of-the-mill political corruption in that the resource grab is not only not under the table but incorporated into official court orders. The lure of deep pockets has had an impact on regulators' behavior: Philadelphia created a special litigation unit "to seize the potential revenue benefit that could be gained by the City of Philadelphia acting as plaintiff." The monetary rewards of regulation-by-litigation thus distort regulatory decision-

contingency fee contracts were awarded without competitive bidding to attorneys who often bankrolled state political campaigns. In Mississippi, attorney general Mike Moore selected his number one campaign contributor, Richard Scruggs, to lead the Medicaid recovery suit. In Texas, attorney general Dan Morales chose five firms for the state's multibillion-dollar tobacco litigation; four of the five firms contributed a total of nearly \$150,000 to Morales from 1990 to 1995.

Robert A. Levy, Tobacco Wars: Will the Rule of Law Survive?, 2 J. HEALTH CARE L. & POL'Y 45, 53 (1998). Not all analysts concur the corruption is a major ongoing problem. Prof. David Dana, for example, argues that "[t]he corruption explanation is . . . unpersuasive" because "not all AGs are elected [as are Mississippi's and Texas's], so at least the campaign contribution concern may be limited in geographic scope" and "the Texas AG has lost office and is now under criminal investigation, which suggests that AGs will now expect to experience some political and perhaps legal punishment if they allocate what turn out to be extremely large contingency fees to known political allies." As a result, "in the wake of tobacco litigation, it seems likely that the retention of private contingency fee counsel will be subject to new ex ante controls, such as public disclosure and competitive bidding. Thus, contingency fee agreements in the future are not likely to be a particularly easy or low-cost means for AGs to secure illicit benefits, even assuming this was previously the case." David A. Dana, Public Interest and Private Lawyers: Toward a Normative Evaluation of Parens Patriae Litigation by Contingency Fee, 51 DePaul L. Rev. 315, 319 (2001).

¹⁴¹ See Thomas O. McGarity & Sidney A. Shapiro, Workers at Risk: The Failed Promise of the Occupational Safety and Health Administration 37 (1993) (describing how Nixon administration used the threat of OSHA regulation to raise campaign funds).

142 CITY OF PHILADELPHIA, FIVE YEAR FINANCIAL PLAN (FY2002-FY2006) (2001), quoted in Randall Lutter & Elizabeth Mader, Litigating Lead-Based Paint Hazards, in REGULATION THROUGH LITIGATION 106, 107 (W. Kip Viscusi ed., 2002). As Profs. Lutter and Mader concluded in their review of lead paint litigation, "the primary rationale for government agencies to sue companies associated with lead-based paint appears reminiscent of Willie Horton's [Sutton's] famous rejoinder about why he robbed banks: that's where the money is." Id. at 124.

¹³⁸ Viscusi, Overview, supra note 25, at 3.

¹³⁹ See, e.g., Jeff Montgomery, *Delaware Landowners Test Wetlands Regulations*, NEWS J. (Del.), May 8, 2003, at 13 (describing settlement of wetlands regulatory case by donation of \$62,500 to "a nonprofit conservation group").

¹⁴⁰ For example,

making by making substantive regulations that can be imposed via litigation more attractive than they would otherwise be. 143

In this context, regulation-by-litigation has several advantages for the regulator. First, it shifts bargaining power to the regulator, as the ability to threaten large financial losses may induce the regulated to accept substantial portions of the regulator's substantive wish list. Second, it greatly reduces the potential for challenges to the substance of the regulation and the authority of the regulator. 144 As Michigan Supreme Court Justice Robert Young noted, the judicial process, "though public in name, is private in essence."145 The defendants' silence has been purchased through the settlement itself; nonparties are not required to be given notice of the action and require the court's permission to even be heard on the merits. 146 Third, the regulator can extract resources as part of the settlement. Fourth, "the allocation of responsibilities for policy becomes blurred, as litigation becomes the mechanism forcing regulatory changes."147 Fifth, it allows substitution of the regulator's preferences for public preferences. As Professor Viscusi noted with respect to the tobacco litigation, for example, the tobacco companies, the states, and the attorneys all had reasons to prefer the pseudo-tax structure imposed to damages awards, but it was unlikely that cigarette consumers would do so. As they were not represented in the settlement process, cigarette consumers' views did not have a place at the table 148 and, not surprisingly, were ignored.

The important features of regulation-by-litigation are:

- (1) lack of public participation in creating the substantive regulation through the use of settlements;
- (2) reduced opportunity for challenges to the agency's views of its authority and the facts, because the threat of substantial penalties is used to coerce agreement by the only formal parties to the lawsuit;
- (3) piecemeal nature of the regulatory outcome, with settlements binding only individual parties and not the public generally; and

¹⁴³ Prof. Bruce Benson and others have documented a similar distortion in law enforcement efforts where civil forfeiture laws grant law enforcement departments a portion of the property forfeited, producing a shift of resources towards crimes that yield forfeitures. See Bruce L. Benson, To Serve and Protect: Privatization and Community in Criminal Justice 141–42 (1998); Brent D. Mast, Bruce L. Benson & David W. Rasmussen, Entrepreneurial Police and Drug Enforcement Policy, 104 Pub. Choice 285, 303 (2000).

¹⁴⁴ It does not completely eliminate the potential for such challenges, of course. The tobacco settlements were challenged by a variety of groups, for example.

¹⁴⁵ Justice Robert Young, "State Judicial Elections: Past, Present, and Future," remarks at conference sponsored by the U.S. Chamber Institute for Legal Reform and the Manhattan Institute, Washington, Apr. 2001, *quoted in James Wootton*, *Comment*, in REGULATION THROUGH LITIGATION 304, 305 (W. Kip Viscusi ed., 2002).

¹⁴⁶ See FED. R. CIV. P. 24 (stating conditions for intervention as of right and permissive intervention).

¹⁴⁷ Viscusi, Overview, supra note 25, at 1.

¹⁴⁸ Viscusi, *Tobacco*, supra note 71, at 52.

(4) sufficient coverage of the regulated industry to serve as a substitute for generally applicable rules.

These characteristics create a means of regulating that is quite different from both regulation-by-negotiation and regulation-by-rulemaking.

III. MAKING THE CHOICE

We have now established the first part of our argument, that agencies purposefully choose among alternative means of regulation.¹⁴⁹

The second part of our argument is that agencies' choices among the means of imposing regulations matter. One might argue that the means do not. For example, if the use of litigation to achieve regulatory goals is simply another tool for regulators, ultimately no different from using the traditional rulemaking or regulation-by-negotiation processes, then the choice is perhaps interesting, but unimportant. If it is true that regardless of how a regulation is imposed the same people bear the cost of the process (the tax-payers), the same people benefit from the regulation, and the same people bear the burden of any changes that result (the consumers who are affected by higher prices and the owners of specialized assets that depreciate because of the action) and the sizes of those costs, benefits, and burdens are invariant across methods of regulating, then the choice of means is largely irrelevant. Agencies would simply consider the transaction costs of each approach and pick the least costly option. This view, however, neglects several important issues.

First, according to the precepts of public choice theory, the regulatory choice is made based on the costs and benefits to the regulator rather than based on some aggregated social welfare calculation. This suggests that agencies assign little if any value to the costs incurred by an industry in defending itself against a lawsuit. It also suggests that agencies assign little if any value to the costs borne by consumers if the agencies' regulatory ac-

¹⁴⁹ Although this seems like an obvious point to us, it has provoked discussions when made while describing the Article, prompting us to discuss the point in more detail than might otherwise seem necessary. The point seems implicit in discussions of regulation-bynegotiation. See, e.g., Harter, Adolescents, supra note 83, at 1408 ("Negotiated rulemaking is not an end in itself, but rather is a tool for making regulatory decisions. Like other tools, it has its time and place and, like other tools, can impose costs and hardships if misused. Thus, negotiated rulemaking should only be employed if its criteria are met"); Susskind & McMahon, supra note 84, at 152 (discussing importance of rule selection for success of negotiated rulemaking). Our discussion supra at notes 106-112 and associated text sets forth this argument in detail. It is also certainly well documented that agency choices about how to conduct litigation, including which cases to file and when to settle, are the result of choices that vary from administration to administration. See Eric Helland, Prosecutorial Discretion at the EPA: Some Evidence on Litigation Strategy, 19 J. REG. ECON. 271, 290 (2001) ("The most obvious conclusion from the results is that there are important differences in the way in which EPA chooses to enforce pollution control laws and these differences can be explained in part by the presidential administration under whose auspices the case is tried.").

tivity results in a new regulatory mandate, except when explicitly required to do so by statute. ¹⁵⁰ Of course, when imposing such costs on defendants or consumers generates political costs for the regulators, those costs will be considered by the agencies. As different methods of regulation impose different constraints on agencies, the substance of the rules will differ depending on the method used to regulate. Thus different people may bear the costs of the process depending on which process is chosen.

Second, the different political costs to the agency of proceeding under various methods can influence the substance of the regulation considered. For example, distributional effects of regulatory policy may influence regulators' choice of means. When regulations have a regressive impact (effectively redistributing income from poorer to richer), their results may be politically unpopular. Directly increasing a tax on a product used more heavily by lower-income consumers (e.g., cigarettes) may thus be politically unpalatable.¹⁵¹ Indirectly imposing a price increase through litigation, on the other hand, avoids the direct link between regulatory action and income redistribution. Thus while the tobacco lawsuits led to price increases of more than thirty cents per pack nationwide, 152 this significant tax increase on cigarettes was imposed without the direct political costs to antitobacco interests of seeking a tax increase on the product from the state legislatures. 153 The method of regulation chosen may therefore alter substantive features of the regulation created by changing the politically feasible set of possible regulatory measures, again making the substance relate to the method. Thus different people may bear the costs of the regulation, depending on the method chosen to impose it.

¹⁵⁰ Thus, for example, the Regulatory Flexibility Act, 5 U.S.C. §§ 601–612 (2000), was passed to require agencies to consider compliance costs for small entities in traditional regulatory activities. Many regulatory statutes require agencies to consider the costs to consumers and producers of new products. See Eric A. Posner, Using Net Benefits Accounts to Discipline Agencies: A Thought Experiment, 150 U. Pa. L. Rev. 1473, 1473–74, 1486–88 (2002) (discussing existing and potential uses of various forms of cost-benefit analysis in regulatory statutes). The absence of such explicit requirements in the litigation process reduces the importance of such costs in the agency's consideration of regulation-by-litigation relative to its consideration of them in regulation-by-rulemaking and regulation-by-negotiation.

¹⁵¹ See Viscusi, Tobacco, supra note 71, at 30-31 (criticizing taxes on cigarettes as "extremely regressive" and "regressive in proportional as well as absolute terms" and noting political reluctance to increase tax).

¹⁵² W. Kip Viscusi, *The Governmental Composition of the Insurance Costs of Smoking*, 42 J.L. & Econ. 575, 580 (1999) ("In economic terms, the penalties are almost tantamount to a per-pack tax, which for an \$8 billion annual payment would be \$.33 per pack. Shortly after the signing of the settlement, cigarette prices reportedly rose nationally by about \$.35 per pack, and they have since risen more.").

as Tort Law, 71 Miss. L.J. 631, 662 (2001) (settlement "is in reality a regressive tax"); Viscusi, Tobacco, supra note 71, at 50-51 ("[W]hat distinguished the out-of-court settlement of the tobacco litigation was that these tax and regulatory policies were enacted without the usual input that accompanies the development of policies of this type.").

Third, the shift in the role of the courts fundamentally alters the basic function of the courts in regulation. The ultimate question to be answered about regulatory actions is whether or not costs net of benefits are being involuntarily imposed on individuals by private actors. 154 If we conclude that harm is being imposed involuntarily on individuals, then we must decide how to deal with the problem. 155 By constitutional design, these collective decisions are to be made by elected representatives. 156 Decisions to regulate are political decisions made by legislative bodies. By passing the CAA, for example, Congress was forced to accept political responsibility for the costs it imposed and the benefits it created.¹⁵⁷ Shifting regulatory decisions to litigation settlements alters that allocation of responsibility. Decisions about the content of regulations are also important. Inherent in the acceptance of the delegation of these questions to unelected agencies is that the decisions be made in the open and with the opportunity for public participation. Regulation-by-litigation, and to a lesser extent regulation-bynegotiation, inappropriately closes off those choices. For example, in the tobacco case, regulation-by-litigation was used to tax cigarettes although "there is little question that the appropriate taxation of cigarettes is a legislative issue, not a judicial one."158

Moreover, although delegation to agencies of the details of regulating allows Congress to shed some political responsibility for the costs of the regulations, Congress remains ultimately politically responsible for the costs of the regulations agencies impose. The function of judicial review of agency action is to ensure that the political-regulatory bargain made

¹⁵⁴ See Epstein, New Wave, supra note 39, at 60-61.

¹⁵⁵ Id. at 61. Of course, Prof. Epstein noted that he was describing a traditional view here. Id. By contrast, he notes, the modern view of collective decision-making seems to hold that legislative bodies are just the first fora for resolving policy questions. If the legislature fails to act, that failure is a sign that democracy does not work effectively rather than a sign that a position advocating action has been rejected legitimately. This failure is caused by special interest groups with unfair power distorting the democratic process. When the legislature fails to work properly, it is time for the losing special interest group to turn to the courts, or so the theory goes. Id.

Industry is then placed in the position of being hounded by litigators whose success turns on winning in only one of many jurisdictions. When the political stakes are high enough, legislative bodies have been known to alter state rules governing civil procedure in order to facilitate regulation-by-litigation. For an example involving the state of Maryland, see FUND & WOOSTER, supra note 137, at 13. For the reverse of this, see comments by litigator Michael Wallace in New Wave, supra note 39, at 8–9, where he explains how the Missispipi legislature adopted a tort reform act in 1994 that would have precluded the successful tobacco suit.

¹⁵⁶ Whether this means there should be a non-delegation doctrine with teeth is a question we leave to another day.

