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Seeking Truth for Power: Informational Strategy and Regulatory Policymaking

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Article

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"The . . . power that is involved here is the power to get information from those who best can give it and who are most interested in not doing so."

United States v. Morton Salt Co., 338 U.S. 632, 642 (1950).

Information is the lifeblood of regulatory policy. The effective use of governmental power depends on information about conditions in the world, strategies for improving those conditions, and the consequences associated with deploying different strategies.[1] Indeed, this need for information has led legislatures to create specialized committee structures, delegate policy authority to expert agencies, and develop administrative procedures that encourage analysis.[2] Although legal scholars have extensively debated procedures and reforms designed to improve the analytic and scientific basis of regulatory policymaking,[3] they have paid relatively little attention to how regulators

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1. As Justice Breyer has written, "[t]he central problem of the standard-setting process and the most pressing task facing many agencies is gathering the information needed to write a sensible standard." STEPHEN BREYER, REGULATION AND ITS REFORM 109 (1982). *See generally* AARON WILDAVSKY, SPEAKING TRUTH TO POWER: THE ART AND CRAFT OF POLICY ANALYSIS (1979).

2. KEITH KREHBIEL, INFORMATION AND LEGISLATIVE ORGANIZATION 46 (1991); Rui J.P. de Figueiredo, Jr. et al., *An Informational Perspective on Administrative Procedures*, 15 J.L. ECON. & ORG. 283, 285–86 (1999).

3. *See, e.g.*, STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE (1993);

gain the information they need for making and implementing regulatory policy.[4] Yet the value of any type of regulatory analysis ultimately depends on the quality and reliability of the information on which it is based.

Many information-gathering efforts by regulatory agencies look more or less like conventional scientific analyses, such as when an environmental agency studies how pollutants travel through groundwater or a public health agency conducts epidemiological research.[5] However, much needed information will not emerge from policy-relevant scientific research. In particular, regulators need detailed and accurate information about the operations of private business enterprises to understand the scope and cause of regulatory problems, and to craft effective solutions to them.[6]

Government regulators are usually poorly positioned to gather information about business operations, or at least to gather it cheaply. Often, the best source of information about the risks of products, the behavior of individuals and firms, the costs of remediation or mitigation, or the feasibility of different technologies will be the very firms that the government agency regulates.[7] While these firms have an incentive to share favor-

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COST-BENEFIT ANALYSIS (Matthew D. Adler & Eric A. Posner eds., 2001); CASS R. SUNSTEIN, RISK AND REASON (2002); Frank Ackerman & Lisa Heinzerling, *Pricing the Priceless: Cost-Benefit Analysis of Environmental Protection*, 150 U. PA. L. REV. 1553 (2002); Robert W. Hahn & Cass R. Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis*, 150 U. PA. L. REV. 1489 (2002); Richard W. Parker, *Grading the Government*, 70 U. CHI. L. REV. 1345 (2003).

4. Although scholars have yet to analyze systematically the strategic or game-theoretic considerations regulators face in obtaining that information through different means, they have recognized that regulatory officials do need information. *See, e.g.*, BREYER, *supra* note 1, at 112 (noting that "the information problem is central and endemic to the standard-setting process"); JERRY L. MASHAW ET AL., ADMINISTRATIVE LAW 643 (5th ed. 2003) (observing that "[s]ound decision making obviously requires good information"); PETER L. STRAUSS ET AL., GELLHORN AND BYSE'S ADMINISTRATIVE LAW 870 (9th ed. 1995) ("Information is itself the raw material that fuels the implementation, even the shaping of statutes . . . ."); Edward Rubin, *It's Time to Make the Administrative Procedure Act Administrative*, 89 CORNELL L. REV. 95, 128 (2003) (acknowledging that "[e]ffective regulation demands large quantities of information").

5. For discussion of the role of science, science policy research, and science advisors in government decision making, see SHEILA JASANOFF, THE FIFTH BRANCH (1990).

6. *See infra* Part I.A.

7. Cary Coglianese, *Litigating within Relationships: Disputes and Disturbance in the Regulatory Process*, 30 LAW & SOC'Y REV. 735, 749–50 (1996)

able, self-serving information, regulators also need accurate information that private firms do not want to disclose. How does a regulator learn about and acquire information from an industry that will suffer if such needed information is revealed?

In this Article, we analyze regulators' gathering of information from firms as a strategic game. In Part I, we discuss the types of information that firms possess and regulators need. We then analyze the payoffs for regulated firms in keeping this information to themselves, arguing that silence by firms within an industry resembles the well-known problem of collective action.[8] In Part II we discuss the strategies, and in Part III the tactics, available to regulators to penetrate a regulated industry's silence and gather information needed to develop effective regulation. Although regulators cannot typically offer explicit side payments to firms to induce them to release information, they can deploy a variety of mechanisms to try to gather information from those whom the agency will target for regulation. Indeed, selective forms of what might be considered "regulatory capture" by individual firms may well be desirable from the standpoint of the public interest in some cases, if in the process firms cede information that permits regulators to craft more effective and efficient regulatory policies.[9]

In Part IV, we consider the relative virtues of the strategies and tactics discussed in Parts II and III and theorize about conditions under which each will be appropriate. Significantly, we discuss the tensions between regulators' need to gather information from industry and the kinds of administrative procedures that have arisen over the past several decades to provide legislators and others an opportunity to oversee the work of government regulators. Many administrative procedures have furthered the objective of transparent government decision making, almost as if transparency were an unalloyed good. Yet while transparency serves important goals, it also inhibits some beneficial government activities. In this Article, we call attention to a little recognized tension between two core principles of contemporary administrative law: transparency and in-

("[A]gency staff members depend heavily on outside groups for information. Effective regulation of an industry depends . . . on knowledge of how that industry works. Agency staff members routinely turn to organizations in the regulated community to provide this information.").

8. *See* Edward A. Parson, Richard Zeckhauser & Cary Coglianese, *Collective Silence and Individual Voice: The Logic of Information Games*, *in* COLLECTIVE CHOICE 49 (Jac C. Heckelman & Dennis Coates eds., 2003).

9. *See infra* notes 111–30, 186–97, and accompanying text.

formed, expert decision making. We conclude that regulators' need to secure information from those they regulate provides a reason for preserving some degree of opacity in an otherwise transparent and accountable regulatory process.

I. INDUSTRY INFORMATION AND REGULATORY DECISION MAKING

Disparities in access to information have emerged as an important theme in the study of regulation. The existence of information asymmetries between producers and consumers is widely accepted as justifying certain kinds of regulatory interventions in the marketplace, including requirements that firms disclose information.[10] Asymmetric information also lies at the core of the principal-agent theory that has become central to the study of bureaucratic decision making.[11] Analysts describing the regulatory process have focused on the strategies that legislators—and other governmental overseers of administrative agencies—use to overcome their information disadvantages vis-à-vis regulatory officials.[12] Yet while the general problem of asymmetric information dominates the contemporary study of

10. *See* BREYER, *supra* note 1; CASS R. SUNSTEIN, AFTER THE RIGHTS REVOLUTION 3 (1990); *see also infra* note 17 and accompanying text. The use of information disclosure as a regulatory strategy has received considerable attention. *See* MARY GRAHAM, DEMOCRACY BY DISCLOSURE (2002); Bradley C. Karkkainen, *Information as Environmental Regulation: TRI and Performance Benchmarking, Precursor to a New Paradigm?*, 89 GEO. L.J. 257 (2001); Paul R. Kleindorfer & Eric W. Orts, *Informational Regulation of Environmental Risks*, 18 RISK ANALYSIS 155 (1998); Mary L. Lyndon, *Information Economics and Chemical Toxicity: Designing Laws to Produce and Use Data*, 87 MICH. L. REV. 1795 (1989); Cass R. Sunstein, *Informational Regulation and Informational Standing:* Akins *and Beyond*, 147 U. PA. L. REV. 613 (1999).