¹⁵⁷ When we say "accept," we overstate the case. Congress, of course, attempted to avoid as much responsibility for the costs and claim as much credit for the benefits of the legislation as it could. Thus a number of provisions of the various CAA Amendments of 1970, 1977, and 1990 look a great deal like they are intended to conceal any responsibility for costs. Nonetheless, Congressional passage of legislation does mean that Congress has taken at least some responsibility for the provisions of the legislation.

¹⁵⁸ Viscusi, Tobacco, supra note 71, at 31.

in the legislature is upheld by the agency.¹⁵⁹ By reviewing both the procedure and the agency's fidelity to legislative intent, the courts play a vital role in substantively constraining agencies. When their review shifts to approving a settlement, however, courts' attention is no longer focused on the legislative intent behind the statute but on the mechanics of settlement. With the defendants, who are in the best position to uncover agency infidelity, silenced by the settlement, there is no voice in the courtroom to argue against the settlement except for those permitted by the court to play a limited role through intervention. Moreover, in some instances governments have taken steps to alter the legal system to favor their position in regulation-by-litigation suits, distorting the legal process.¹⁶⁰ The larger point is that the various branches have different strengths and weaknesses in coping with regulatory issues.¹⁶¹ Regulation-by-litigation and regulation-by-negotiation shift too much discretion to agencies and limit the important roles legislatures and courts play in ensuring regulators are accountable.

Finally, as Professor Coglianese has noted:

When legislators or executive branch officials impose procedural requirements on administrative agencies, they purportedly do so in order to achieve some instrumental goals, including improving the efficiency or cost-effectiveness of regulations, preventing capture, reducing conflict, or changing the pace of the rulemaking process. These goals may not always be, or perhaps even are seldom likely to be, fully consistent with the broader public interest, but the reforms are nevertheless intended to have some consequences. ¹⁶²

Thus, Congress and the executive branch put constraints on agencies because they intend that those constraints produce a result. If agencies can evade those constraints, they are likely to produce a different result than intended by Congress or the executive.

¹⁵⁹ Landes & Posner, *Interest Group*, *supra* note 77, at 880–85 (modeling judges as enforcing bargains made by others).

¹⁶⁰ Prof. Viscusi describes how this worked in the tobacco litigation:

State attorney general suits put state judges, appointed by the very governments serving as plaintiffs, in a position to make rulings that, by undermining industry defenses, left the defendants with no choice but to agree to transfer immense sums to those states or risk immediate bankruptcy (because appeals would require posting of a bond equal to the entire verdict plus expected interest during the appeals process).

Viscusi, Tobacco, supra note 71, at 61.

¹⁶¹ See Neil Komisar, Imperfect Alternatives: Choosing Institutions in Law, Economics and Public Policy (1996).

¹⁶² Coglianese, Empirical Analysis, supra note 6, at 1115.

To summarize, it is our contention that regulators have a choice of how to create new substantive regulatory measures, as well as a choice about whether to create such measures at all, and that those choices matter. Each method has advantages and disadvantages for the regulator, for the regulated, and for others, including the consumers of the regulated entities' products and the employees of the regulated entities. Understanding how regulators make their choices is critical to understanding how legislatures must structure regulatory statutes if they hope to control agencies. To provide a framework for doing so, we next turn to a brief survey of insights from the theories of regulation used by social scientists to understand agency behavior; we use these insights to support our necessary contention that agencies choose how to regulate in a predictable way.

A. Theories of Regulation

We briefly examine the theories developed by political scientists, historians, and economists to explain why and how governments regulate. These theories give us a framework for understanding agencies' incentives in the regulatory process, a vital piece of any attempt to explain agency behavior.

1. The Public Interest Theory

The oldest theory of regulation, the public interest theory, holds that regulators purposefully seek to improve the nation's overall well being. 165 Each regulator is motivated to serve a broadly defined public interest. If pollution is the problem to be addressed, then regulators seek to minimize global costs in reducing the costs pollution involuntarily imposes on society by choosing the least costly method of regulation and the most appropriate regulatory measures to do so. If the costs of regulating are larger than the costs pollution imposes, then no action is taken. The theory posits that regulators generally seek to serve the public interest, not special interests such as the interest of one state or community, or the interests of a particular industry or firm. 166

¹⁶³ It is, of course, possible that legislatures do not want to control agencies, but prefer to allow them to operate with only loose supervision, allowing the legislatures to sell the service of reining in the agencies. *See supra* note 141.

¹⁶⁴ We thus disagree with Prof. Kenneth Abraham who concluded that "regulation-by-litigation, within broad bounds, may strike like lightning, almost randomly." Abraham, *supra* note 30, at 222.

¹⁶⁵ For an overview and critique of several theories of regulation, including the public interest theory, see Steven P. Croley, *Theories of Regulation: Incorporating the Administrative Process*, 98 COLUM. L. REV. 1 (1998). For a modern attempt to articulate a public interest theory, see Michael E. Levine & Jennifer L. Forrence, Regulatory Capture, Public Interest, and the Public Agenda: Toward a Synthesis, 6 J.L. ECON. & ORG. 167, 168 (1990).

¹⁶⁶ Croley, *supra* note 165, at 66-67 (noting that the theory assumes that regulators "at times... seek to advance the interests of the citizenry at large" as well as their own interest in staying in power).

The public interest theory recognizes that politicians and regulators are human, and that as a result errors and even deliberate acts of chicanery will sometimes occur, but the theory implies that examining regulatory choices as though politicians and bureaucrats seek to serve all interests taken together provides the best explanation of regulatory outcomes. Modern public interest theorists have modified the theory to consider the self-interest of the regulators as well. Outright corruption and regulations that primarily benefit special interests are aberrations rather than outcomes predicted by particular conditions.

A public interest theory of the choice of means of regulation would depend on regulators choosing the social cost minimizing method. There are obvious flaws with the public interest theory, not the least of which is that measures furthering special interests at the expense of society as a whole appear too frequently to be best explained as random noise. Selection of the means of regulation based on minimizing social costs is thus unlikely to satisfactorily explain regulators' choice of means. Despite its flaws, considering the public interest theory offers an important insight for understanding how regulators choose to regulate: our theory cannot depend on assumptions that public officials are concerned only with serving special interests. Publicly interested public servants do exist and, while it would be wrong to assume agencies are populated only by angels, it would be equally wrong to assume they are populated only by devils. It is often the angels we need fear the most, however. As Justice Brever noted, agencies are sometimes afflicted with tunnel vision and place too great a weight on solving the problems within their jurisdiction at the expense of other priorities. 168 Legislatures will sometimes seek to impose substantive limits on agencies' powers. Such limits may well appear to the public-spirited regulator as the result of an illegitimate backroom "political deal" and so deserving of subversion if possible. 169 Agencies are not Platonic guardians,

¹⁶⁷ Id. at 67.

¹⁶⁸ STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION 11 (1993) ("[E]ach employee's individual conscientious performance effectively carries single-minded pursuit of a single goal too far, to the point where it brings about more harm than good.").

¹⁶⁹ In the tobacco litigation, for example, state attorneys general often used litigation as a means of making an "end run" around legislatures that would not accept their proposals. See Dana, supra note 140, at 319–20 ("The most persuasive explanation for why AGs would retain contingency fee counsel is that the AGs perceive a need to bypass state legislatures. Both critics and defenders of the AGs' use of contingency fee agreements concur that had the AGs sought legislative funding to hire a staff to prosecute the tobacco litigation or to pay outside lawyers on a pay-as-you-go, hourly basis, they would have been rebuffed. Indeed, it appears that some governors and AGs were so rebuffed.") (footnote omitted). See also Viscusi, Tobacco, supra note 71, at 53–55 (noting role of "public health community" in using litigation to prompt federal regulatory activity and to overcome legislative reluctance to act); Philip J. Cook & Jens Ludwig, Litigation as Regulation: Firearms, in Regulation Through Litigation 67, 68 (W. Kip Viscusi ed., 2002) (noting that gun liability suits are brought by local governments seeking "what Congress and most state legislatures have been unwilling to legislate").

however, and even politically motivated substantive limits are nonetheless legislatively authorized substantive limits. Regulators may seek to overturn or prevent such deals, but they should not do so by subverting the restrictions imposed by the legislature.¹⁷⁰ When agencies have a choice of means with which to regulate, their choices may be based on the ability to evade constraints imposed by the legislature.

2. Capture Theory

Dissatisfaction with the predictive ability of the public interest theory led to the development of capture theory, derived from the work of political scientist Marver Bernstein¹⁷¹ and economic historian Gabriel Kolko.¹⁷² Like the public interest theory, capture theory starts with the notion of politicians serving the public interest. Unlike the public interest theory, capture theory recognizes the ambiguities inherent in defining the public interest. Even dedicated and well-meaning politicians face a fundamental problem: there is no clear-cut definition of what might be the public interest for every bill being considered in a legislative session, and so how to vote may not be easily determined.¹⁷³

Suppose the issue at hand has to do with regulating NO_x emissions from heavy-duty diesel engines. What is the standard that serves the public interest? Based on positions taken by various groups, we can predict that legislative or administrative consideration of the problem would likely draw proposals from at least the following:

Engine makers argue that the best route to reduced pollution is mandating cleaner fuel;¹⁷⁴ fuel refiners resist this suggestion, insisting that improved engine design offers cheaper ways to obtain reduced pollution;¹⁷⁵ one set of environmental pressure groups focused on global warming advocates technologies aimed at reducing greenhouse gas emissions, which include greater reliance on diesel,¹⁷⁶ while another group rejects those

¹⁷⁰ See Morriss, Meiners & Dorchak, supra note 66, at 571-82 (describing Secretary of the Interior Bruce Babbitt's campaign to subvert the General Mining Law of 1872).

¹⁷¹ See Marver H. Bernstein, Regulating Business by Independent Commission (1955).

 $^{^{172}}$ See Gabriel Kolko, The Triumph of Conservatism: A Reinterpretation of American History, 1900–1916 (1963).

¹⁷³ Indeed, providing service to the public may be an outcome of the legislative process, not an input to it. In any case, the dedicated legislator finds an ample supply of private and public sector advisors who happily recommend how best to vote on particular issues.

¹⁷⁴ See Dan Lang, Attention to Sulfur Content Pleases Engine Manufacturers, TRANS-PORT TOPICS, Feb. 14, 2000, at 13 ("The Engine Manufacturers Association is hailing an Environmental Protection Agency proposal to require deep reductions in the sulfur content of diesel fuel.").

¹⁷⁵ See John Wislocki, Bush Team Reopens Diesel Sulfur Rule, TRANSPORT TOPICS, Jan. 29, 2001, at 1, 33 (noting oil industry attempts to get low-sulfur fuel rule weakened).

¹⁷⁶ See Jeffrey Ball, Fuel for Debate: California Clean-Air Czar's Shift is New Boost for Diesel Engines, WALL ST. J., Oct. 24, 2002 (noting support for diesel by Dr. Alan Lloyd, head of California Air Resources Board, as well as by some EPA officials, on grounds that

technologies over concern for particulate emissions;¹⁷⁷ natural gas producers lobby for increased use of their product as an alternate fuel to diesel;¹⁷⁸ railroads seek rules that will reduce the use of long-distance trucks using heavy-duty engines of any type;¹⁷⁹ domestic trucking concerns point to Mexican trucks entering the U.S. as a more important source of pollutants and urge restrictions;¹⁸⁰ EPA's air programs office argues for fuel

diesel is a better technology for dealing with global warming).

177 The Sierra Club objects to the use of diesel engines to reduce overall greenhouse gas emissions:

European environmentalists and government officials have been more comfortable with diesels than their American counterparts. "A liter of diesel takes one farther and produces fewer greenhouse gases," said Albrecht Schmidt, an energy expert for Germany's Green Party. "The big problem with diesel are the small particulates, but we think that problem can be solved with new particulate filters." American environmentalists remain highly critical. "Diesel is the quick and dirty way to increase fuel economy," said Daniel Becker, the director of energy and global-warming policy at the Sierra Club. "As long as we have other technologies that are clean, I don't see the point in producing carcinogenic soot."

Edmund L. Andrews, W. Europe Embraces Diesel Cars That Get 78 mpg, SEATTLE TIMES, May 27, 2001, at A10. This issue also divides politicians. See Tom Meersman, A Divide on Law of the Land: Coleman and Wellstone Both Call Themselves Environmentalists, but They Stand Far Apart on Some Major Issues, STAR TRIB. (Minn.), Oct. 21, 2002, at 1B (noting the divergence in positions between Senate candidates both claiming to be environmentalists, with one emphasizing prevention of global warming and the other cleaning up contaminated land and creating parks).

¹⁷⁸ See, e.g., Yet Again, NGVs Outperform Diesel, Natural Gas Vehicles Coalition ("NGVC") website, at http://www.ngvc.org/ngv/ngvc.nsf/bytitle/release02009.html (last visited Nov. 19, 2004) (on file with the Harvard Environmental Law Review). NGVC defines its Government Affairs Committee's mission at the federal level as follows:

In the area of federal legislation, the goal of the Government Affairs Committee (GAC) is to stimulate NGV market development by convincing the Congress to pass and the President to sign into law legislation that rewards NGVs for the environmental, energy security and other benefits they provide. Legislative targets include tax incentives, appropriations/grants, other incentives, increased federal support for RD&D and the removal of regulatory barriers.

Id., at http://www.ngvc.org/ngv/ngvc.nsf/bytitle/federallegislation.htm (last visited Nov. 19, 2004) (on file with the Harvard Environmental Law Review). The Coalition is made up of "more than 180 companies interested in the promotion and use of natural gas and hydrogen as transportation fuels, including: engine, vehicle and equipment manufacturers[,] fleet operators and service providers[,] natural gas companies[,] and environmental groups and government organizations." Id., at http://www.ngvc.org/ngv/ngvc.nsf/bytitle/aboutngvc.htm (last visited Nov. 19, 2004) (on file with the Harvard Environmental Law Review).