11. *See, e.g.*, DAVID EPSTEIN & SHARYN O'HALLORAN, DELEGATING POWERS (1999); Eric A. Posner, *Controlling Agencies with Cost-Benefit Analysis: A Positive Political Theory Perspective*, 68 U. CHI. L. REV. 1137 (2001). The regulator (or administrative agency) is typically treated as the agent, while the legislature or executive is treated as a principal. For a discussion of principal-agent theory, see PRINCIPALS AND AGENTS: THE STRUCTURE OF BUSINESS (John W. Pratt & Richard J. Zeckhauser eds., 1985).

12. *See* Murray J. Horn & Kenneth A. Shepsle, *Administrative Process and Organizational Form as Legislative Responses to Agency Costs*, 75 VA. L. REV. 499 (1989); Matthew D. McCubbins et al., *Administrative Procedures as Instruments of Political Control*, 3 J.L. ECON. & ORG. 243 (1987); Barry R. Weingast & Mark J. Moran, *Bureaucratic Discretion or Congressional Control? Regulatory Policymaking by the Federal Trade Commission*, 91 J. POL. ECON. 765 (1983).

regulation, the asymmetries between regulators and those they regulate has escaped sustained attention.[13]

In this first part, we consider the nature and degree of regulators' informational dependence on those they regulate. We begin by discussing the importance of information in regulatory decision making, and then explain why industry usually disproportionately possesses the information needed to craft good regulatory policy.

A. REGULATORS' NEED FOR INFORMATION

Government regulation is usually justified on the basis of three main types of market failures:[14] lack of competition (as in

13. The existence of information asymmetries between regulators and firms has certainly been recognized. *See, e.g.*, Glenn Blackmon & Richard Zeckhauser, *Fragile Commitments and the Regulatory Process*, 9 YALE J. ON REG. 73, 104 (1992) (noting "the principal-agent relationship between the regulator and firm" and the firm's "advantage of superior information"); Paul L. Joskow & Richard Schmalensee, *Incentive Regulation for Electric Utilities*, 4 YALE J. ON REG. 1, 18 (1986) (noting that "the regulator's information is assumed to be inferior to that of the utility's management" and that "the assumption of asymmetric information is quite plausible"); Barton H. Thompson, Jr., *People or Prairie Chickens: The Uncertain Search for Optimal Biodiversity*, 51 STAN. L. REV. 1127, 1132 (1999) (noting that regulators have a difficult time assessing the costs of regulatory options "because that information is generally in the hands of the regulated community, which has an incentive to overstate those costs"). However, virtually no analytic attention has been paid to the way regulators play the regulatory game to overcome their informational disadvantage, or to the implications of this particular problem of asymmetric information for the design of administrative law. In the relevant legal literature, we find only two extended game theoretic treatments of the information asymmetry between regulators and regulated entities. *See* Jason Scott Johnston, *A Game Theoretic Analysis of Alternative Institutions for Regulatory Cost-Benefit Analysis*, 150 U. PA. L. REV. 1343 (2002) (providing a game theoretic analysis of information provision under different statutory requirements about cost-benefit analysis); Tracy Lewis & Michel Poitevin, *Disclosure of Information in Regulatory Proceedings*, 13 J.L. ECON. & ORG. 50 (1997) (analyzing the effect on information provision and decision making of different evidentiary standards in regulatory proceedings). This other work, like ours, takes the information asymmetries in making regulatory policy as a starting point for analysis. However, it differs in important respects. Johnston focuses on information asymmetries with respect to compliance costs only, whereas we recognize asymmetries in information about benefits as well. Lewis and Poitevin consider only the context where a regulator must review an application or petition from a regulated entity, while we analyze that context as simply one of many institutional arrangements for gathering information. More importantly, unlike these studies, we tend to view the strategic problem from the perspective of the regulator, identifying strategies for government to use to play the informational game embedded within regulatory policymaking.

14. *See* OFFICE OF INFO. & REGULATORY AFFAIRS, OFFICE OF MGMT. & BUDGET, MORE BENEFITS FEWER BURDENS (Dec. 1996), *available at*

cases of monopoly);[15] externalities (the failure of market prices to incorporate all the costs to society of a particular form of economic behavior);[16] and a lack of full information about products and services (for prices therefore cannot reflect the true preferences of the parties).[17] For each of these three types of market failure, regulators need to gather information about the activities of, and costs and benefits for, individuals and firms. They must first be able to determine when market conditions fail to meet the ideal of a well-functioning market. Then they must identify possible interventions and assess the consequences of adopting each.[18]

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http://clinton4.nara.gov/OMB/inforeg/3_year_report.html; OFFICE OF MGMT. & BUDGET, ECONOMIC ANALYSIS OF FEDERAL REGULATIONS UNDER EXECUTIVE ORDER 12866 (Jan. 11, 1996), *available at* http://www.whitehouse.gov/omb/inforeg/riaguide.html (directing analysts to identify a "significant market failure" justifying each proposed regulation); OFFICE OF MGMT. & BUDGET, GUIDELINES TO STANDARDIZE MEASURES OF COSTS AND BENEFITS AND THE FORMAT OF ACCOUNTING STATEMENTS (Mar. 22, 2000), *available at* http://www.whitehouse.gov/omb/ memoranda/m00-08.pdf; EDITH STOKEY & RICHARD ZECKHAUSER, A PRIMER FOR POLICY ANALYSIS 291–308 (1978). *But cf.* Richard O. Zerbe Jr. & Howard E. McCurdy, *The Failure of Market Failure*, 18 J. POL'Y ANALYSIS & MGMT. 558 (1999) (arguing that a superficial focus on market failure can lead analysts to overlook the underlying causes of regulatory problems and that attention to transaction costs offers a better approach).

15. Concentration of market power, whether through predatory behavior or a so-called "natural monopoly," enables firms to obtain rents by reducing supply below the levels that would arise in a fully competitive marketplace. *See* DAVID L. WEIMER & AIDAN R. VINING, POLICY ANALYSIS: CONCEPTS AND PRACTICE 100–07 (3d ed. 1998). Market power provides the justification for antitrust law and certain kinds of utility regulation.

16. *See id.* at 94–100. Although manufacturing firms count their private costs, such as capital, labor, and other inputs, they do not count the costs that pollution from their factories impose on neighboring communities. Environmental regulation responds to this type of market failure, seeking to alter firms' behavior in ways that reduce negative externalities.

17. *See id.* at 107–15. Usually sellers know more about the efficacy and safety of their products than buyers. In such cases, government regulation may be needed to overcome the information asymmetries between consumers and sellers. Labeling and product testing requirements fall into this category. *See supra* note 10 and accompanying text.

18. We recognize, of course, that the regulators' information needs will not be the same for all alternative solutions. For example, regulators do not need the same information to restrict the quantity of an externality (such as pollution) as they do to require the adoption of specific control technologies or impose a tax on the same externality. *See, e.g.*, Evan Kwerel, *To Tell the Truth: Imperfect Information and Optimal Pollution Control*, 44 REV. ECON. STUD. 595 (1977); Amyaz A. Moledina et al., *Dynamic Environmental Policy with Strategic Firms: Prices versus Quantities*, 45 J. ENVTL. ECON. & MGMT. 356 (2003); Martin L. Weitzman, *Prices vs. Quantities*, 41 REV. ECON. STUD. 477 (1974). Although the choice of regulatory instrument will affect the type and

To identify whether firms are acting as monopolists, regulators need information about firms' marginal costs of production. For utility regulation, they often need to know whether firms are making the kind of cost-effective choices about technology or management that they would make if the market were fully competitive.[19] For social regulation that addresses externalities or seeks to ensure adequate product disclosure or safety, regulators need to know about the risks created by different types of products and production processes. Thus, regulators need to know about the nature and magnitude of any harmful activities or products, as well as the probability of such harm.

Regulators also need to understand the causes of regulatory problems. When the National Highway Traffic Safety Administration (NHTSA) learns of a cluster of automobile accidents, it needs to find out whether the accidents occurred due to driver error, road conditions, or mechanical problems. For example, when the Agency initiated a rulemaking in the wake of blowouts in Firestone tires, NHTSA regulators needed to understand the extent to which tire separation was caused by factors such as heat or underinflation of tires, the tires' poor design or production, or the design or operation of the vehicles on which the tires were installed.[20]

Regulations usually specify actions that individuals or firms either must or must not take, so regulators need to identify a portfolio of actions that they might require or prohibit. Particularly for problems of externalities or product hazards, regulators need to be able to specify technological or managerial options to change present operations and reduce risk. Environmental regulators, for instance, need to know how oil refin-

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amount of information a regulator will need in any given context, the regulator will still always need some information about regulatory problems and their alternative solutions.

19. *See* Joskow & Schmalensee, *supra* note 13, at 16–17.

20. *See generally* Federal Motor Vehicle Safety Standards; Tires, 67 Fed. Reg. 10,050, 10,054–56 (proposed Mar. 5, 2002) (to be codified at 49 C.F.R. pt. 571) (analyzing factors leading to tire failure); OFFICE OF DEFECTS INVESTIGATION, U.S. DEP'T OF TRANSP., ENGINEERING ANALYSIS REPORT AND INITIAL DECISION REGARDING EA00-023: FIRESTONE WILDERNESS AT TIRES (Oct. 4, 2001), *available at* http://www.nhtsa.dot.gov/hot/Firestone/firestone report.pdf (presenting competing analyses of the root causes of tire separation in Firestone tires). After further study, NHTSA eventually did issue new standards for vehicle tires. *See* Federal Motor Vehicle Safety Standards; Tires, 68 Fed. Reg. 38,116 (June 26, 2003) (to be codified at 49 C.F.R. pt. 571); *see also* Kevin M. McDonald, *Don't TREAD on Me*, 49 BUFF. L. REV. 1163 (2001).

ing, computer manufacturing, and other industrial operations can generate less pollution. Auto safety regulators need to understand what steps can be taken to prevent blowouts. Even when regulations set performance standards, regulators must often know about solutions in order to choose a feasible standard or develop appropriate performance measures.[21]

Finally, regulators need information about the probable (and actual, if known) consequences of different courses of action.[22] These consequences include the extent to which a proposed regulation will deliver social benefits, such as enhanced safety or public health. They also include other effects, such as compliance costs, impacts on technological innovation, and the creation of additional harms or unintended side effects.[23] For example, if regulators at NHTSA seek to reduce fatalities from automobile accidents and are considering a requirement that manufacturers install air bags, they need to know more than just how well different types of air bags will reduce overall levels of injuries or fatalities. Price increases associated with an air bag mandate could reduce sales of new and safer cars, or the air bags themselves might create new risks of harm, such

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21. *See* BREYER, *supra* note 1, at 110 (noting that in developing a performance standard for tires, NHTSA "needed access to technical, scientific facts [but] the experts who could deal with [the key policy] questions were in industry."). The need for industry information is especially pronounced when performance standards must be explicitly based on what is achievable by existing technologies.

22. *See, e.g.*, Richard B. Stewart, *Reconstitutive Law*, 46 MD. L. REV. 86, 99 (1986) ("Formulating centralized directives to control complex industrial and governmental subsystems involves exorbitant information and decision-making costs. Enormous amounts of data must be centrally accumulated and analyzed in order to determine desired results and formulate the specific commands needed to achieve them."). The practice of benefit-cost analysis in regulatory policymaking presumes that information about consequences is relevant, even if not necessarily dispositive, in making regulatory policy. *See, e.g.*, Kenneth J. Arrow et al., *Is There a Role for Benefit-Cost Analysis in Environmental, Health, and Safety Regulation?*, 272 SCIENCE 221, 221 (1996) (defending benefit-cost analysis as "an economic tool for comparing the desirable and undesirable impacts of proposed policies").

23. *See* Johnston, *supra* note 13, at 1354–58 (discussing regulators' incentives to consider compliance costs). Regulators also need information about the expected levels of compliance with different regulations, since full compliance is rarely achieved. *Cf.* Elizabeth Garrett, *Harnessing Politics: The Dynamics of Offset Requirements in the Tax Legislative Process*, 65 U. CHI. L. REV. 501, 560 (1998) (noting the tendency of budget officials to "meet with affected parties to obtain information so that their projections will more accurately predict taxpayer behavior"). For a regulator, information about noncompliance with existing rules may even constitute a reason to issue new rules.

as by deploying at high speeds into the faces of children or smaller-than-average adults.[24]

Regulators depend on information for nearly everything they do.[25] The pages of the *Federal Register* are filled with information about regulatory problems, alternative solutions, and their consequences. Agency dockets and the offices of agencies' staff members contain still more information collected in connection with rulemaking. As Justice Breyer has observed, regulators' demand for information is "central and endemic" to the making of regulatory policy.[26]

B. INDUSTRY'S INFORMATIONAL ADVANTAGE

When governmental intervention is needed to protect the public from harms arising largely independent of economic activity—such as the transmission of disease or earthquakes and hurricanes—the relevant information may be acquired by government or independent researchers as easily as by industry. Agencies may develop their own in-house expertise, and may also draw upon the expertise of academic researchers, independent consultants, or even the staff of advocacy groups.[27] Such expertise tends to be general, say on the effects of air pollutants on health.

This kind of general expertise, however, is not sufficient when regulatory agencies must make decisions to control particular industry practices.[28] Internal agency experts, and even their outside consultants, will be at a disadvantage. Firms simply have much better access to up-to-date and fine-grained information about regulatory problems, potential solutions, and expected consequences.[29]

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24. *See, e.g.*, Sam Kazman, *NHTSA Air Bag Mandate Misfires*, REGULATION, Winter 1997, at 17.

25. This holds true even if regulators are concerned mainly about protecting their own turf or maintaining their budgets. After all, even parochial regulators need information about their policies to predict and respond to reactions by interest groups and governmental overseers.

26. BREYER, *supra* note 1, at 112.

27. *Id.* at 109.

28. *Id.* at 111.

29. David E.M. Sappington & Joseph E. Stiglitz, *Information and Regulation*, *in* PUBLIC REGULATION 3, 6 (Elizabeth E. Bailey ed., 1987) (noting that even if regulators do acquire information about firms' production technologies, demand structures, and factor costs they do so "only with a lag, and indeed, in a rapidly changing environment, the information that they acquire may be of only limited relevance to the current situation").

Where government contemplates regulation to protect public health or safety, those engaging in the potentially harmful activity are likely to hold relevant information about the underlying problem through the normal course of business, or be able to obtain such information more readily than the government. Manufacturing firms, for instance, almost always know much more than government about the risks associated with their products, technologies, and processes.[30] They learn through their own testing, from reports of complaints by customers or workers, or just based on their superior understanding of the properties of their products and processes. It is generally accepted, for example, that tobacco companies knew about the dangers of cigarettes and chemical firms knew about health risks from vinyl chloride emissions decades before government knew or could have known about them.[31] Many large companies have internal tracking systems through which they can identify risks from their products and manufacturing processes long before government is able to learn of them.[32]

Firms' informational advantage over government is usually even more pronounced for information about possible changes from the status quo. For example, facilities that emit vinyl chloride have vastly greater access than regulators to information about how to reduce those emissions.[33] While firms may

30. Douglas C. Michael, *Cooperative Implementation of Federal Regulations*, 13 YALE J. ON REG. 535 (1996) (noting that firms are "more knowledgeable about the risks generated by their company's operation[s]").

31. *See* MARTHA A. DERTHICK, UP IN SMOKE: FROM LEGISLATION TO LITIGATION IN TOBACCO POLITICS (2002); DAVID KESSLER, A QUESTION OF INTENT: A GREAT AMERICAN BATTLE WITH A DEADLY INDUSTRY 182 (2001); *Chemical Reaction*, ECONOMIST, Mar. 31, 2001, at 62, *available at* http://www.economist.com/displayStory.cfm?Story_ID=550695.