179 See Thomas D. Simpson, Don't Overlook Truck Sizes and Weights, 204(1) RAILWAY AGE 12 (Jan. 1, 2003) (describing rail industry's lobbying efforts to block increase in allowable truck weights including use of environmental arguments), available at 2003 WL 14653507; John D. Schulz, Making a Wish List, Traffic World, Feb. 4, 2002, at 14 (noting that truck sizes and weights were "[l]argely frozen because of savvy railroad industry lobbying as part of the 1991 Intermodal Surface Transportation Equity Act"), available at 2002 WL 8043913; Patricia McCullough, Who's the Environmental . . . Bad Guy?, Heavy Duty Trucking, Oct. 1993, at 62 (describing rail campaign against trucking).

¹⁸⁰ On the overall truck dispute, see Carrie Ann Arett, Comment, The Mexican Trucking Dispute: A Botleneck to Free Trade, 25 Hous. J. INT'L L. 561 (203).

additives to reduce emissions, but EPA's ground water office opposes some additives as potential ground water contaminants;181 the Office of Management and Budget criticizes proposed actions as too expensive;¹⁸² the trucking industry warns of lost jobs from higher costs; 183 and retailers and justin-time manufacturers resist regulatory measures that increase trucking costs on grounds that they will cause a general economic slowdown.¹⁸⁴

In many cases, these various special interest groups credibly claim to be serving the public interest, despite the obvious disagreement amongst

¹⁸¹ The controversy over the gasoline additive MTBE illustrates the potential for such conflicts. After its use was mandated by EPA to improve air quality, it was discovered to cause significant ground water pollution problems.

MTBE is a particularly important case of scientific uncertainty because it illustrates the problem of cross-media pollution, a problem only exacerbated by the current structure of EPA. Use of MTBE to address air pollution caused new water pollution problems. Air pollution regulators who made the key decisions surrounding the introduction of MTBE did not have adequate animal studies to assess the risks of drinking and swimming water contamination. They also failed to communicate with other regulators about the problem of leaking underground storage tanks or understand the special geological significance of MTBE's solubility as a pathway into groundwater.

Paul S. Weiland & Robert O. Vos, Reforming EPA's Organizational Structure: Establishing an Adaptable Agency Through Eco-Regions, 42 NAT. RESOURCES J. 91, 100-01 (2002) (citations omitted).

For a thorough discussion of contradictions of the fuel additives program, see generally Adler, Clean Fuels, supra note 72. Agency rivalries can hamper effectiveness. See, e.g., Joel A. Mintz, Agencies, Congress and Regulatory Enforcement: A Review of EPA's Hazardous Waste Enforcement Effort, 1970-1987, 18 ENVIL. L. 683, 757 (1988) (noting "a relatively high level of rivalry among EPA regional offices, the Agency's headquarters, and the DOJ [during the period studied]. To some extent, these conflicts diminished the effectiveness of the government's overall enforcement effort"). See also Coglianese, Promise and Performance, supra note 63, at 1291-94 (discussing reformulated gasoline rule as an example of the failure of rulemaking-by-negotiation).

182 Elena Kagan, Presidential Administration, 114 HARV. L. REV. 2245, 2276-82 (2001)

(surveying OMB's role in several administrations).

183 See, e.g., Tania Douek, North America Regional-Groups Team Up to Defy US Ruling on Mexican Trucks, WMRC DAILY ANALYSIS, Dec. 3, 2002 (describing coalition of trucking interests and environmental pressure groups opposing NAFTA ruling on allowing Mexican truckers access to US market), available at 2002 WL 104064634.

184 We extrapolate from other positions taken by "just in time" manufacturers. See, e.g., Coalition of New England Companies for Trade website, at http://www.conect.org/ position.html (last visited Nov. 4, 2004) (on file with the Harvard Environmental Law Review) (group arguing for increased public funding of customs service infrastructure because "[i]n today's just-in-time world where products are manufactured using parts and raw materials from global sources, even a delay of a few hours can have huge repercussions"). Interestingly, EPA Region 2 gave an award to a company that adopted a "just-intime" manufacturing program on the ground that this allowed the company to reduce storage of hazardous materials on site. See Press Release, EPA, U.S. EPA Selects 32 New Members for Participation in National Environmental Performance Track, Recognized Top Environmental Performers (Feb. 11, 2002), at http://www.epa.gov/region02/news/2002/ 02006.htm (last visited Oct. 17, 2004) (on file with the Harvard Environmental Law Review). EPA's website made no mention of the tradeoff of increased emissions from more frequent deliveries or increased exposures to motorists to the potential for an accident by delivery trucks.

them about what the standard should be. Some of their disputes are factual but difficult to resolve. For example, either cleaning up diesel fuel is a cheaper means of obtaining an improvement in air quality than redesigning engines or the reverse is true, ¹⁸⁵ but it will be difficult to obtain sufficient credible data to answer this question in advance. Adopting the cheaper alternative is the preferred solution for society as a whole, ¹⁸⁶ but even with the best of intentions and best information available, the legislator or bureaucrat may not be able to choose based only on objective criteria. Persuaded by some of the interest groups, the legislator or bureaucrat takes a position that turns out to be advantageous to certain groups and disadvantageous to others. The theory describes the winners as having captured the politician or bureaucrat on this issue. The challenge for the winners is holding the gained territory when the next piece of legislation or regulation comes forward, and the favors special interest groups can bestow upon the supportive politician or bureaucrat are the means of doing so.

The capture theory predicts that special interest groups will organize and use the political process to their private advantage. With this theory in mind, one can imagine how producers of eastern high-sulfur coal may have captured key members of Congress when the 1977 CAA Amendments were being written. Those amendments required scrubbers for newly constructed coal-fired electricity plants, even if the plants planned to burn western low-sulfur coal that did not need scrubbers to meet emissions targets.¹⁸⁷ Not requiring all plants to use scrubbers would give western lowsulfur coal a cost advantage over eastern high-sulfur coal and could reduce overall SO, emissions. It would also increase mining in the West (largely nonunion, strip mining) and decrease it in the East (largely union, underground mining). Requiring scrubbers for all plants regardless of the type of coal they burned would eliminate western coal's cost advantage, might produce higher total SO, emissions by reducing the use of western lowsulfur coal, and would lead to production of additional solid waste from the scrubbers. Interest groups on both sides of the scrubber issue argued that their positions would improve environmental quality. 188 Similarly, history describes railroad interests capturing the Interstate Commerce Commission ("ICC") and limiting the entry of unregulated motor carriers into

¹⁸⁵ It is theoretically possible that the two alternatives are exactly equal in cost, but this strikes us as so unlikely that we need not worry about a general procedure for how to break ties in such cases.

Of course, some interest groups will undoubtedly argue that both should be done. Our example assumes that the socially optimal level of air pollution can be obtained by one or the other, setting aside the inevitable disagreements about what that level should be. The example is intended to make it as easy as possible to focus on the problem: even when the contentious issue of how clean the air should be is assumed to be solved, the public-interested legislator or regulator still faces significant uncertainty in determining how to go about achieving the goal.

¹⁸⁷ See Bruce A. Ackerman & William T. Hassler, Clean Coal/Dirty Air (1981).
¹⁸⁸ "Environmental" groups took only one side.

the business of hauling freight, and trucking interests eventually fighting back and winning a larger share of the business. ¹⁸⁹ Capture theory offers us an important additional insight: legislative and agency choices may be influenced by interest groups seeking private advantage. ¹⁹⁰

A capture theory of regulatory choice adds the element of self-interest among interest groups to the mix. Regulators choose the means of regulating that gives an advantage to the interest group that captures the regulator. This is helpful. To the extent that different groups have different advantages in rulemaking, negotiated rulemaking, and litigation, they will favor a particular approach. To the extent that the assessment that environmental pressure groups have a comparative advantage in negotiated rulemaking is correct¹⁹¹ and that such groups have successfully captured EPA, for example, we should see EPA making use of negotiated rulemaking.

Capture theory explains a great deal more of regulatory history than does the public interest theory alone. But there are key elements of the political struggle that the theory does not explain. It does not predict which of several competing interest groups caught in a political struggle will capture and which will lose out. Why, for example, did the eastern coal producers win and western coal producers lose in 1977? Why did truckers at first lose in competition with the rail interests but later prevail? Capture theory thus represents a first step toward incorporating interest group politics into regulatory theory but it is inadequate as an explanation of regulator behavior. To develop an explanation of regulator choice of means, we need a theory that includes analysis of the costs and benefits of the means of regulatory action to the regulator who makes the decision.

3. The Economic Theory

The economic theory of regulation, pioneered by the late Nobel economics laureate George Stigler, attempts to explain what happens when competing interest groups seek to influence political outcomes to their advantage. ¹⁹² The theory suggests that one should view the legislative process as an auction where the content of specific bills is auctioned to the highest bidder. Those who might bid the most are generally those who have the most to gain, or lose, net of their cost of organizing and communicating their bids. The theory thus offers an answer to the puzzle left by the

¹⁸⁹ For some detail on this and early ICC history, see James C. Nelson, *The Changing Economic Case for Surface Transport Regulation, in* Perspectives on Federal Transportation Policy 7–25 (James C. Miller III ed., 1975). *See also* Dorothy Robyn, Breaking the Special Interests: Trucking Deregulation and the Politics of Policy Reform (1987).

¹⁹⁰ The point may seem obvious but advocates of regulatory solutions do not always discuss the possibility that their proposal will be manipulated by interest groups.

¹⁹¹ See supra note 108 and associated text.

¹⁹² George J. Stigler, *The Theory of Economic Regulation*, 2 Bell J. Econ. & Mgmt. Sci. 3 (1971).

capture theory of why some groups succeed and others do not. Differences in costs of organizing explain the struggle between eastern and western coal interests over the 1977 CAA Amendments, for example. The mostly unionized eastern coal workers were already organized to protect their interests; the largely nonunion western coal workers were not. 193 Key legislators on the EPA Congressional oversight committee came from eastern coal-producing states, and the eastern coal industry had been organized to protect its interests in Congress for years. 194 The resulting lower organizing costs for eastern coal interests led to a greater net benefit to them and so a greater investment in the political process. Organizing costs also explain the railroads' success in dominating the early ICC: there were initially far fewer railroad companies than trucking companies, making organizing costs lower for the rail interests. Competing railroads had already organized cartels for the purpose of allocating freight among freight pool members and for lobbying state legislative bodies. The railroads owned huge amounts of land and real estate across the country, thus giving them an important and permanent political presence in many states. The railroads also initially had more massive capital investments than truckers, making them more willing to commit resources to winning regulatory battles. 195 The costs of organizing and communicating to Congress were low for railroads, making their early domination of the ICC predictable. Over time these advantages reversed and trucking interests came to dominate the ICC. 196

The economic theory of regulation adds a great deal of predictive power compared to its predecessors but still leaves two important gaps. First, it does not provide a complete role for government actors as self-interested participants in the regulatory drama. In particular, it does not address their role in the supply of interest groups. What if a potentially valuable industry group has not yet organized but politicians find it advantageous to have organized support? Can agencies create constituencies for their services?

A more specialized economic theory of regulation put forward by Professor Fred McChesney explains how political threats can induce a new interest group to organize.¹⁹⁷ McChesney describes some regulatory attempts as efforts by politicians to extract payments from the threatened firms and industries. For example, McChesney's theory suggests that congressional leaders offer bills that call for some industries to be regulated

¹⁹³ ACKERMAN & HASSLER, *supra* note 187, at 31 ("From the point of view of the United Mine Workers Union, the scrubbing issue was particularly straightforward. Because its membership is concentrated in the East, it had no difficulty coming out publicly for universal scrubbing.").

¹⁹⁴ Id. (eastern coal interests "use[d] their considerable political muscle" to help pass bill).

¹⁹⁵ GABRIEL KOLKO, RAILROADS AND REGULATION 1887–1916, 34–44 (1965).

¹⁹⁶ Lawrence S. Rothenberg, Regulation, Organizations, and Politics: Motor Freight Policy at the Interstate Commerce Commission 78–79 (1994).

¹⁹⁷ Fred McChesney, Rent Extraction and Interest-Group Organization in a Coasean Model of Regulation, 20 J. LEGAL STUD. 73 (1991).

for the first time, only to later see the bills go down in defeat. The bill inspires an unorganized industry to organize and generates campaign contributions and other meaningful support for politicians. Similarly, a politician may encourage a regulatory body to open a threatening industry investigation, only later to chastise the regulatory agency for overreaching its authority after the threatened industry has gained the ear of the legislator. ¹⁹⁸ In short, bureaucrats and politicians have the incentive and the means to alter organizing costs to advance their own interests.

Second, the economic theory has no role for ideology. Professor Bruce Yandle's "Bootleggers and Baptists" regulation theory explains how successful lobbying efforts often result when one supporting group, the "Baptists." takes the moral high ground while the other group, the "bootleggers," seeking to gain competitive advantage, provide political resources. 199 The name is drawn from the debate over laws requiring the Sunday closing of liquor stores. Sunday closings are favored by actual Baptists on moral grounds and by real bootleggers as a means of reducing their competition from legal sales of alcohol. Both bootleggers and Baptists support politicians who promote Sunday closing laws, enabling each group to achieve an objective it could not achieve on its own. To illustrate an application of the theory in environmental policy, some environmental pressure groups (the "Baptists") and corn producers (the "bootleggers") support legislation that requires the use of ethanol as a fuel supplement in gasoline. 200 The environmentalists claim that ethanol is a relatively clean renewable energy source. The corn producers simply want to expand the market where they have a specialized advantage. The "Bootleggers and Baptists" theory explains how implicitly shared lobbying efforts reduce the cost of gaining political advantage and how ideology can create such implicit sharing. It also offers an instrumental role for ideological claims made during debates over regulatory policy and explains how some people might perceive the public interest model of regulation as still valid.

¹⁹⁸ For example, western senators and congressmen benefit from attempts by others to "reform" the General Mining Law of 1872, which they are able to block, thus demonstrating their value to their constituents. See Morriss, Meiners & Dorchak, supra note 66. See also Frank B. Cross, Pragmatic Pathologies of Judicial Review of Administrative Rulemaking, 78 N.C. L. Rev. 1013, 1058-60 (2000) (describing congressional desire to avoid accountability for agency action while taking credit for addressing issues).