32. Computer manufacturer IBM, for example, has developed highly detailed in-house databases to track the chemicals used in its production processes, the exposure of its employees to these chemicals, and these employees' medical histories. Gerald Hillman, *ECHOES: IBM's Environmental, Chemical and Occupational Evaluation System*, 24 J. OCCUPATIONAL MED. 827 (1982); Spencer E. Ante, *Was IBM Hazardous to Workers' Health?*, BUS. WK., Oct. 20, 2003, at 46, 48. Other major companies have implemented systems to track their impacts on occupational health and environmental quality. *See* Cary Coglianese & Jennifer Nash, *Bolstering Private-Sector Environmental Management*, ISSUES SCI. & TECH., Spring 2001, at 69; R.E. Joyner & Phil H. Pack, *The Shell Oil Company's Computerized Health Surveillance System*, 24 J. OCCUPATIONAL MED. 812 (1982); Maureen T. O'Berg et al., *Cancer Incidence and Mortality in the DuPont Company: An Update*, 29 J. OCCUPATIONAL MED. 245 (1987).

33. *See* Cary Coglianese & David Lazer, *Management-Based Regulation: Prescribing Private Management to Achieve Public Goals*, 37 LAW & SOC'Y

not have the incentive to acquire information about alternative solutions at the socially optimal level—ignorance is a virtue if knowledge will lead to pressures to undertake costly changes to existing practices—these private actors will have much more experience about how their activities might be modified to reduce or solve a problem. For example, automobile manufacturers will be in the best position to identify options for building safer cars or boosting mileage.

Most significantly, firms are better equipped to predict and identify the consequences of different regulatory options. Obviously, firms can better project their costs of producing goods or services under different regulatory standards. They can also better identify other consequences. For example, they will know how long it will take to incorporate new designs into their products and their manufacturing schedules, relevant information for deciding the length of any phase-in period for new regulations. Firms also generally have superior information about potential trade-offs created by alternative rules. For example, regulators would want to consider whether changes in the fuel economy standards for cars would affect crash safety, something manufacturers can more easily assess.[34]

It is often impossible for government agencies to conduct independent research to reproduce the information held by private actors. Even where they try, it is almost always more expensive or time consuming, since firms have significant advantages in cumulative experience, technical skills, access to data, and research capacity, not to mention the fact that they own the production process. When David Kessler, then-Commissioner of the Food and Drug Administration (FDA), decided to build a case for regulating tobacco products, he directed the staff at one of the Agency's chemistry laboratories to see if they could "scientifically establish that extra nicotine had been added to currently marketed cigarettes."[35] The FDA lab undertook a "painstaking process" of testing tobacco, paper, and filters that "was repeated hundreds of times, virtually around the clock."[36] When the results turned out to be useless,

REV. 691, 695 (2003) (noting that firms "possess the most information about risks and potential control methods").

34. For a discussion of the potential trade-off between fuel economy and automobile safety, see NAT'L RESEARCH COUNCIL, EFFECTIVENESS AND IMPACT OF CORPORATE AVERAGE FUEL ECONOMY (CAFE) STANDARDS 113 (2002).

35. KESSLER, *supra* note 31, at 129.

36. *Id.*

Kessler directed the labs to undertake additional studies that also proved to be of no help: "[T]hey spent weeks searching for particles of mica that might have been a source of added nicotine [but] [n]othing useful showed up."[37] Kessler soon discovered much more valuable information from within industry itself. When firms already have the needed information, efforts by government to replicate it are at best duplicative and should probably be used as a last resort after attempts to extract the information from industry have failed.

We recognize, of course, that not all information provided by firms will be accurate, reliable, or helpful, and that relying exclusively and unthinkingly on the information provided by a single firm or industry can contribute to biased regulatory decision making.[38] Regulators should certainly not rely on all, or perhaps even most, of the information volunteered by industry. Nevertheless, in many instances the best and most valuable information needed by regulators will be available only from industry. We can expect industry will share reliable and accurate information readily in those cases where it supports the interests of that industry. The problem to which we now turn is how to get reliable and accurate information from business in those cases where releasing it does not advance an industry's interests.

II. THE STRATEGY TO OVERCOME INDUSTRY SILENCE

Government cannot count on self-interested holders of information to reveal it fully and without bias.[39] Neither can government count on its power to compel the disclosure of information. Regulatory agencies can only mandate the disclosure of

37. *Id.* at 130.

38. *See* PAUL J. QUIRK, INDUSTRY INFLUENCE IN FEDERAL REGULATORY AGENCIES 17 (1981); Steven Croley, *White House Review of Agency Rulemaking: An Empirical Investigation*, 70 U. CHI. L. REV. 821, 834 (2003) (suggesting that "because agencies rely so heavily on information about the consequences of regulatory alternatives from the very interests most affected by regulation, who therefore know the most about those consequences, agencies over time become unwittingly biased in favor of those they regulate").

39. *See* Stephen Breyer, *Judicial Review of Questions of Law and Policy*, 38 ADMIN. L. REV. 363, 388 (1986) (observing that industry has incentives to keep regulatory agencies from receiving information they need when setting regulatory policy); Daniel C. Esty, *Environmental Protection in the Information Age*, 79 N.Y.U. L. REV. 115, 207 (2004) (noting that "[c]ompanies may decide not to be forthcoming with environmental information if they see themselves in an adversarial relationship with regulators").

information when they are so authorized by Congress,[40] and for many issues they lack such authority.[41] Even when agencies do have authority, they must know what to ask for and firms can always resist or evade government demands.[42] When firms do release the precise information requested, they rarely generate anything more—a distinct disadvantage when regulators are less certain about what they need to know.[43] Far better for regulators is to find a cooperative source that will engage in give and take, answering follow-up questions, providing background details that help the regulator fit the requested information into a larger pattern, and searching for additional information when needed.

How can regulators secure information from those they regulate? In this part, we begin by looking at this question from the standpoint of an industry. Since regulations affect entire industrial sectors, the release of relevant and accurate information from any actor within a given sector will help the regulator, but likely harm others in the sector—as when one tobacco company or asbestos manufacturer releases information to the government about the hazards of its products. The challenge for an industry, therefore, is to maintain a collective silence.

The information game between regulators and industry has a complex set of payoffs from information disclosure, and this complexity provides opportunities for government regulators to elicit the information they need to make effective regulatory policy. As we explain in this part, the basic strategy is for the regulator to discover, exploit, and, if necessary, create asymmetric interests in the release of relevant information. The regulator must also address the risk of retribution that any disclosing party will likely face from others within industry.

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40. *See generally infra* Part III.B.

41. For example, the FDA lacked general subpoena power that it could use to gather information in its rulemaking involving the tobacco industry. *See* KESSLER, *supra* note 31, at 235.

42. A firm that resists an agency's subpoena usually can avail itself of several stages of administrative and judicial review. STRAUSS ET AL., *supra* note 4, at 904–05. The result is that any firm that "resolutely seeks to block an investigation can tie up the proceedings for long periods, and have the benefit of many different views of the correctness of the demand made." *Id.* at 905.

43. BREYER, *supra* note 1, at 111 (suggesting that the more industry is questioned in an adversarial way, "the more narrowly responsive will be its answers . . . and the less likely it is that the information provided in response to the first set of questions will help when the agency shifts to the second set").

A. INDUSTRY INCENTIVES AND THE PROBLEM OF COLLECTIVE SILENCE

The provision of information to support effective public decision making benefits society on net.[44] Yet potential targets of regulation will often lose, and therefore will have the incentive to yield or withhold information strategically. Targets' decisions to produce information, and to reveal, bias, or conceal what they hold, will reflect their calculated attempts to influence the knowledge and perceptions of regulators so as to promote public decisions that either reduce their anticipated costs or increase their private benefits.[45]

Firms usually have an interest in maintaining silence, in withholding or not even generating information that would help government regulate.[46] After all, the more regulators learn about individual firms' technological capabilities, the more able

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44. *See* W. KIP VISCUSI, FATAL TRADEOFFS 154 (1992) ("Information by its very nature tends to be a public good; it can be acquired by another party without destroying its productive value to those who already possess it."); Karl Claxton, *Bayesian Approaches to the Value of Information: Implications for the Regulation of New Pharmaceuticals*, 8 HEALTH ECON. 269, 271 (1999) ("Information is non rival and a public good . . . ."); William Mock, *On The Centrality of Information Law: A Rational Choice Discussion of Information Law and Transparency*, 17 J. MARSHALL J. COMPUTER & INFO. L. 1069, 1085 (1999) ("The cost structure of information, including the ease of reproducing it and the fact that it is not lost to a transferor, makes most forms of information public goods . . . ."); Richard H. Pildes & Cass R. Sunstein, *Reinventing the Regulatory State*, 62 U. CHI. L. REV. 1, 103 (1995) ("[I]nformation is sometimes a public good. Once it is available at all, or to anyone, it may well be available to everyone or to many people.").

45. *See* ROGER G. NOLL & BRUCE M. OWEN, THE POLITICAL ECONOMY OF DEREGULATION 63 (1983) ("[I]nterest groups have an incentive to withhold information that is inconsistent with their position and to present incomplete or biased information that supports their views."); Edward A. Parson, *The Technology Assessment Approach to Climate Change*, 18 ISSUES SCI. & TECH. 65, 66 (2002) ("No company or industry has an interest in helping regulators to impose burdens on them.").

46. Our analysis also applies to the selective or biased release of information in a way favorable to industry's interests. However, for the sake of our analysis, we generally treat the informational decision facing industry as a binary one: either disclose truthfully and fully, or not at all. We recognize that such a simplification abstracts away much of the subtleties in information transmission, leaving to the side selective transmission, signposting, framing, and spinning, and all sorts of important questions about interpretation. *See* Richard J. Zeckhauser & David V.P. Marks, *Sign Posting: The Selective Revelation of Product Information*, *in* WISE CHOICES: DECISIONS, GAMES, AND NEGOTIATIONS 22 (Richard J. Zeckhauser et al. eds., 1996). We make this simplifying assumption because our main purpose here is to bring clarity to the structure of incentives facing industry and the strategies available to government to identify and respond to those incentives.

they will be, all things being equal, to design and justify more stringent requirements later. Given the nature of information, once anyone in an industry gives it to the regulator, it usually cannot be retracted and its release will lead to consequences that extend beyond the discloser.[47] Thus, all the firms within a relevant sector will have a collective interest in everyone maintaining silence.

When no firm's benefits from revealing information outweigh its benefits from silence, there is no conflict between individual and collective interests; silence will prevail. But when firms' individual interests to reveal conflict with the industry's collective interest in silence, maintaining silence effectively becomes a problem of collective action.[48] The collective action problem arises when there exists some good that all members of a group can share, but when each group member has an incentive to "free ride" by letting the others work to produce the collective good. For example, all citizens can enjoy the benefits of a cleaner environment, but each individual's share of these benefits is usually far smaller than the cost to any single individual to lobby successfully for new environmental regulations. Since individuals will be able to enjoy a cleaner environment regardless of whether they participated in any collective lobbying effort, each individual will have an incentive to free ride on the activities of others.

With information, a comparable tension arises between collective and individual interests. Each firm in an industrial sector benefits from silence, but only if all firms refrain from disclosing information to the regulator. Thus, industry faces a problem of "collective *in*action"—to maintain silence.[49]

The immediate costs of concealing information are usually trivial, since silence typically requires taking no action at all;

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47. Otto Keck, *The Information Dilemma: Private Information as a Cause of Transaction Failure in Markets, Regulation, Hierarchy, and Politics*, 31 J. CONFLICT RESOL. 139, 152 (1987) (noting that "exchange of information is irreversible"). Disclosure by one actor may, of course, be disputed or contradicted by others. In some cases, the release of information by one actor may be insufficient to meet the regulator's needs, and still more information is needed from others. We discuss the implications of the order of disclosure *infra* Part II.D.

48. The quintessential collective action problem is getting individuals to make voluntary contributions to a common purpose, such as supporting a museum or a professional organization. For discussions of the problem of collective action, see RUSSELL HARDIN, COLLECTIVE ACTION (1982); MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION (1965).

49. *See* Parson, Zeckhauser & Coglianese, *supra* note 8, at 56–59.

instead, the collective inaction challenge becomes severe when the consequences of regulatory decisions based on information released differ across firms.[50] Some firms might not be harmed. Some firms may even benefit from disclosure (at least relative to their competitors). For example, if competitors differ in the costs of controlling a certain type of risk, it may be beneficial for a low-cost firm to disclose information about the risk to the regulator.

B. THE INFORMATION GAME

The real world game among industry participants can best be understood with the aid of a game theory matrix. In this section, we provide an illustration of a simple information game involving two firms. The lessons, though, readily extend to cases with many firms.

Consider first a game in which each of the firms maximizes its payoff through the outcome where both firms maintain silence. (Within each box in Figure 1, Firm *A*'s payoff is listed first.) If the game is fully symmetric, and the regulator intervenes no further, silence can be expected.

In the situation illustrated in Figure 1, Firm *A* would essentially reason to itself as follows:

> If Firm *B* is going to reveal, I should as well. But if *B* stays silent, I also want to remain silent. Fortunately, *B* is insightful, and will see that payoffs are highest for both of us in the box where we both maintain silence. Thus, I will remain silent.

Firm *B* would reason equivalently, and silence will be maintained.

We have presented the information game using illustrative payoff structures that are symmetric. However, the expected payoffs from silence and revelation will often vary from firm to firm depending on the particular piece of information. Even if firms always made the same predictions about a regulator's actions (and, of course, they do not), those actions will affect different firms differently. Regulation can sometimes benefit cer-

50. More precisely, these differences are ones of expected consequences. The expected value of silence and disclosure for any individual firm will reflect its predictions about the consequences of the action a regulator will likely take if certain information were to be disclosed. These predictions will be based on judgments about the behavior of the regulator, the degree of confidence the regulator will have in the information, and the responses of other group members to the disclosure of that information.

Figure 1: Information Game with Symmetric Payoffs

		Firm *B*	
		Maintain Silence	Reveal Industry Information
Firm *A*	Maintain Silence	10,10	0,8
	Reveal Industry Information	8,0	6,6

tain firms, for example by raising barriers to entry by competitors.[51] Even among comparable firms in the same sector, there will be differences in the capacity and cost of each firm to respond to new regulations. Unless demand for a product is fairly elastic, a regulation that increased one firm's costs by, say, ten dollars per unit would help that firm if it simultaneously increased competitors' costs by twenty dollars per unit. Firms that discover more benign industrial practices may believe they could reap a competitive advantage by revealing what they have learned to the regulator and encouraging the promulgation of new rules that will disproportionately burden their competitors.

In such situations, the payoffs to each firm will no longer be symmetric. Building on our two-firm example, Firm *B* could actually gain from the revelation of information, particularly if Firm *A* remains silent. A game theory matrix to reflect such a case is shown in Figure 2.

In this new game, Firm *B* will reveal, since this is its preferred strategy no matter what Firm *A* does. If Firm *A* anticipates this, it will reveal as well, so as to receive four rather than zero.

51. *See, e.g.*, George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. & MGMT. SCI. 3, 5–6 (1971).

Figure 2: Information Game with Asymmetric Payoffs

		Firm *B*	
		Maintain Silence	Reveal Industry Information
Firm *A*	Maintain Silence	10,10	0,11
	Reveal Industry Information	8,0	4,6

These matrices reveal a danger if firms do not know their counterpart's type. It may be that both firms have the payoffs of Firm *A*, but either or both of them may worry that the other firm has payoffs like Firm *B*'s—or even that the other firm may think that it has payoffs like Firm *B*'s (even though they are really like Firm *A*'s). A firm that worries in this way can be expected to reveal. Thus, although there may be a stable equilibrium where both maintain silence, sufficient uncertainty about payoffs may prompt one or both parties to reveal.

These examples have treated the regulator's role as fixed. However, as we will develop further in the next section, regulators can influence firms' payoffs in the information game to help those firms that disclose. For example, imagine that the payoff to Firm *B* for revealing when Firm *A* stayed silent had originally been a nine, not an eleven (upper right box in Figure 2). In such a situation, if the regulator were able to push Firm *B*'s payoff of nine up to an eleven, it would provide that firm with a dominant strategy to reveal—that is, revelation would be better no matter what Firm *A* did.