¹⁹⁹ Bruce Yandle, Bootleggers and Baptists: The Education of a Regulatory Economist, REGULATION, May-June 1983, at 12-16. See also Bruce Yandle & Stuart Buck, Bootleggers, Baptists, and the Global Warming Battle, 26 HARV. ENVIL. L. REV. 177 (2002) (applying theory to explain global warming debate).

²⁰⁰ See Renewable Fuels Ass'n, Who Supports Extending the Ethanol Tax Incentive Through 2007, 72 ETHANOL REPORT (May 7, 1998) (quoting Rep. Richard Gephardt), at http://www.ethanolrfa.org/EReports/er050798.html (last visited Nov. 13, 2004) (on file with the Harvard Environmental Law Review). See also Catherine Zandonella, Going Up in Smoke, New Scientist, Aug. 18, 2001, at 17; Adler, Clean Fuels, Dirty Air, supra note 72. Some environmental groups have now become critical of ethanol.

When we consider the costs and benefits to both the regulator and the regulated, we have a more complete picture of how to explain regulator behavior in choosing among alternative means of regulation. Regulators have a choice of four courses of action with respect to a particular set of facts. The regulator may:

- 1. do nothing;
- 2. issue a regulation through rulemaking;
- 3. negotiate a rule with the relevant interest groups; or
- 4. sue regulated entities and seek a consent decree that creates new substantive obligations on the part of the regulated.

In choosing among these alternatives, the agency is constrained by the facts of the particular issue, the structure of the regulated industry and relevant interest groups, the underlying statute the agency enforces, the agency's resources, the agency's other responsibilities, politics, and other factors. By comparing the costs and benefits of these four alternatives, the agency can choose the action that maximizes its net benefits. As McChesney and Yandle's elaborations on the economic theory of regulation suggest, this choice may be quite complex and involve dynamic effects of the agency's choices, as where an action spurs an industry to organize into a political pressure group.

B. Understanding Agencies

By combining the insights drawn from the theories described above, we derive eleven principles that characterize agency incentives, explaining when agencies act, which is the first step in understanding how they act.²⁰¹

1. All else being equal, in a competitive struggle among interest groups seeking political favors, the winning group will be one that is relatively small in size, so that the political benefits are concentrated and the cost of achieving agreement is low.

Interest groups competing for favorable regulatory outcomes will be willing to commit greater resources if the benefit to each interest group member is larger. Suppose there are two regulatory outcomes, A and B, which each generate \$1,000,000 in benefits. If 1000 firms will divide the

²⁰¹ We cannot explain every nuance of agency action. Other approaches may be needed to explain particular events. For example, there are problems of agency cost in the linkage between legislator and regulator that we described earlier. The legislator may intend that the regulator act in a particular way, but the regulator may either misunderstand or have another agenda to satisfy. Real world regulators must also often serve more than one master. Executive branch agencies, such as EPA, must attempt to satisfy both the Congress and the President, and sometimes the desires of the two masters are in conflict. Theories of regulation can carry us only so far in building detailed forecasts of regulator behavior.

benefits of regulatory outcome A and 10 firms will divide the benefits of regulatory outcome B, the 10 firms will each reap 100 times as much benefit (\$100,000 per firm in outcome B versus \$1,000 per firm in outcome A) as each of the 1,000 firms. The cost of reaching and enforcing an agreement to cooperate in seeking the desired regulatory outcome will also be lower for the 10 firms than for the 1000 firms, since negotiating an agreement on a common strategy and monitoring the contributions of each firm will be less costly with fewer firms, a key point derived from the economic theory. Smaller (in number) groups thus have an advantage over larger (in number) groups in the regulatory process. This explains, for example, the success of U.S. sugar producers in securing agricultural programs and tariffs that impose small costs on individual sugar consumers but provide large, concentrated benefits to the small number of U.S. sugar producers.²⁰²

2. All else being equal, the political process will prefer regulatory outcomes that spread the costs of regulations over a large and diverse population to outcomes that concentrate costs on smaller, more homogenous populations.

Small costs incurred by large numbers of individuals are less likely to provoke resistance than large costs imposed on small numbers of individuals, by the converse of point one. Similarly, diverse populations will face higher organizing costs than homogenous ones. Again, the U.S. sugar tariffs illustrate the point, derived from the economic theory.²⁰³

3. All else being equal, the winning interest group will be the one that has the lowest cost of organizing and communicating with politicians.

Groups with lower organizing costs face a lower "price" for their desired regulatory outcome and hence will "buy" more of it through the political process. Although we use economic terminology, the point holds under the capture theory as well as under the economic theory. Eastern coal miners, largely already organized into unions, thus were cheaper to organize to support the "dirty coal" bargain in the 1977 CAA than the nonunion western miners who opposed the deal.

²⁰² See GAO, SUPPORTING SUGAR PRICES HAS INCREASED USERS' COSTS WHILE BENEFITING PRODUCERS, RCED-00-126 (2000) (estimating that the program provided approximately \$1 billion in benefits for domestic sugar producers and cost U.S. consumers approximately \$1.9 billion in 1998). For a general historical analysis of sugar programs, see Katherine E. Monahan, Note, U.S. Sugar Policy: Domestic and International Repercussions of Sour Law, 15 HASTINGS INT'L & COMP. L. REV. 325 (1992).

²⁰³The sugar program costs an estimated \$50 per family of four per year, while costing a total of \$1.9 billion per year to sweetener consumers and benefiting producers by about \$1 billion. See United States Sugar Policy, Implications for International Trade and Options for Reform: Hearing Before the Subcomm. on Trade of the House Comm. on Ways and Means, 101st Cong. 146 (1990) (statement of Michael Becker, Director, Citizens for a Sound Economy); GAO, Supporting Sugar Prices Has Increased Users' Costs While Benefiting Producers, RCED-00-126 3-5 (2000).

4. Politicians and all other participants in the political process, including members of the bureaucracy, seek to minimize their own costs when acting on behalf of interest groups or the general public.

This point simply reflects rational actors' preference for lower cost solutions over higher cost solutions and concern with their own welfare and is consistent with all the theories of regulation.

5. Politicians must signal their performance to interest groups that support them by taking actions that reflect the symbolic preferences of the interest group, that deliver real benefits to the group, or that impose real costs on other groups to the advantage of the interest group.

Here we assume nothing more than that interest groups care about results. We make no assumptions about their motives, making the point consistent with all of the theories of regulation. Politicians seeking support of an interest group must demonstrate through their behavior in office that they will advance the interest group's agenda by rewarding it directly, supporting policies that the interest group supports, or punishing the interest group's adversaries. Interest groups' "report cards" on politicians are evidence of this phenomenon: members of Congress supported by trade unions are graded on their positions on free trade and labor legislation, for example, while environmental interest groups grade votes on environmental legislation.²⁰⁴

6. The unorganized general public is rationally ignorant about the details of specialized legislation or regulation designed by politicians and regulators to favor particular groups.

Rational ignorance means that individuals consider the benefits and costs of being informed.²⁰⁵ The point is consistent with all the theories of regulation, although it derives from the economic approach. When there are no perceived benefits to having additional information but there are costs, the individual rationally chooses to be ignorant on that topic. Thus, for example, any individual voter in a U.S. presidential election is unable to affect the result.²⁰⁶ Investing resources in learning the positions of the candidates on various issues by researching the candidates' position pa-

²⁰⁴ See, e.g., LEAGUE OF CONSERVATION VOTERS, 2002 NATIONAL ENVIRONMENTAL SCORECARD (Nov. 2002) (showing how Congressional delegations from various states voted on environmental issues), available at http://www.lcv.org/images/client/pdfs/scorecard02final.pdf (on file with the Harvard Environmental Law Review).

²⁰⁵ See David M. Schizer, Realization as a Subsidy, 73 N.Y.U. L. Rev. 1549, 1608 (1998) ("The relevant audience for a politician is the average voter, as opposed to the average tax practitioner or law review reader. It usually is not worthwhile for voters to understand the tax law except as it applies (narrowly) to them—a phenomenon known as 'rational ignorance."").

²⁰⁶ Yes, even in Florida in the 2000 Presidential election.

pers or reading detailed legislative proposals would be a waste of resources 207

Political candidates can attempt to reduce the cost of learning their positions by, for example, forming political parties and using advertisements to communicate with voters. Since such communication is designed to reduce voters' costs of being informed, it is unlikely to include details of regulatory measures, however. Voters thus know that "Republicans are tough on crime" and "Democrats want to protect the environment" rather than the details of the positions underlying such claims. The public is unlikely to hear that "Republicans favor life sentences for people convicted of three minor felonies" or "Democrats favor giving high-sulfur, unionized coal producers a competitive advantage over cleaner coal mined by nonunion miners." To the extent that the shorter, less accurate "sound bites" are successful, they may change the political calculations of particular politicians. Thus the "tough on crime" sound bite may persuade Democrat politicians to abandon their commitment to civil liberties²⁰⁸ and the "environment" sound bite may persuade Republican politicians to abandon their commitment to economic freedom. 209

7. Elected officials are the agents of the electorate. Bureaucrats are agents of elected officials. As in all principal-agent relationships, there are agency costs to delegating authority, including creation of freedom of action for the agent to pursue its own interests.

Agents do not perfectly carry out their principals' wishes for a variety of reasons: agents may seek to pursue their own agendas; principals may imperfectly convey their instructions; agents may misunderstand instructions; principals may communicate conflicting or vague instructions. Agency costs increase when politicians delegate actions to regulators because such delegations add additional principal-agent relationships (politician-bureaucrat and bureaucrat-bureaucrat) to the pre-existing public-politician principal-agent relationship. Of course, politicians can also benefit from the existence of a potential rogue agency, since it offers them a service (controlling the agency) to sell. ²¹⁰ This point is consistent with both the capture and economic theories.

²⁰⁷ Some individuals, including at least one of the authors of this Article, derive consumption benefits from such research. That some people become informed about politics is thus not inconsistent with the theory.

²⁰⁸ For example, the USA Patriot Act passed with only one Democratic Senator (Russell Feingold) voting against the law. Since its passage, the Act has been heavily criticized by civil liberties groups.

²⁰⁹ See PERC, PERC MIDTERM REPORT CARD, BUSH ADMINISTRATION'S ENVIRON-MENTAL POLICY (2003) (assessing Bush Administration commitment to market principles on environmental issues and giving it an overall grade of C-), available at http://www. perc.org/pdf/reportcard_2002.pdf (on file with the Harvard Environmental Law Review). Republicans in Congress also supported the 1990 CAA Amendments, a statute that clearly did not comport with the (theoretical) Republican preference for limited government.

²¹⁰ See supra note 141.

8. Interest groups prefer long-term, uninterrupted political benefits to short-term arrangements.

Long-term arrangements yield more benefits than short-term arrangements, all else being equal, by continuing the stream of benefits. Different forms of political arrangements have different degrees of durability. A constitutional amendment is more durable than legislation; legislation is generally more durable than a regulator's promise; and regulation can be limited by congressional removal of funds for enforcing rules.²¹¹ Successful lawsuits and settlements are more durable than regulations, since it takes legislation to override court action. This point is consistent with both the capture and economic theories.

9. Regulations can cartelize an industry by imposing and enforcing rules on the industry.

The fundamental problem of cartels from the point of view of a potential participant is preventing the defection of the cartel's members. ²¹² If a cartel can use regulations to restrict its members' acts and the authority of regulatory agencies to enforce those rules, it can cooperate more successfully than if it must rely on its own efforts. ²¹³ Thus the New Deal's National Recovery Act allowed industry groups to form output-limiting cartels enforced by the federal government. ²¹⁴ Even without direct cartelization through regulation, however, regulations can indirectly promote cartelization. For example, regulations requiring uniform product standards can generate uniform pricing and output decisions. ²¹⁵ This point is consistent with both the capture and economic theories.

²¹¹ See Morriss, Meiners & Dorchak, supra note 66, at 576–77 (describing congressional use of appropriation riders to control Interior Department changes to regulations under the General Mining Law of 1872).

²¹² See Christopher Avery, Christine Jolls, Richard A. Posner & Alvin E. Roth, *The Market for Federal Judicial Law Clerks*, 68 U. Chi. L. Rev. 793, 864 (2001) ("In general a cartel is much easier to sustain if strong outside sanctions exist to punish defectors. In the case of ordinary cartels, antitrust law denies enforcement of any explicit agreements, thereby eliminating most of the effective outside means of sanctioning those who defect."); RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW 309–10 (5th ed. 1998) ("a price-fixing agreement is less stable than most contracts" because of incentive to cheat).

²¹³ POSNER, ECONOMIC ANALYSIS, *supra* note 212, at 572 ("[M]uch legislation seems designed to facilitate cartel pricing by the regulated firms.").

²¹⁴ See Robert A. Skitol, The Shifting Sands of Antitrust Policy: Where It Has Been, Where It Is Now, Where It Will Be In Its Third Century, 9 CORNELL J.L. & PUB. POL'Y 239, 242 (1999) ("FDR's response [to the Depression included] . . . the National Industrial Recovery Act, NRA Codes and the resulting government sponsorship of industry cartels throughout the economy. Cartels were plainly to be preferred over 'free' competition and the chaos it brought."); POSNER, ECONOMIC ANALYSIS, supra note 212, at 688 (noting NIRA was "cartel remedy for depressions").

²¹⁵ See Posner, Economic Analysis, supra note 212, at 290 (noting homogeneity of product makes a market more susceptible to price fixing by making it harder to cheat by altering product quality).