Regulators who undertake actions that affect firms' interests in disclosure follow a strategy well known in criminal law. Prosecutors routinely cut deals with low-level employees or bit players in conspiracies in return for information. In a similar way, regulators may have the ability to turn symmetric situa-

tions like those in Figure 1 into a Prisoners' Dilemma, where both firms have an incentive to reveal, although both would be better off if they both maintained silence.

Where firms' interests are asymmetric, as in Figure 2, regulators will likely have an easier time. They will identify and work on the firm or firms having the greatest incentive to break silence. For at least three reasons, interests in silence and disclosure will often be asymmetric. First, as already noted, regulators may seek to manipulate firms' payoffs for disclosure. Even if regulators do not know which firms are more likely to reveal, offering rewards to cooperating firms would encourage the most revelation-prone firm to reveal. Each firm may worry that some other firm could have an incentive to depart from the industry silence equilibrium, and at some point those worries may reach a level where a firm reveals. In Part III, we discuss in much more detail the various ways that regulators can reward or punish individual firms based on whether they disclose information.

Second, payoffs among firms will differ on their own, even absent rewards from the regulator. As we have noted, not all firms will oppose the revelation of specific information; some might even gain a comparative advantage from any resulting regulation that revelation makes possible.[52] Asymmetries may also arise out of different beliefs about the likelihood that silence will successfully stave off new regulation. If it appears to an individual firm that a regulator intends to issue a regulation even in the absence of some particular information, that firm may prefer to be perceived as a "good citizen" and to release that information in an attempt to shape the details of the new regulation.[53]

Finally, firms are made up of individual people whose interests vary. Individual employees or managers within firms are the people who actually collect, analyze, and store information that may be of value to a regulator. Their interests will not, of course, always be fully aligned with the firm's overall interests; personal payoffs may differ from the payoffs to their firm.[54] Individuals may not care about the benefits that silence brings to the firm as an organization, and they may sometimes find that cooperating with a regulator brings them personal

52. *See infra* notes 62–63 and accompanying text.

53. *See infra* text accompanying notes 75 and 111.

54. John W. Pratt & Richard J. Zeckhauser, *Principals and Agents: An Overview*, *in* PRINCIPALS AND AGENTS, *supra* note 11, at 4.

benefits, such as by making it easier in the future for them to interact with the regulator on other matters related to their jobs.

For these reasons, any industry faces a challenge in maintaining collective silence. To meet this challenge successfully, the industry needs to be able to threaten retribution on those who squeal. Retribution can range from various social sanctions inflicted against the executives or managers of a squealing firm (e.g., yelling at them on the phone or withdrawing invitations to social events), to kicking the firm out of the industry trade association, to leaking information uniquely damaging to the squealing firm.[55] The risk of retribution is clearest for employees who disclose information adverse to their employers: they lose their current job, and can expect difficulty finding employment elsewhere in the industry.[56]

Retribution can be practiced in subtle but important ways, such as by affecting a firm's or individual's status and reputation within an industry. A former vice president of government affairs for a Fortune 100 company in the retail sector emphasized this point to us in an interview: "CEOs are on the same page and know that if one person breaks loose, this has a significant impact on the whole industry."[57] In discussing a specific decision his firm had made to cooperate with regulators, this industry insider described several different types of retribution:

> We took a lot of hits from [trade] association leadership and other leaders in the industry. It gets personal. There's trash talking and people can remember it later on other legislative issues and decide not to support us because we didn't support them on that. Occasionally, we found this happened on economic development issues, where our competitors would try to hold up some new construction.[58]

The existence of different types of retribution, whether explicit or subtle, helps reinforce silence within an industry.[59]

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55. Why would firms disclose information adverse to a competitor only as retribution, instead of disclosing it preemptively? The reason is simple. If a firm did not hold back, it would then be the squealing firm and would itself be subject to retribution.

56. *See* CASS R. SUNSTEIN, WHY SOCIETIES NEED DISSENT 6 (2003).

57. To ensure candor, the interviews from which we quote in this Article were conducted on a not-for-attribution basis, a standard practice for elite interviewing in the social sciences.

58. *See supra* note 57.

59. Of course, this sort of retribution depends on employers or other firms in the industry detecting the disclosure and determining who revealed the information. If firms or individuals can disclose information to a regulator with-

C. INFORMATIONAL STRATEGY FOR REGULATORS

Regulators face two distinct scenarios when trying to secure industry information. In the first, the interests within an industry are asymmetric and the industry faces a challenge in maintaining collective silence. The regulator can seek to exploit these asymmetries and try to secure information from those who would expect to gain. In the second scenario, all firms' natural incentives are to maintain collective silence. The regulator will need to create new incentives, by offering rewards or punishments (or both) for the release of relevant and accurate information. In this section, we explain how these two scenarios lead to the general strategies available for overcoming industry silence.

1. Exploit Asymmetries of Interests

Asymmetries of interest arise across different firms when firms face (or perceive that they face) different levels of harm from the disclosure of certain information. For example, in the 1970s, aerosol product firms tried to maintain a unified opposition to a ban on chlorofluorocarbon (CFC) propellants. As consumer resistance to aerosol products emerged, however, the S.C. Johnson Wax Company broke ranks and publicly announced that it would remove all CFC propellants from its products, thus revealing to government decision makers that a ban would be feasible. S.C. Johnson could take this position because it had developed water-based propellants twenty years earlier and used CFCs in only a small fraction of its aerosol products.[60] The subsequent ban on CFC propellants was much less adverse to Johnson's interests as it was to other companies' interests, and it could actually offer the company some competitive advantage, at least in the short term.

To exploit asymmetries, regulators try to find the firms that are equivalent to the S.C. Johnson Wax Company.[61] Since firms differ in the extent to which their business depends on a

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out it being known to others that they are disclosing, they can reduce the risk of retribution. For this reason there exists a heretofore unappreciated value to secrecy in the regulatory process. *See* discussion *infra* Part IV.D.

60. LYDIA DOTTO & HAROLD SCHIFF, THE OZONE WAR 164, 166 (1978).

61. In the 1970s, NHTSA officials found they could move forward on issuing a tire standard only after one firm in the industry stepped forward: "Only when a tire firm (Uniroyal) broke ranks and submitted its own proposal for rating treadwear, traction, and blowout resistance was NHTSA able to develop a meaningful standard." BREYER, *supra* note 1, at 108.

technology or practice of concern to regulators, regulators can try to elicit information from the firms likely to be affected least by a new regulation, but that still possess information that can be generalized across the industry. Firms that have already invested in strategies with lesser social impacts may actually prefer to disclose information that will promote regulation, or at least may be less opposed to its release.[62] For example, prior to issuing a recent notice of proposed rulemaking on dietary supplements, the FDA engaged in various public outreach and information-gathering efforts. The larger manufacturers shared information because they hoped that the FDA's rulemaking "would establish a level playing field for industry, which would help prevent irresponsible firms from making and selling adulterated products."[63] Firms at the forefront of their fields sometimes even cultivate close relationships with regulators, so that they can pass along information about innovative practices that regulators might make obligatory.

There are many differences in firms beyond those between so-called "leaders and laggards."[64] Older firms frequently have interests that differ from newer firms. Suppliers' interests can differ from those of manufacturers. Firms selling to regional or niche markets may differ from firms selling to a broad, national market. Differences in firms' cost structures, technologies, and comparative abilities will affect attitudes toward disclosing information to regulators.

Firms also differ in the degree to which they are regulated. Some firms are affected by an entire series of regulations issued by a government agency, while other firms are affected by only a few of the agency's rules. Firms that interact with a regulatory agency on an ongoing basis will have stronger interests in open and accurate disclosure of otherwise adverse in-

62. *See* NEIL GUNNINGHAM & DARREN SINCLAIR, LEADERS AND LAGGARDS: NEXT GENERATION ENVIRONMENTAL REGULATION (2002).