10. Regulations typically have differential effects on regulated entities.

Firms experience different costs of complying with regulations. For example, a firm with ten plants can spread the fixed costs of a compliance staff over more facilities than a firm with only one plant. It is thus possible for one firm to raise competitors' costs by successfully obtaining a regulation that imposes small costs on itself yet high costs on competitors.²¹⁶ Similarly, regulation can generate differential effects across firms. If a particular control technology favored by regulators happens to be the technology used by firm A, but not by firms B to Z, then the chosen technology raises firms B to Z's costs relative to firm A's costs. The differential effects of regulation may also be enjoyed by firms that produce substitutes for those made by the regulated industry. For example, firms that produce diesel fuels may favor regulations that affect diesel engine design and oppose rules that call for cleaner diesel fuel. Firms that produce natural gas may favor regulations that raise the cost of burning diesel and so promote use of natural gas in vehicles. Existing firms will favor regulatory outcomes that create barriers to entry for potential competitors.²¹⁷ Competition within the field of regulation can be as intense, and as important to the future of firms, as competition in product markets. Although derived from the capture and economic theories, this point is consistent with all the theories.

11. The amount of resources a targeted industry will commit to avoiding an undesirable regulatory outcome is related to the expected cost of the regulation, including the uncertainty the regulation generates.

Uncertainty is a cost for regulated entities. If a regulator can guarantee that a particular regulation will not be changed for a fixed period, the cost of that regulation is lower for the regulated entity than if no such guarantee is possible. Differences among regulated entities make the cost of uncertainty vary. For example, firms with long lead times and large capital costs are more vulnerable to the costs of regulatory uncertainty than are firms with shorter lead times and smaller capital costs.²¹⁸ Once regulation be-

²¹⁶ See Todd J. Zywicki, Environmental Externalities and Political Externalities: The Political Economy of Environmental Regulation and Reform, 73 TULANE L. Rev. 845, 864–65 (1999) ("[T]he costs of complying with environmental regulations will not fall equally on all producers in a given industry. [Fixed cost investments] will fall harder on small businesses than on large businesses. Because most paperwork and other regulatory compliance measures are relatively constant costs, they will also fall harder on small firms and dampen competition. As compared to small firms, large firms can also absorb the costs of the numerous lawyers needed to weave their way through the regulatory and litigation thicket.").

²¹⁷ See Richard Revesz, Federalism and Environmental Regulation: A Public Choice Analysis, 115 Harv. L. Rev. 553, 572 (2001) (discussing how regulations can serve as barriers to entry); Jonathan H. Adler, Clean Politics, Dirty Profits: Rent-seeking behind the Green Curtain, in Political Environmentalism 1, 5 (Terry L. Anderson ed., 2000).

²¹⁸ The cost imposed by regulatory uncertainty rises with the length of the product design cycle that typifies an industry. For example, if the auto industry works on a five-year design cycle for the interiors of new cars, rule changes that might affect the kind and location of passive restraints can be disruptive and costly if imposed in mid-cycle. Lead time

comes a part of an industry's legal environment, adjustments are made to accommodate the regulatory constraints. As a result, the more frequent the change in regulation, all else being equal, the more costly the accommodation process. In short, even if regulation is costly, producers adjust as the cost of regulation becomes part of their competitive environment. Any unexpected action taken by regulators disturbs this equilibrium and introduces uncertainty into what was before a somewhat predictable relationship. When regulatory authorities shift from one form of regulation to another—when a regulator decides to litigate in lieu of or in addition to using traditional rulemaking, for example—uncertainty rises within an industry. Cartelization that may have been formed by older regulations is threatened, and the normal planning and design cycle is disrupted. The cost of uncertainty can far exceed the amount of penalties imposed by courts or through settlements. This is consistent with both the capture and economic theories.

C. Understanding Choice of Means

The eleven principles set out in the previous section do not embody any particularly controversial or contested ideas about how agencies behave. Although they are inconsistent with a pure public interest theory, serious analyses of agency behavior have long ago abandoned such an approach. Using these principles, we now turn to creating a framework to explain how agencies choose among the means of regulation.

"Administrative law is constructed and reconstructed on the basis of assumptions about how particular procedural arrangements will affect the behavior and performance of government officials and organizations." Applying our eleven principles to regulators' choice of means of regulating allows us to draw several insights about agency behavior to test those assumptions.

First, regulators will be more likely to act when it is possible to spread the cost of their action across a large number of relatively powerless actors (consumers or producers) while concentrating the benefit of their actions on a relatively small number of actors.²²⁰ Different means allow different degrees of cost spreading and so will produce different outcomes. For example, the gains from the tobacco settlement are concentrated in a relatively small number of state politicians and plaintiffs' attorneys. The cost of the settlement is imposed on smokers worldwide. Outside the western world it is unlikely that the typical smoker is aware of the settlement and its costs; even inside the United States, smokers are relatively politically powerless in most states because they are a diffuse, unorganized group. Similarly, EPA's suit against the heavy-duty diesel engine producers in-

on regulation ideally matches lead time on product design.

²¹⁹ Coglianese, Empirical Analysis, supra note 6, at 1113.

²²⁰ Principles 1 and 2, supra Part III.B.

volved a small number of engine producers and a large number of users who purchase heavy-duty diesel engine-equipped trucks. The cost of EPA's action would ultimately be spread across consumers of transportation services and products whose production included transportation services and diesel engine manufacturers.²²¹ If the cost per consumer is large enough, consumer groups can overcome the cost of organizing, band together, and deflect political efforts to impose costly regulation on the firms that supply them even when the number of firms is small. The high cost of organizing large numbers of consumers with diverse interests, however, will give an advantage to the regulated firms in transferring the costs to the consumers.

To predict the choice of means by regulators, we must therefore examine the relative cost for regulators of litigation, traditional rulemaking. and negotiated rulemaking.²²² Our regulatory theory principles predict that regulators will consider these costs in deciding how to act.²²³ Litigation involves relatively high costs per regulated entity, since formal proceedings are required to deal with each. Similarly, negotiation costs rise as the number of participants increases. On the other hand, traditional rulemaking offers a lower cost per regulated entity since one proceeding covers all firms. Thus regulation-by-litigation and regulation-by-negotiation are more likely to be used when a small number of regulated entities are targeted. Since regulators are more likely to act when benefits are concentrated and costs are dispersed,²²⁴ rulemaking will be the most frequent means of regulating. Where an agency is imposing large costs on a small, organized group, however, litigation will be preferable since it offers the agency the opportunity to neutralize the natural advantage organized interest groups have in contesting agency action.

Second, regulation-by-litigation may be used by agencies as a way to separate normally allied interests. If an industry has organized against past efforts at regulation, then successful suits attacking major firms in the industry will disrupt the regulation-based cartel by creating incentives for the firms to break ranks.²²⁵ Indeed, the bruised firms may become quiet supporters of action against their competitors as they argue for a level playing field. Litigation allows regulators to deal with firms individually, preventing regulated entities from cooperating in responding to a regulatory initiative. Legal rules, such as those governing waiver of attorney-client privilege, may also hamper cooperation among defendants.²²⁶ Regulation-

²²¹ Exactly who bore the costs would depend on whether the engine manufacturers could raise prices or not.

²²² Principle 4, supra Part III.B.

²²³ Principle 7, supra Part III.B.

²²⁴ Principles 1, 2, and 3, supra Part III.B.

²²⁵ Principles 9, 10, and 11, supra Part III.B.

²²⁶ There are work-arounds for such problems, such as joint defense strategies, but these impose their own costs.

by-negotiation, on the other hand, has the opposite effect, requiring cooperation among the regulated in the negotiations. Where the regulated do not share common interests, negotiations are more difficult. The negotiations themselves also provide a device for inducing cooperation that might not otherwise be possible because of antitrust considerations. Where the regulator wishes to foster cooperation, it is more likely to choose regulation-by-negotiation; where it wishes to hinder it, it is more likely to choose regulation-by-litigation.

Third, regulation-by-litigation will be used by agencies when there are resources that can be captured by the regulators from the regulated.²²⁷ As there is little point in winning monetary settlements from bankrupt firms, it is therefore less likely when firms are financially weak. Regulation-by-litigation is thus more likely against profitable industries than against economically weak ones. In addition, success in litigation offers a means to signal an agency's fidelity to interest groups.²²⁸ The announcement of large civil penalties telegraphs to important constituents the fact that enforcement actions are being taken.²²⁹ The amount of the settlements can be seen as trophies by those who favor regulation.²³⁰ Regulation-by-rulemaking, on the other hand, hardly makes headlines once the rules are in place, are operating, and the announcement of complex rules is harder (but not impossible) to package for the media. Further, regulation-by-negotiation opens an agency to charges of capture by spoiler groups.²³¹

Fourth, regulation-by-litigation will be used when it is politically advantageous to achieve a more permanent impact on the targeted firms or industry. A change in administration can interrupt and even reverse regulations that are in an agency's regulatory pipeline on the way to becoming final.²³² By comparison, the political costs to a new president of calling off litigators in the midst of court proceedings, requiring a public reversal

²²⁷ Keep in mind our distinction between regulation-by-litigation and civil enforcement actions involving existing substantive rules. The latter also generate positive headlines for regulators but do not involve imposing new substantive requirements, merely bringing noncompliant actors into compliance.

²²⁸ Principles 5 and 6, supra Part III.B. See also Jonathan H. Adler, Bean Counting for a Better Earth: Environmental Enforcement at EPA, REGULATION, Spring 1998, at 40, 48 ("[W]ork that produces high profile outcomes tends to drive out work that produces little noticed outcomes. If enforcement goes down, EPA risks being attacked by environmental groups or politicians for being 'soft' on polluters.").

groups or politicians for being 'soft' on polluters.").

229 See, e.g., EPA Set Enforcement Records in 1999, ENV'T News SERVICE, Jan. 21, 2000 (quoting EPA Administrator Carol Browner: "This year's enforcement statistics again send a strong signal that we will unfailingly take action against those who illegally pollute the environment of our country"), available at 2000 WL 7838025.

²³⁰ See, e.g., Attorney General Janet Reno's comments on announcing the penalties against the diesel engine manufacturers, discussed in Morriss, Yandle & Dorchak, supra note 14, at 509 n.590 and associated text.

²³¹ See Todd J. Zywicki, Baptists?: The Political Economy of Environmental Interest Groups, 53 C.W.R.U. L. Rev. 315, 327-28 (2002) (describing spoiler role played by national environmental groups to protect national lobbyists' turf).

²³² See Morriss, Meiners & Dorchak, supra note 66, at 590-94 (describing how Bush Administration reversed Clinton Administration policies on mining).

of positions taken in official court filings, will often be higher than the costs of changing course in a rulemaking.²³³ Changing positions in a rulemaking involves changing a judgment call among plausible alternatives. Changing positions in litigation, at least for the public, involves changing positions on what "the law" says—a harder position to sustain publicly.

Fifth, regulation-by-litigation is a way for regulators to close the door to interests who might wish to make their views known in a traditional regulatory process or even in a regulation-by-negotiation process. Unlike a notice and comment rulemaking procedure, regulation-by-litigation does not guarantee all interests the opportunity to be heard in the regulatory process. The government and defendants selected by the government are parties; all others must seek permission to intervene to present their positions and evidence. Courts need not grant such permission, and often do not.²³⁴ Although agencies can close interests out of regulation-by-negotia-tion, they are vulnerable to suits over the exclusion and challenges from excluded interests in the rulemaking that follows the negotiations.

Sixth, regulation-by-negotiation is most likely to be used when the agency seeks to facilitate interest group bargaining over relatively minor adjustments to existing regulatory schemes. By inviting interest groups into the process before drafting the rule, the agency cedes considerable control of the agenda, trading off bargaining power for the involvement of the interest groups. By allowing each group to hold the final negotiated product hostage to each group's veto, the agency makes credible interest group commitments easier.²³⁵

To summarize, once they decide to regulate, agencies have three alternative means of regulation: regulation-by-rulemaking, regulation-by-negotiation, and regulation-by-litigation. Each offers a different set of advantages and disadvantages for regulators, regulated entities, and society generally. The choice of means is largely left to the regulators, so where the social costs and benefits of various forms of regulation diverge from the regulators' costs and benefits, regulators may choose a socially inappropriate means of regulation.

²³³ Of course, reversals of any policy can cause political fallout. See, e.g., Editorial, Protecting the Everglades, Patriot-News (Pa.), June 2, 2002, at F4 ("The Bush administration has had a rather woeful record on the environment up to this point, it being all too eager to reverse Clinton administration policies that sought to preserve the best of America's natural world that is still unprotected."); Editorial, Choking on the Air in Yellowstone Park, Pensacola News J. (Fla.), Mar. 8, 2002, at 8A (commenting on reversal of Clinton policy on snowmobiles in Yellowstone that "[t]he degree to which the Bush administration is clueless on environmental policy is revealed more starkly than anywhere else in the debate over snowmobiles in Yellowstone National Park").

²³⁴ In the diesel regulation litigation described *supra* note 134, the truck manufacturers association was denied permission to intervene, for example.

²³⁵ Principle 8, supra Part III.B.

IV. EXPLAINING EPA'S CHOICES

We began this Article with a discussion of public choice theory and principles that included a summary of major theories of regulation and a review of regulatory process options that are available when a regulator chooses to act. We emphasized the fact that decisions about regulation are made by ordinary human beings, not angels or devils. We pointed out that public choice assumes that all people, whether they are politicians, bureaucrats, professors, or supermarket employees, seek to maximize their own well-being when making choices. In earlier work we examined in detail the regulation of heavy-duty diesel engine emissions.²³⁶ This case study is ideal for testing our broader theory, as EPA and its predecessor chose each of the four actions described above (no action, rulemaking, negotiated rulemaking, and litigation) over the more than thirty years of regulatory activity on diesel mobile source emissions. We first describe the incentive structure for EPA under the CAA, necessary to understand EPA's choices. We then use a highly abbreviated account of the regulatory history of diesel engine emissions, focusing on the choices the agencies made in choosing when and how to act,237 as a vehicle to analyze agency choice of the means of regulation.