63. Current Good Manufacturing Practice in Manufacturing, Packing, or Holding Dietary Ingredients and Dietary Supplements, 68 Fed. Reg. 12,158, 12,160 (proposed Mar. 13, 2003) (to be codified at 21 C.F.R. pts. 111–12).

64. *See, e.g.*, DAVID M. HART, BUSINESS IS NOT AN INTEREST GROUP (AND, BY THE WAY, THERE'S NO SUCH THING AS "BUSINESS") (Kennedy Sch. of Gov't, Faculty Research, Working Paper No. RWP02-032, 2002) (arguing that on many policy issues there are no common positions for all businesses); Marissa Martino Golden, *Interest Groups in the Rule-Making Process: Who Participates? Whose Voices Get Heard?*, 8 J. PUB. ADMIN. RES. & THEORY 245, 262 (1998) (observing based on a study of HUD regulations that "business[es] did not present a united front").

formation on any given issue than firms that rarely interact with the agency; the former have more need to maintain their credibility with the regulator.

Regulators can also exploit asymmetries inside firms, by seeking information from employees, the so-called whistleblowers. Sometimes regulators receive employee information passively. For example, New York's attorney general, Eliot Spitzer, received a tip from a whistleblower in 2003 that suggested illegal market timing and after-hours trading within the mutual fund industry. This prompted further investigation by the Securities and Exchange Commission (SEC) and led to new regulations of the industry.[65]

Regulators often do not wait for employee revealers to step forward. For example, in the FDA's tobacco rulemaking in the 1990s, Commissioner David Kessler admitted that he "badly needed industry informants who could help [him] piece together the bits of information . . . and make sense of it all."[66] He directed his staff to track down current and former employees who might possess information to help the FDA build its case against tobacco. One informant who the Agency located was able to "confirm[] that the technology existed to make tobacco that was free of nicotine," a fact that the tobacco industry had undoubtedly tried to suppress.[67]

When exploiting potential asymmetries across or within firms, regulators must protect their sources from retribution. To this end, they treat sources confidentially. For example, after providing assurances of confidentiality, FDA investigators needed to do little more than appeal to civic duty to convince most tobacco informants to reveal information adverse to their current or former employers.[68] Regulatory agencies commonly provide protections for confidential business information, which allows firms to provide information without competitors' knowing what they revealed.[69] Of course, it is also important that

65. Adrian Michaels, *SEC Widens Investigation into Mutual Funds*, FIN. TIMES, Sept. 5, 2003, at 33, *available at* LEXIS (reporting on SEC probe of the mutual fund industry launched after Attorney General Spitzer's office received tip about market timing); CBS News, *Meet a Major-League Whistleblower* (Feb. 17, 2004), *at* http://www.cbsnews.com/stories/2004/02/17/60II/main600649.shtml (describing Wall Street insider Noreen Harrington's decision to go to Attorney General Spitzer's office with information about market timing).

66. KESSLER, *supra* note 31, at 112.

67. *Id.* at 115.

68. *Id.* at 83, 235.

69. The Freedom of Information Act (FOIA) exempts agencies from dis-

the regulator avoid using the information in a way that would hint at its underlying source. Double sourcing—revealing only when other confirmatory information has been obtained through other means—offers such protection.[70]

Regulators may also offer to protect whistle-blowers against reprisals from their employers. For example, the Nuclear Regulatory Commission (NRC) issued regulations that prohibit nuclear facilities and their contractors from firing, reducing the salary, or otherwise discriminating against employees who report violations to the NRC.[71] The NRC also issued rules that prohibit employers from including "no-talk" provisions in agreements settling employment discrimination disputes, finding that such restrictions can "have a chilling effect on communications about nuclear safety, security, or other matters, and would restrict, impede, or frustrate full and candid disclosure to the Nuclear Regulatory Commission about matters of regulatory significance."[72]

2. Create Incentives

When regulators cannot identify sources that might reveal, or suspect there are none, they find themselves in the second

closing "trade secrets and commercial or financial information obtained from a person and privileged or confidential." 5 U.S.C. § 552(b)(4) (2000). In addition, the Trade Secrets Act provides additional protection for certain confidential business information. 18 U.S.C. § 1905 (2000). While such protection can be valuable even when government mandates disclosure, such protection of confidentiality will be even more critical when government is seeking information voluntarily by exploiting asymmetries of interests, given the potential competitive or retributive consequences if the revealer is found out. The D.C. Circuit Court of Appeals has recognized the need to protect the confidentiality of business information precisely to encourage continued cooperation by industry in informing government decision makers. *See* Critical Mass Energy Project v. Nuclear Regulatory Comm'n, 975 F.2d 871, 880 (D.C. Cir. 1992). In an en banc decision, the court interpreted section 552(b)(4) of FOIA to exempt disclosure of virtually any business information voluntarily submitted to the government. *Id.*

70. In some cases, regulators will be able, or will need, to use information leaked to it as a basis for issuing orders for further information. For example, the tips state officials received about practices in mutual fund firms helped the SEC know what information to order funds to disclose, something which it has now done for many financial institutions in the mutual fund business. We discuss the relationship between the different strategies further in Part II.D.

71. Employee Protection, 10 C.F.R. § 30.7 (2004).

72. Preserving the Free Flow of Information to the Commission, 55 Fed. Reg. 10,397, 10,398 (Mar. 21, 1990) (to be codified at C.F.R. pts. 30, 40, 50, 60, 61, 70, 72, 150); *see also* Employee Protection, 10 C.F.R. § 30.7.

scenario. In this case, they must create new incentives to break industry's silence.[73]

Regulators can issue information requests under a threat of a penalty. For example, when the SEC in 2003 ordered mutual funds to turn over information related to possible market timing and after-hours trading activity, its request detailed the civil penalties for noncompliance.[74] Even a "voluntary" request for information may carry an implicit risk that failure to demonstrate good faith compliance might subject the firm to a closer and more extensive investigation by the regulator.

Regulators can also reward firms that come forward with needed information. In crafting a new regulation, it is sometimes possible to design a rule, or mode of enforcement, to vary the burden imposed on particular industries or firms, effectively (though not explicitly) giving favorable treatment to firms that provide information. As we discuss further in Part III, some regulatory agencies have even established recognition programs that try to reward firms that act responsibly and express a willingness to engage in information sharing with the agency.

Beyond creating incentives for individual firms, regulators can use their regulatory authority to shape overall industry incentives. If government can credibly signal that it will issue a new regulation whether or not it receives certain information from industry, firms may choose to disclose otherwise adverse facts in the hope of forestalling an even more stringent or costly regulation.[75] Firms may also find some value from acting like "good citizens" if they think the regulator already has enough information to create a regulation that will withstand judicial scrutiny. Regulators, like shrewd prosecutors trying to break down conspirators, may feign more knowledge than they have.

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73. There is a symmetry here with the conventional problem of collective action. One of the well-known solutions to this problem is the provision of selective benefits. Political interest groups organized to promote collective interests routinely offer gifts, discounts, magazines, or travel benefits to solicit new members. They also serve as nodes for valuable networking for business or social purposes. OLSON, *supra* note 48; JAMES Q. WILSON, POLITICAL ORGANIZATIONS 33–39 (1973); Robert H. Salisbury, *An Exchange Theory of Interest Groups*, 13 MIDWEST J. POL. SCI. 1, 20–22 (1969).

74. *See supra* note 65. Section 21c of the Securities and Exchange Act of 1934 provides for judicial enforcement of SEC information demands and criminal penalties for failure to comply. 15 U.S.C. § 77h-1 (2000).

75. *See supra* text accompanying note 53; *infra* text accompanying note 111.