A. Lack of Action

The first national regulations dealing with heavy-duty diesel emissions were issued under the Air Quality Act of 1967²³⁸ in 1968 to apply to model year ("MY") 1970 engines and regulated the emission of "smoke" as measured through an opacity test.²³⁹ An initial level was set for MY1970-MY1973 and a more stringent level for MY1974 and beyond.²⁴⁰ Relative to other sources, the initial round of regulation paid little attention to heavy-duty diesel engines. The passage of the CAA Amendments of 1970 and the creation of EPA by President Richard Nixon that same year changed the regulatory climate. Federal authority was enhanced at the expense of the states.²⁴¹ At the same time, environmental quality became an important national political issue, with both the Nixon Administration and presumed 1972 Democratic presidential candidate Senator Edmund Muskie jockeying for advantage on the issue.²⁴²

²³⁶ See Morriss, Yandle & Dorchak, supra note 14.

²³⁷ For convenience and to minimize the length of this Article, we cite only to our earlier case study for the facts in this section. The interested reader is referred to that article for original source for the facts we provide here.

²³⁸ Pub. L. No. 90-148, 81 Stat. 485 (1967).

²³⁹ 33 Fed. Reg. 8304, 8305 (June 4, 1968).

²⁴⁰ Morriss, Yandle & Dorchak, *supra* note 14, at 460–62.

²⁴¹ Andrew P. Morriss, *The Politics of the Clean Air Act, in Political Environmentalism* 263, 282–85 (Terry L. Anderson ed., 2000).

²⁴² Id.

The new regulatory framework reserved mobile source emission standards to the federal government (except for California, which already had a regulatory program in effect).²⁴³ EPA tightened the MY1974 standards for diesels, adding emissions standards for CO, NO_x, and hydrocarbons to the "smoke" standard.²⁴⁴ Although EPA's MY1974 regulations were more stringent than their Department of Health, Education and Welfare ("HEW") predecessors, they were less stringent than those applied to automobiles.²⁴⁵

Diesel emissions were virtually ignored in early federal air pollution regulatory efforts because the gains from regulating them were slight. In the late 1960s and early 1970s, heavy-duty diesel engines played a comparatively small role in mobile source emissions in the United States. For example, in 1970, diesel trucks made up only 2.45% of trucks in use.²⁴⁶ In contrast, by the late 1990s diesels made up over 90% of trucks in use in the heavy-duty segment.²⁴⁷ Diesels thus accounted for only a small fraction of total 1970 emissions—1.75% of particulates, 0.02% of CO, 1.9% of hydrocarbons, 4.8% of NO_x, and 0.4% of SO_x. ²⁴⁸ The gains from regulatory activity by EPA and HEW were thus small. Because of the small proportion of diesel engines among mobile sources, even large reductions in diesel emissions would only marginally reduce mobile source or total emissions. It is not surprising, therefore, that EPA and HEW focused their attention elsewhere, with their first step to reduce visible emissions ("smoke"). Moreover, both EPA and HEW had large competing demands on their resources. The passage of multiple new national regulatory statutes, along with the creation of EPA itself, meant that agency resources were scarce. Devoting them to regulating a minor contributor to air pollution would not have been a rational allocation of scarce agency resources. and the comparative neglect of heavy-duty diesel emissions in the first rounds of national mobile source emissions is thus unsurprising.

²⁴³ Morriss, Yandle & Dorchak, *supra* note 14, at 462–63. *See also* Clean Air Act, Pub. L. No 90-148, 81 Stat. 485 (1967).

²⁴⁴ Id. at 463-64. See also Clean Air Act, Pub. L. No 90-148, 81 Stat. 485 (1967).

²⁴⁵ Id. at 463.

²⁴⁶ U.S. Department of Health, Education, and Welfare, Public Health Service, Environmental Health Service, National Air Pollution Control Administration, Control Techniques for Carbon Monoxide, Nitrogen Oxide, and Hydrocarbon Emissions from Mobile Sources 2–4, Table 2-1 (1970).

²⁴⁷ CHARLES RIVER ASSOCIATES, DIESEL TECHNOLOGY AND THE AMERICAN ECONOMY 10 (2000), available at http://www.dieselforum.org/enews/downloads/DTF-Economic-Study.pdf (on file with the Harvard Environmental Law Review).

²⁴⁸ N. A. Henein, *Diesel Engines Combustion and Émissions*, in Engine Emissions: Pollutant Formation and Measurement 211, 211 (George S. Springer & Donald J. Patterson eds., 1973).

B. Regulating by Rulemaking in the 1970s and 1980s

Four crucial features of the post-1970 regulatory framework affected EPA's subsequent regulatory choices. First, the CAA required EPA to establish air quality standards for specific pollutants.²⁴⁹ Regions that failed to attain these standards were disadvantaged in several ways, including the potential loss of federal highway funds²⁵⁰ and reduced future economic growth due to more stringent pollution control restrictions.²⁵¹ Second, the statute distinguished between regulation of mobile and stationary sources, giving EPA effective control of emission level from the former and states substantially more authority over emissions from the latter.²⁵² Third, EPA chose, not unreasonably, to rely on air quality modeling rather than actual air quality measurement to evaluate the effectiveness of air quality measures.²⁵³ Performance in the model, rather than actual performance, thus became critical for the agency.²⁵⁴ Fourth, EPA chose to regulate heavy-duty engines by testing engines in laboratories under specified conditions rather than through measurements of actual emissions on the road.²⁵⁵ Technological and cost constraints can explain EPA's decision—heavy-duty diesel engines are expensive and road testing capabilities were limited in the early 1970s.

The 1977 CAA explicitly required EPA to substantially tighten diesel emissions standards,²⁵⁶ a result that benefited a potent coalition of the automobile manufacturers, stationary sources, and states looking for reductions in emissions to allow economic growth. At the same time, the 1977 amendments made changes favorable to the automobile industry, postponing more stringent standards for cars.²⁵⁷ The new diesel requirements partially offset the impact of the delays in auto standards. Congress also imposed a significant constraint on EPA, requiring a four-year lead time for new mobile source emission standards.²⁵⁸ Despite the 1977 Amendments requirement of increased regulation, EPA continued to drag its feet on issuing standards for heavy-duty diesels; ultimately the Natural Resources Defense Council successfully sued to force EPA to issue final NO_x and

²⁴⁹ 42 U.S.C. § 7408(a)(1) (2000).

²⁵⁰ Id. at § 7407(d)(1)(A)(i).

²⁵¹ Morriss, Yandle & Dorchak, *supra* note 14, at 408.

²⁵² Id. at 412-15.

²⁵³ Id. at 415-21.

²⁵⁴ Id. at 415-21.

²⁵⁵ Id. at 452-53.

²⁵⁶ Morriss, Yandle & Dorchak, *supra* note 14 at 465–67 and n.336 (quoting Clean Air Act Amendments of 1977 (Pub. L. No. 95-5), 91 Stat. 685, 765 (codified as amended in 42 U.S.C. § 7521 (1994)).

²⁵⁷ Id. at 465.

²⁵⁸ 42 U.S.C. § 7521(a)(3)(C) (2000) ("Any standard promulgated or revised under this paragraph and applicable to classes or categories of heavy-duty vehicles or engines shall apply for a period of no less than 3 model years beginning no earlier than the model year commencing 4 years after such revised standard is promulgated.").

particulate standards.²⁵⁹ Again, EPA's lack of action is an understandable result of the agency's allocation of resources. Heavy-duty diesel emissions were simply not a large enough problem to warrant the investment of agency resources when compared to other priorities. However, as the proportion of diesel engines in heavy-duty vehicles grew²⁶⁰ (largely due to lower operating costs compared to gasoline engines) and other mobile source emissions were reduced, heavy-duty diesel emissions began to be a larger proportion of total emissions.²⁶¹ Over time, therefore, the gains to EPA of reducing heavy-duty diesel emissions grew and EPA's willingness to invest political capital and resources in regulating them also grew. EPA's choice of rulemaking in the 1970s and 1980s is readily explained: it was the only option the agency had at that time. There was no reason for EPA to look for alternatives, however, as rulemaking was well suited to the type of regulatory activity EPA was engaged in.

EPA's regulatory choices had important consequences for the future. For a variety of technical reasons, described in detail in our earlier article, ²⁶² heavy-duty diesel engine manufacturers reduced emissions through controlling combustion rather than by adding on external control devices, as was done with automobiles and catalytic converters. ²⁶³ This increased control over combustion provided engine manufacturers with the ability to enhance customer-desired characteristics of the engines (chiefly increased mileage) as well as reducing emissions. ²⁶⁴ In particular, because of the highly structured nature of the emissions testing required by EPA, engine manufacturers were able to optimize engines for mileage outside the EPA test cycle and optimize them for emissions control within the test cy-

As diesel engines continue over time to power an even greater portion of the nation's heavy-duty vehicles (on-the-road trucks and buses whose gross vehicle weight rating exceeds 8,500 pounds), their contribution to ambient levels of total suspended particulate (TSP) will increase over levels that are already significant. Current heavy-duty diesels emit more than twice the particulate per mile emitted by heavy-duty gasoline engines operated on leaded gasoline.

See also John H. Cushman, Jr., Record Penalty Likely Against Diesel Makers, N.Y. TIMES, Oct. 22, 1998, at A1:

Environmentalists and Government officials say diesel engines were passed over in emission standards until the 1990's because they caused much less smog than did cars and smokestack industries. But since car emissions of hydrocarbons and nitrogen oxide began to be regulated in 1970, diesel engines have increasingly emerged as a greater problem.

²⁵⁹ Morriss, Yandle & Dorchak, *supra* note 14, at 473. *See* Nat. Res. Def. Council v. Ruckelshaus, 21 ERC 1953 (D.D.C. 1984), *available at* 1984 WL 6092 (cited in 6 ENVTL. Law 309, 403, n.876).

²⁶⁰ Morris, Yandle & Dorchak, supra note 14, at 473-74.

²⁶¹ See 46 Fed. Reg. 1910 (Jan. 7, 1981):

²⁶² Morriss, Yandle & Dorchak, *supra* note 14, at 437–42.

²⁶³ Id. at 437-38.

²⁶⁴ Id. at 439-40.

cle.²⁶⁵ These impacts on technology became important in the mid-1990s, as we describe below.

C. Negotiated Rulemaking over the Noncompliance Penalties

As emissions standards tightened in the 1980s and 1990s, meeting them became more costly and more difficult for the engine manufacturers. Because failing to meet the standards could result in loss of certification for an engine, a potential death sentence for an engine manufacturer, the engine manufacturers sought flexibility from EPA in meeting tightened standards. EPA introduced several provisions allowing delays to accommodate economic circumstances and the need for lead time. Most importantly, EPA created "noncompliance penalties" ("NCPs") that allowed engine manufacturers to continue to sell engines which did not meet emissions standards in return for payment of fines. This provision resulted from EPA's first use of negotiated rulemaking, with agreement on the rule reached in four months. Sale of an engine with an NCP required findings by the EPA that the standard had become more difficult to meet, that substantial work was required to meet the standard, and that a technological laggard was likely to exist. Selection of the result of the standard and that a technological laggard was likely to exist.

Why use negotiated rulemaking for the NCP rule? One reason was that EPA generally was an early and enthusiastic adopter of negotiated rulemaking.²⁷⁰ Another was that those within EPA favoring a hard line against industry would have had little bargaining power, since the Reagan Administration was generally unsympathetic to increasing regulatory burdens. More importantly, we think, is that the NCP rule fits the profile of a rule where benefits of negotiated rulemaking are highest. The NCP rule was essentially a negotiation over how much the industry would have to pay to exceed the standards. Congress and the Administration were unlikely to allow EPA to set standards that would prevent any U.S. engine manufacturer from selling engines. EPA thus had little to lose by allowing an escape valve and something to gain—reduced opposition to tighter standards and political capital from generating funds. The main obstacle for EPA was the opposition of environmental pressure groups, who had to be convinced that EPA had not "given away the store" in setting the penalties. The negotiated rulemaking setting allowed the industry to credibly convey financial information to the environmental groups to prove it had not gotten "too good" a deal from EPA.

²⁶⁵ Id. at 442.

²⁶⁶ Id. at 476.

²⁶⁷ Morriss, Yandle & Dorchak, *supra* note 14 at 476 n.401, quoting 50 Fed. Reg. 35,374 (Aug. 30, 1985).

²⁶⁸ Id. at 476-77.

²⁶⁹ Id. at 477 n.405 and associated text, quoting 50 Fed. Reg. 35,375 (Aug. 30, 1985).

²⁷⁰ Id. at 477.

D. Rulemaking in the 1990s

The CAA was amended again in 1990, again tightening standards for heavy-duty diesels (as well as other mobile sources) and introducing diesel fuel regulations. Two important developments changed EPA's attitude toward heavy-duty diesel emissions. First, by the 1990s, heavy-duty diesel emissions had become the largest part of overall mobile source emissions of NO_x and particulates, ²⁷² largely because of the stringency of automobile regulation. Second, scientists had begun to view diesel emissions as more dangerous than they had previously believed. ²⁷³ To set the new standards under the 1990 Amendments, EPA returned to rulemaking.

This choice is not surprising. Mobile source regulations generally, and heavy-duty diesel regulations in particular, are technology forcing regulations, which do not depend on the industry's current ability to meet the standard.²⁷⁴ Indeed, the technology forcing approach was the result of Congressional distrust of mobile source manufacturers' claims about technological feasibility.²⁷⁵ The strength of negotiated rulemaking, the credible transmission of information, was thus not an important part of the standard setting. Moreover, by the 1990s, the tradeoff of reductions from various sources had become more obvious. The large number of regions out of compliance with EPA standards meant that there was a premium on additional reductions in mobile sources, which could only come from EPA.²⁷⁶ (States' authority over mobile sources was largely limited to the politically infeasible imposition of use restrictions.)²⁷⁷

E. Negotiating Principles

EPA returned to negotiations (although not to formal negotiated rule-making) in 1995 to create a "Statement of Principles" for the future regulation of heavy-duty diesel engines.²⁷⁸ Negotiating with the California Air Resources Board ("CARB") and the engine manufacturers, EPA created a framework intended to provide greater stability in regulation.²⁷⁹ The engine

²⁷¹ Id. at 478-79.

²⁷² Morriss, Yandle & Dorchak, *supra* note 14 at 479 n.421, citing Arnold W. Reitze, Jr., *Mobile Source Air Pollution Control*, 6 ENVIL. LAW 309, 341 (2000).

²⁷³ Id. at 479 n.422, citing Kathleen M. Nauss & the HIE Diesel Working Group, Critical Issues in Assessing the Carcinogenicity of Diesel Exhaust: A Synthesis of Current Knowledge, in Health Effects Institute, Diesel Exhaust: A Critical Analysis of Emissions, Exposure, and Health Effects 7 (1995).

²⁷⁴ Id. at 421-24.

²⁷⁵ Id. at 421.

²⁷⁶ Id. at 428.

²⁷⁷ Morriss, Yandle & Dorchak, supra note 14 at 412–13.

²⁷⁸ Id. at 480 n.423, citing Control of Air Pollution from Heavy-Duty Engines, Appendix: Statement of Principles, 60 Fed. Reg. 45,580, 45,602-04 (proposed Aug. 31, 1995) (to be codified at 40 C.F.R. pts. 80, 86, and 89).

²⁷⁹ Id. at 480-81.

manufacturers agreed to a substantial reduction in NO_x in exchange for an agreement by EPA to not reduce particulate standards and from CARB to delay further reductions in NO_x. ²⁸⁰ As in the earlier NCP negotiated rulemaking, EPA had little to lose by negotiating. Since the issue was trading off particulate and NO_x reductions, the credible transmission of information by the engine manufacturers was important. Moreover, there were important gains available for the engine manufacturers from obtaining a joint agreement from CARB and EPA, ensuring consistent standards. Those gains could be used by EPA and CARB to gain greater reductions than they could get the engine manufacturers to accept individually. ²⁸¹ The Statement of Principles proved less worthwhile than the engine manufacturers had hoped, as EPA later reneged. ²⁸²

F. Litigating Defeat Devices

By the mid-1990s, EPA had a serious NO_x emissions problem. Diesel emissions were not declining outside the model, as EPA had thought they would in response to the emissions regulations issued after passage of the 1990 CAA Amendments.²⁸³ Higher atmospheric levels of NO_x meant more regions were out of compliance with EPA's ozone standard; reducing NO_x levels would improve compliance in EPA's emissions model, although not necessarily in reality.²⁸⁴ EPA's emissions models in the 1990s under-predicted heavy-duty diesel emissions in part because "little effort has been made to describe truck travel explicitly within travel demand models. In current modeling practice, it is common to estimate heavy-duty truck travel as a fixed percentage of predicted traffic volumes" despite differences in traffic patterns from light duty traffic.²⁸⁵ Moreover, the models misestimated the NO_x-ozone relationship, ignoring evidence that under some conditions decreasing NO_x emissions increased ozone levels.²⁸⁶

In 1998, EPA filed suit against the seven U.S. heavy-duty engine manufacturers, alleging that they had used electronic engine controllers as "de-

²⁸⁰ Id.

²⁸¹ The agencies could always impose reductions but the engine manufacturers could challenge the reductions in court.

²⁸² Morriss, Yandle & Dorchak, *supra* note 14, at 480-81 n.429, quoting Ralph Kisiel, *Cloud Hovers Over Proposed Diesel Rules*, AUTOMOTIVE NEWS, Jan. 27, 1997, at 34.

²⁸³ Id. at 481.

²⁸⁴ Id. at 419.

²⁸⁵ David B. Dreher & Robert A. Harley, A Fuel-Based Inventory for Heavy-Duty Diesel Truck Emissions, 48 J. AIR & WASTE MGMT. ASSOC. 352, 352 (1998) (footnote omitted). One estimate based on fuel consumption put on-road NO_x emissions at twice what EPA predicted in 1996. Andrew J. Kean, Robert F. Sawyer, & Robert A. Harley, A Fuel Based Assessment of Off-Road Diesel Engine Emissions, 50 J. AIR & WASTE MGMT. ASSOC. 1929, 1937 (2000).

²⁸⁶ Morriss, Yandle & Dorchak, supra note 14, at 409 nn.79, 80.

feat devices."287 In short, EPA claimed that the engine manufacturers had programmed the engine controllers to recognize the EPA test protocol conditions and to minimize emissions of regulated pollutants under those conditions.²⁸⁸ When the controller determined that the engine was not in the test cycle, it was programmed to maximize mileage, resulting in higher emissions.²⁸⁹ EPA's claims presented the engine manufacturers with a serious problem. If EPA prevailed in its enforcement action against them, they would owe substantial penalties for the engines already sold. 290 More importantly, if EPA took the position that the engine controllers in the engines for MY1999 were also illegal defeat devices, it could deny the engine manufacturers the certifications they needed to sell engines. While it was unlikely that EPA could successfully deny certifications to all seven U.S. engine manufacturers, 291 if a few broke ranks, EPA could shut down some. As existing market trends pointed toward a consolidation in the industry, even a temporary loss of certification could be devastating for individual firms.²⁹² The engine manufacturers were thus in a classic prisoner's dilemma regardless of what other firms did, each was better off cooperating with EPA.²⁹³ If no other firm cooperated, the first to capitulate would benefit from a head start in selling compliant engines. If other firms cooperated, a holdout would be shut out of the market. Table 1 puts the firms' choices in prisoner's dilemma format, with the higher utility choices in boldface. The upper-left cell, where all firms cooperate, gives the equilibrium solution.

 $^{^{287}}$ Id. at 481-82. A "defeat device" is just what the name implies, a device to defeat the regulations.

²⁸⁸ Id. at 483.

²⁸⁹ *Id.* at 483.

²⁹⁰ Id. at 509-10.

²⁹¹ The U.S. heavy-duty engine market was dominated by U.S. manufacturers. More recently, and partly in response to EPA's actions, foreign engine manufacturers have started to sell significant numbers of engines in the U.S. market. *See* Morriss, Yandle & Dorchak, *supra* note 14, at 450–55.

²⁹² Id. at 507.

²⁹³ See ROBERT AXELROD, THE EVOLUTION OF COOPERATION 9 (1984) ("The Prisoner's Dilemma is simply an abstract formulation of situations in which what is best for each person individually leads to mutual defection, whereas everyone would have been better off with mutual cooperation.").

Other Firms	Firm A	
	Cooperate with EPA	Refuse to Cooperate with EPA
Cooperate with EPA	Firm A: existing market share unchanged, pay penalty Other firms: existing market share unchanged, pay penalty	Firm A: EPA refuses certification, sales 0 Other firms: Market share increased as sell to A's customers, pay penalty
Refuse to Cooperate with EPA	Firm A: Gain market share, pay penalty Other firms: EPA refuses certification, sales 0	Firm A: existing market share unchanged, pay litigation costs and possible penalty Other firms: existing market share unchanged, pay litigation costs and

TABLE 1: FIRM RESPONSE TO EPA SUIT AS PRISONER'S DILEMMA

Thus, even if the engine manufacturers thought they were likely to prevail against EPA in the enforcement action, and they had good reason to think so,²⁹⁴ EPA's ability to deny certification for the coming year's engines, which would force the engine manufacturers to litigate the denial of certification as well as defend the enforcement action, meant that a decision to resist would amount to a bet of the entire company. Prudent directors could hardly agree to such a bet, even if the chance of losing the litigation on the merits were small. Not surprisingly, then, the engine manufacturers settled just as the October deadline for certification of the next year's engines arrived.²⁹⁵

possible penalty

In the October 1998 consent decrees that settled the enforcement actions, the engine manufacturers agreed to "pull ahead" the MY2004 regulations to MY2002 engines, something EPA could not have directly imposed because of the CAA's lead time rules.²⁹⁶ The settlements also added

²⁹⁴ Morriss, Yandle & Dorchak, *supra* note 14, at 483–86. EPA's settlement of the suits and defense of the consent decrees against environmental pressure groups' complaints that the settlements were too weak included admissions that EPA was far from certain to prevail in the enforcement actions. *See* Mem. of Law of the U.S. in Supp. of Mot. to Enter Consent Decree and Respond to Pub. Comments at 36–37, United States v. Caterpillar, Inc., 227 F. Supp. 2d 73 (D.D.C. 2002) (Civ. No 1:98-2544 HHK) ("EPA Settlement Br.").

²⁹⁵ Morriss, Yandle & Dorchak, supra note 14, at 488–93.

²⁹⁶ 42 U.S.C. 7521(a)(6) (2000).

new test protocols to the existing set of federal test protocols, another change that likely would have been barred by the lead time rules. The engine manufacturers agreed to a "Low NO_{x} Rebuild Program" to improve emissions from existing engines and to a number of steps to offset the greater emissions existing engines produced over the predicted emissions EPA had used in modeling. The existing engines are consistent of the predicted emissions and the predicted emissions existing engines produced over the predicted emissions expected in modeling.

Proceeding by litigation in this instance offered EPA significant gains over proceeding by traditional or negotiated rulemaking. First, EPA was able to secure substantive regulations (the "pull ahead" of the MY2004 standards and revision of the test protocols) that it would not have been able to impose in rulemaking and for which it would have had to pay a high price in negotiations. By shifting substantial bargaining power to itself through both the threat of financial penalties and denial of certification for future engines, EPA gained substantively through using litigation. The settlement process also maximized EPA's leverage by eliminating objections from the engine manufacturers to the outcome (to which they agreed in advance, in a binding fashion unlike the result of negotiated rulemaking) and reduced the role of environmental pressure groups. EPA, and the Clinton-Gore Administration, also secured favorable publicity for being "tough" on environmental issues, 300 an important campaign theme for Vice President Gore's 2000 campaign for president.

In short, EPA needed to act in 1998. Suits and petitions from north-eastern states that risked being placed in nonattainment status added urgency to the stimulus. Political benefits from signaling a tough stance on polluters led agency leaders to trumpet their support for stricter emission regulations. A difficult presidential campaign lay ahead, and the politics and the "get tough" policy of EPA's enforcement division call for action could be communicated broadly at low cost. Many factors constrained EPA's actions and choice of regulatory process, among them the legal and other constraints that placed the engine manufacturers out of the reach of regulation-by-rulemaking, the number and size of firms to be regulated, the diffuse nature of consumers who would bear the cost of EPA's final action against producers, and the extent to which the political action could extract payments from firms.

²⁹⁷ Morris, Yandle & Dorchak, supra note 14, at 490.

²⁹⁸ Id. at 490-91.

²⁹⁹ EPA noted in its filing seeking approval of the settlements that:

[[]T]he government did not conduct this negotiation as it does a rulemaking, bringing all "stakeholders" to the table, and working out a solution in the same way that they participated in the development of the emission standards.... While the public has an opportunity to comment on a consent decree during the comment period, it is neither feasible, necessary nor appropriate for the public to be present in negotiations of the United States' claims against individual defendants.

EPA Settlement Br., supra note 294, at 38.

³⁰⁰ Morriss, Yandle & Dorchak, supra note 14, at 508-09.

Because EPA was blocked from a timely traditional regulatory solution by the combination of the lead-time provisions and its own earlier actions, regulation-by-litigation offered an advantage over traditional rule-making or regulation-by-negotiation because controls could be imposed sooner. With a favorable settlement, the agency could trumpet the prospects of earlier improvements, no matter what the final accounting might be on the net impact on NOx emissions or ozone levels once truck purchasers reacted to EPA's actions. Since the model's predictions, rather than improvement in emissions, was all that mattered in the short-term, EPA could ignore this effect until later. This, too, supported regulation-by-litigation.

The results of the litigation for air quality were ambiguous at best. The MY2004 standards reduced emissions and the new test protocol required engines operate to meet the standards under a greater range of conditions.³⁰¹ The pull-ahead ensured that MY2002 and MY2004 engines would be cleaner than they would otherwise. Heavy-duty diesel engines have a long useful life,³⁰² however, and the consent decree conditions also created an enormous incentive to "pre-buy" engines before October 2001.³⁰³ Because many customers were leery of the new technologies introduced to meet the pull ahead, they bought more MY2001 engines than they would have otherwise, substantially reducing the number of cleaner engines bought after the new standards went into effect.³⁰⁴ The pre-buy was substantial and it is at least arguable that the net impact of the consent decrees on air quality was negative for a significant period of time.

The public interest theory predicts that regulators will seek to minimize all costs taken together when developing and implementing a regulatory strategy. The economic theory says that regulators will seek to minimize their cost when developing and implementing a strategy. The extraction theory³⁰⁵ says regulators will seek remedies that generate tangible political rewards. The Bootlegger-Baptist theory predicts regulators will be aided by groups that bring moral authority to their cause.

Using these theories can explain EPA's methods. Despite the various constraints on the agency, EPA still had a choice when considering regulatory strategies for the regulation of heavy-duty diesel engines. Environmental pressure groups, accustomed to using the courts in pursuit of their interests, would predictably call for quick action to reduce emissions. They

³⁰¹ Id. at 488-89.

³⁰² Id. at 425.

³⁰³ Id. at 500-06. Interestingly, the provisions the mobile source regulations most resemble elsewhere in the CAA are the new source standards for stationary sources. As economist Lawrence White concluded, the mobile source "regulations have had the effects of new source performance standards—differentially increasing the costs of new vehicles, discouraging their purchase, and encouraging the retention of the older vehicles that are the heavy emitters in the fleet." Lawrence J. White, The Regulation of Air Pollutant Emissions from Motor Vehicles 68 (1982).

³⁰⁴ Morriss, Yandle & Dorchak, supra note 14, at 500–02.

³⁰⁵ See generally McChesney, supra note 197.

would support bringing suits against violators and penalize them. The agency would evaluate the targeted firms. Could they pay penalties and were they and their constituencies powerful enough politically to deflect the agency's actions? A decision to use regulation-by-rulemaking could be criticized by environmental pressure groups because of the delay in getting results. On the other hand, regulation-by-litigation offered the attraction of bringing a timely outcome in a politically visible way. The diesel engine producers and their constituencies apparently lacked the political clout to deflect the action. And the risk diesel producers faced of losing the EPA-granted authority for marketing the current crop of engines was more than the industry could take on. The spreading of the costs of forcing change in the diesel engine industry over all users of long distance truck transportation, through higher engine and operating costs, concealed the impact of EPA's actions from the public.

V. Conclusion

We have two sets of conclusions from our analysis. First, through our examination of EPA's record in regulating heavy-duty diesel engines in the context of our framework for understanding agency choice of means of action, we can assess the appropriateness of one agency's specific choices. Second, understanding how agencies regulate allows us to offer suggestions on how they *should* regulate.

To evaluate either EPA's actions in the diesel regulation story or agency action more generally, we must begin with the issue of whether the agency's decision to regulate is appropriate. As we noted at the start, there are well-documented incentives that lead agencies to regulate too often as well as reasons why they might regulate too infrequently. We argued that the dangers of too much regulation are treated as larger by the U.S. system than the dangers of under-regulation. This leads us to both a general and a specific conclusion: regulation-by-litigation is used by agencies to over-regulate.

To see why this is so, we draw from a discussion of regulation-by-litigation by Richard Epstein. He described two responses that might be taken by a constitutional government to address harms imposed by some members of the community on others against their will. The first response he described called for a determination of the number being harmed and, implicitly, the cost of their organizing common law suits against the parties that had invaded their property rights, assuming, of course, a common law framework existed. The private action were feasible, then there would be no further role for the state. Epstein implied that government has a responsibility to assist in defining and enforcing property rights. The provision of a system of justice for settling property rights disputes provides

³⁰⁶ See Epstein, in New Wave, supra note 39, at 61-62.

³⁰⁷ Id. at 61.

adequate protection of the public interest. Epstein went on in his comment to consider briefly those situations where many unwilling individuals are harmed, situations where the collective harm is large but the individual harm is too small to justify taking private action. In these cases, he suggested, government can act for the citizens, following a tradition that relates to a "distinction between general and special damages as early as 1535."

Epstein moved from antiquity to the present, explaining that our modern interpretation of government calls for government to act in such circumstances. If, after proper deliberations among appropriately elected officials, government fails to act, then government has failed.³¹⁰ Under this theory, any failure to intervene in the name of public health, no matter the cost, is a failure to serve the public interest. Given that government has failed, special interest groups that claim to be serving the public interest move to the courts. As Epstein put it, "[s]o-called public health positions are always going to get at least two bites at the apple. They, in effect, have to win only one war; industries in defensive positions are going to have to fight their battles over and over again."311 Epstein's discussion was focused on suits undertaken by state attorneys general in suits against handgun and cigarette producers; the discussion was not about the use of regulation-by-litigation by federal agencies in their pursuit of firms or industries already regulated. But while this was not the focus of Epstein's comments, it is still possible to glean something from them for the case at hand.

In the specific case of regulation of heavy-duty diesel engines, it seems clear enough that the harms imposed on individuals by diesel engine emissions coming from trucks and other equipment are so small that no one person or small group could justify organizing a suit against the emission producers.³¹² We will not attempt to reach a judgment as to whether the collective harms would justify action, assuming instead that that is the case. Assuming that a case for general harm can be made, then, as Epstein sug-

³⁰⁸ *Id*.

³⁰⁹ Id

³¹⁰ Id. at 62.

³¹¹ Epstein, in New Wave, supra note 39, at 62.

³¹² Environmental pressure groups do bring citizen suits under a variety of environmental laws seeking enforcement of permit terms against sources. The citizen suit provisions are explicitly designed to overcome the collective action problem by providing attorneys' fees for the victorious group and eliminating the requirement to show direct harm to the plaintiff's property or person. They thus arguably provide incentives for too much litigation. Citizen suits do not, however, lead to substantive regulatory changes, merely to enforcement of existing regulations. See generally Daniel J. Dunn, Environmental Citizen Suits Against Natural Resource Companies, 17 Nat. Res. & Env't 161 (2003) (discussing how citizen suits are used); Richard A. Epstein, Standing in Law & Equity: A Defense of Citizen and Taxpayer Suits, 6(2) Green Bag 17 (2002) (arguing citizen and taxpayer suits should be routinely allowed in equity and that current standing law is mistaken). Hypersensitive individuals could also arguably make claims as well.

gested,³¹³ government can act for the harmed individuals. The passage of the CAA and its amendments is the first result. The regulations affecting diesel engine emissions that evolved from the statute is the continuing result. When Congress debated the statute, the affected industry and all other interested parties had access to the debate. When EPA engaged in regulation-by-rulemaking and regulation-by-negotiation, the industry and all other interested parties had access to the regulatory process and to the courts if the regulatory process was seen as being improper. Everyone had the same number of bites at the apple. In the process, some modicum of regulatory certainty was assured for the industry and for all who favored stricter standards. The process was transparent to the participants and to the monitors of the regulatory process in the legislative and executive branches.

EPA's decision to litigate in 1998 did not necessarily represent a second bite at the apple for those who support cleaner air. It was a fresh bite by the regulator. EPA, as a regulator, faced a political challenge. On the one hand, the northeastern states facing the cost of nonattainment status demanded action, and the administration wished to be recognized as being tough on polluters in the run-up to the 2000 elections. EPA also had to recognize that its own past estimates of improvements in air quality were faulty and played a role in creating the crisis. If EPA recognized that the problem stemmed from its faulty predictions and modeling and granted relief to the upwind states, it would anger northeastern state voters, whose states would then require increased stationary source restrictions, and look soft on pollution nationally. If it attempted to reduce restrictions on both the northeastern states and the upwind states, it would anger "environmental" voters. If it required tighter stationary source controls in upwind states, there would be important political costs to pay there. Mobile source regulation offered a way out of this dilemma. On the other hand, EPA was constrained by the regulatory process from taking swift action through issuing new standards by the lead time restrictions and the impact of fleet turnover.

By employing regulation-by-litigation, EPA took a bite from the apple it had been forbidden to eat. Circumventing the lead time restrictions, EPA was able to do what Congress had said it could not and tighten mobile source emissions standards sooner than it could through regulation-by-rulemaking. Environmental pressure groups would be happy with the "tough" action and northeastern states would get relief as the model predicted lower emissions from the stricter emissions standards, while upwind states would not be required to reduce their emissions. The solution was "win-win" for everyone except the consumers of heavy-duty diesel engines and firms that made or used the engines. In other words, the political benefits were concentrated on environmental pressure groups and state

³¹³ See Epstein, in New Wave, supra note 39, at 61 (discussing several justifications for government regulatory action).

regulators, while the costs were spread among essentially all consumers, since transportation services affect most products. Moreover, by employing litigation, the agency insulated its regulatory action from changes in the political control of the executive branch. A new administration might consider rolling back a regulation but it would be unlikely to return to court to seek to reduce the burdens of a "voluntary" settlement agreed to by sources alleged to have committed significant wrongdoing.

The cost of this episode cannot be reckoned in terms of the magnitude of the cash portion of the settlement, which was a transfer from the owners of the diesel engine producers to the federal government. Nor can it be reckoned just in terms of its effects on the cost of diesel engines and related effects on transportation and other activities powered by large diesel engines. These are clearly costs to consider, and to be minimized if possible. The more serious cost of the diesel regulation-by-litigation relates to the integrity of the regulatory process itself and the effect of regulation-by-litigation on the behavior of participants in future regulatory episodes.

This leads us to our general conclusion. The problems with regulation-by-litigation in the diesel engine case are the result of the agency having a choice of how to proceed. Since agencies will choose regulation-by-litigation only when the net benefits to them of doing so exceed the net benefits of proceeding by regulation-by-rulemaking or regulation-by-negotiation, an important reason for agencies to choose litigation over their alternatives is that litigation allows them to evade constraints imposed on them by the other branches of government. Evading those constraints may appear justified to agency litigators, particularly where the constraints appear to be the result of political compromises of a questionable nature. How could an agency lawyer not see, for example, outwitting a constraint imposed by a powerful Congressperson seen as in the pocket of a polluting industry as a good outcome?

But good intentions are not enough. We do not allow agencies to pick and choose which Congressional mandates and Executive Orders they will follow, despite good reason to believe that some of each of these are the result of political sausage making that is best left unexamined. We give effect to even restrictions of questionable moral or substantive legitimacy because the delegation of authority to administrative agencies is tenable only if we allow the political process the means of ultimate control over them. Regulation-by-litigation is a means for escaping those constraints and is thus a problem for the democratic legitimacy of agency action.

How troubling is the rise of regulation-by-litigation? Although EPA's recent employment of regulation-by-litigation has set a new precedent in the already controversial annals of federal regulation, it is still used only in a small fraction of that agency's exertion of regulatory power. Yet we have no reason to predict that regulation-by-litigation will end any time soon. Indeed, the public choice logic we have employed to explain this episode suggests that when the conditions that triggered EPA's use of litiga-

tion in the diesel engine case arise again, then regulation-by-litigation will just as surely emerge again unless this form of regulation is precluded by congressional action. Given the widespread violation of the complex regulations issued by regulatory agencies, ³¹⁴ something that the rules' complexity and breadth make almost impossible to avoid, regulators have many opportunities to use regulation-by-litigation.

How might the problems of regulation-by-litigation be contained? We suggest two first steps. First, we already have a model of how agencies can be constrained through reporting requirements in the various executive orders that force agencies to make clear the impact of their actions.315 This technique could be used on settlements, by requiring agencies to certify to the legislature and the executive branches that the terms of any settlement they propose to a court does not require actions they could not impose directly through the exercise of their rulemaking powers. This step alone would have precluded the tobacco and diesel settlements, since state attorneys general lacked the authority to increase tobacco taxes and EPA lacked the authority to order the pull-ahead of the MY2004 standards. Second, courts could be empowered to reject settlements between agencies and private parties that impose substantive requirements the agencies lack authority to impose directly, with members of the legislature granted standing to challenge settlements on such terms. This ensures that agencies truthfully report the impact of their settlements.

Would the world be a better place if such restrictions on regulationby-litigation existed? In the tobacco case, the settlement likely would not have been possible without the funding from the "tax" it created. State attorneys general would have had to litigate the merits of their claims against the tobacco companies. Had the states prevailed, something that was by no means certain, the tobacco companies would likely have been bankrupted by the damages. Had the tobacco companies prevailed, antismoking advocates would have had to turn to the political process to seek further restrictions on smoking. In the diesel case, if EPA had prevailed, it would have had to find alternative ways for the diesel engine companies to reduce emissions. One obvious means of doing so would be to require them to fund programs to buy and retire older, more heavily polluting vehicles. Such a program would have increased demand for newer vehicles, rather than decreasing it as the settlement did. Cleaner air quality sooner would thus have been the result. If EPA had lost, it would have had to find alternative ways to resolve the ozone noncompliance problem, either through inducing voluntary reductions or paying the political price for mandating them. Preventing the attorneys general and EPA from regulat-

³¹⁴ See Ruhl & Salzman, supra note 36, at 767 ("[T]he net result of regulatory accretion may be that many regulated entities do not know—and cannot ensure practically—that they are fully in compliance.").

³¹⁵ See id. at 780–81 (describing pre-decisional review and justification requirements imposed by both Congress and the federal executive branch).

ing through litigation would thus not have prevented either from seeking to change the behavior in question but only forced the regulators to pay the political cost of doing so directly.

In the final analysis, the question of the desirability of allowing regulation-by-litigation to continue turns on the reader's view of the desirability of agency action. If the main problem is, as many in the regulatory community appear to believe, that agencies fail to act often enough, leaving people at risk from the behavior of private actors, then the various obstacles to regulatory action imposed by constitutions, legislatures, and executive branches are hurdles to be jumped or circumvented. If, however, agency action is not presumptively desirable, then creating alternative paths around those hurdles is problematic. As we described above, there is no reason to grant agency action favored status relative to agency inaction. Agencies act for a variety of motives, both legitimate and illegitimate. Keeping agencies "on the track," and so forcing them to jump the hurdles that may prevent regulatory activity in some cases, is thus important because it protects society from over-regulation. If those hurdles are too high, the remedy is to lower them, not to create a new path around them.

Regulation-by-negotiation presents a different set of issues. Negotiated rulemaking was initially touted as a means of lowering transaction costs and increasing regulatory quality. Its record casts doubt on the robustness of those claims. Our analysis suggests its major role is to offer a means of credible information transfer from the regulated to interest groups seeking additional regulatory activity and to promote cooperation among regulated entities. There are times when such impacts have a net positive social impact. The NCP negotiations, for example, which mitigated the problems caused by earlier rulemaking much more rapidly than if environmental pressure groups had not been convinced that the penalties were sufficiently high to deter deliberate noncompliance, produced an outcome that appears to be a net social gain. Although the negotiated Statement of Principles ("SOP") reduced the zone of disagreement over the future direction of regulatory effort, its goals were too lofty and the constraints it imposed too weak to provide a credible long-term commitment by the agency. Not surprisingly, EPA reneged on the SOP only a few years later by filing the defeat device suits.

The theoretical problem posed by regulation-by-negotiation is that it will inappropriately serve as the environmental version of the New Deal's NRA, inducing cartel-like behavior. The fragility of the negotiated rule-making process, which prevents it from delivering its claimed benefits of lower costs and higher quality, makes such cartels unlikely to be durable, as the SOP experience revealed. The other danger of regulation-by-negotiation is that it will simply raise transaction costs by being used inappropriately. Since agencies bear many of those costs themselves, however, this is also unlikely to be a major problem in practice. Other than continuing to

ensure that agencies adequately disclose when they use negotiated rulemaking, no further restrictions appear necessary.

The most important conclusion of our analysis is also the most general: when agencies have a choice of means of imposing regulation, they will choose how to do so based on their own costs and benefits. That calculation will include whether one form allows evasions of externally imposed constraints on agency action. If Congress and the President are serious about those constraints, they must take additional steps to ensure that agencies do not evade them in this fashion. Although there are serious flaws in the political process, we think that the need for political accountability of agencies trumps the benefit to agencies of evading constraints when the agencies decide the constraints hinder their missions.