Finally, industry's response to new regulations can give regulators information needed to tighten or refine these regulations still further. For example, the Montreal Protocol required a fifty percent reduction in industry's use of CFCs and established a technology assessment panel to identify ways to meet this target.[76] Since the entire industry now faced incentives for finding ways of reducing their use of CFCs, participation on the assessment panel provided an opportunity for firms to pool their expertise to achieve innovations.[77] The results included new information that proved helpful to industry and yielded positive externalities: the collective search led to the use of less harmful chemicals and new technological processes that reduced the use of ozone-depleting chemicals by more than ninety-five percent.[78]

D. ADDITIONAL STRATEGIC CONSIDERATIONS

Our analysis of regulators' basic strategies raises three implications. First, effective regulatory decision making depends on more than just scientific, economic, and engineering information. It also requires political information, that is, information about the interests and proclivities of affected firms and individuals. Regulators must understand the various interests at stake if they are going to try to exploit asymmetric interests, even when using rewards or punishments. Often information about such interests comes from ongoing interactions between regulators and the industries they regulate. Regulators may also issue advance notices of proposed rulemaking to flush out interests. In a preplay to the main round of the game, the nature and intensity of firms' responses to regulators' initial forays reveals information about their underlying interests.[79]

Second, regulators may use both strategies—exploit asymmetries and create incentives—in tandem, such as by issuing a general information request backed up by penalties, and also separately (and discretely) targeting individual firms with differential interests to obtain other information. Or they may combine the two strategies into one effort, such as by re-

76. Protocol on Substances that Deplete the Ozone Layer, Sept. 16, 1987, art. III, 1522 U.N.T.S. 31–33, *reprinted in* 26 INT'L LEGAL MATERIALS 1541, 1552–54 (1987).

77. EDWARD A. PARSON, PROTECTING THE OZONE LAYER 168–69, 242 (2003).

78. *Id.*

79. *See* Johnston, *supra* note 13, at 1367–68.

warding those firms already most inclined to disclose. They may also stage the two strategies when searching for the same information. Regulators who exploit asymmetries can later try to create incentives.

In addition, they may use different strategies for different bits of relevant information. Regulatory problems often have several plausible causes, and they almost always have several potential solutions. The value of any particular piece of information for the regulator depends on how effectively it fills a gap in the regulator's knowledge base and how important that gap is to the regulator's overall decision making. For firms, the costs and benefits of providing any given piece of information also vary, depending upon the likely consequences of disclosure. The regulator will thus wish to downplay or obscure the significance of any information it seeks from a potential source, and perhaps in some cases will even want to pursue different pieces of information from different actors, so that it will be harder for any one of them to see how the pieces fit together.[80] When acting this way, regulators behave much like the police investigating a crime. They go around asking many people for small bits of information and then attempt to piece it all together.

Firms with a hazy picture of the regulator's overall puzzle will be less likely to assess accurately the value and impact of the release of any particular piece of information.[81] Some firms will overestimate the value of their information to the regulator and will therefore resist disclosure; others will underestimate the regulator's use of what they say, and will release more information than they otherwise would. For example, in building its case for tobacco regulation, FDA investigators interviewed tobacco farmers about some of the experimental crops they grew in an effort to show how the industry had developed techniques to control the levels of nicotine in cigarettes.[82] Undoubt-

80. The regulator will face a tradeoff in deliberately soliciting information from different sources for the purpose of avoiding showing all its cards to any single player. The accuracy and usefulness of information may well diminish as the number of sources increases, especially if different sources use different units of measurement and the regulator is unable to convert the data into a common metric. In such cases, the regulator will be better off pursuing information from a single source, even if doing so will reveal more fully to that source the value of the information the regulator needs.

81. Thus, firms have an incentive to cooperate with the regulator when the regulator cooperates in return and shares information about the agency's plans. *See infra* note 167 and accompanying text.

82. KESSLER, *supra* note 31, at 214–15.

edly, few farmers who talked to Agency investigators fully appreciated how the FDA would use information about their crops to build a case against the tobacco industry, and surely no experienced government investigator would have conveyed to these farmers that the fate of the tobacco industry rested on the information they were being asked to provide.

A third consideration emerging from our strategic analysis is that regulators need to consider the order in which they pursue different sources of information.[83] Regulators will want to distinguish between sources of information according to how valuable their information is. It may be better for regulators first to pursue information from sources possessing lower information value, building up their base of knowledge so that they can later maximize what they learn from their most intelligent sources of information. Of course, since regulators often do not know what they are hunting for, they may not know which sources will be most valuable until well into an inquiry.

As a general guideline, regulators should try to exploit asymmetries before attempting to create incentives. A regulator's initial step in any regulatory proceeding should be to determine which firms (or individuals) are likely to have asymmetric interests with respect to different pieces of relevant information.[84] It may take time to find a willing source of information but, if the agency can afford the delay, this is generally preferable to mandating disclosure, which sets up an adversarial posture that can be difficult or impossible to unwind.[85] On the other hand, when regulators believe that there is a low probability of finding any cooperative source or perhaps if the problem is particularly urgent, it may be better to use their subpoena power at the outset.[86] Mandatory disclo-

83. Correspondingly, industry's collective ability to inflict retribution on those who disclose information will also likely vary depending on the order of revelation. Whether by regulators or by industry, the strongest incentives—positive or negative—may be applied to those firms who disclose (or threaten to disclose) first. *See* Parson, Zeckhauser & Coglianese, *supra* note 8, at 62–64.

84. *See infra* Part IV.B.

85. *See supra* notes 97–110 and accompanying text.

86. There may also be strategic reasons for regulators to issue subpoenas before exploring other options, regardless of the relative merits of mandated disclosure in terms of collecting valuable information. Issuing a subpoena conveys to Congress and the public an impression that the regulator is taking swift action to address a problem and it also tends to put the firms subject to a subpoena in a bad light, which may distract attention from criticisms of the regulator. For recent accounts of regulators' high-profile probes into practices in the mutual fund industry, see Ellen Kelleher, *US Extends Probe to Include*

sure may also be more appropriate when regulators are looking for confirmation of something they already know.

III. REGULATORS' TACTICS FOR ELICITING INFORMATION

In this part, we consider the specific tactics that regulators use to exploit asymmetries of interest and to create new incentives for disclosure. Legal commentators generally distinguish between forms of voluntary disclosure of information and compulsory disclosure,[87] and pay more attention to compulsory inspections and subpoenas which raise issues about privacy and protection against self-incrimination.[88] Yet the tactics available to regulators are actually quite diverse: (a) disclosure as a precondition for regulatory decisions; (b) mandatory reporting and access; (c) rewards for disclosure; (d) nonmandatory information requests; (e) formal interaction; and (f) informal interaction.

A. CONDITIONING DECISIONS ON DISCLOSURE

Regulators sometimes condition key decisions on the disclosure of information by regulated firms.[89] For example, companies must submit extensive information to the FDA to secure

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Intermediaries, FIN. TIMES, Oct. 13, 2003, at 16; Adrian Michaels, *SEC Puts Pressure on Mutuals*, FIN. TIMES, Oct. 30, 2003, at 16, *available at* LEXIS; Scott Bernard Nelson, *US, State Broaden Inquiry of Funds: More Firms Get Notes Seeking Information*, BOSTON GLOBE, Sept. 6, 2003, at C1.

87. MASHAW ET AL., *supra* note 4, at 643 ("Agencies obtain needed information . . . in a variety of ways. Most of it is provided voluntarily[.] . . . However, some information that government officials require to develop policy . . . is not willingly disclosed."); 1 RICHARD J. PIERCE JR., ADMINISTRATIVE LAW TREATISE 194 (4th ed. 2002) ("[A]lmost all the information the agencies receive from private parties comes in voluntarily. In both adjudication and rulemaking, whether formal or informal, private parties voluntarily submit the facts about themselves, and they usually answer questionnaires without compulsion.").

88. *See, e.g.*, Carlos B. Castillo, Comment, *Discord Among Federal Courts of Appeals: The Constitutionality of Warrantless Searches of Employers' OSHA Records*, 45 U. MIAMI L. REV. 201 (1990); Geoffrey G. Hemphill, Note, *The Administrative Search Doctrine*, 5 REGENT U. L. REV. 215 (1995); Susan M. McDonough, Note, *The Fourth Power? Administrative Searches vs. The Fourth Amendment*, 20 NEW ENG. J. ON CRIM. & CIV. CONFINEMENT 195 (1993).

89. The Office of Management and Budget (OMB) estimates that 39.7% of all authorized information collection requests are "required to obtain or retain some kind of benefit." OFFICE OF MGMT. & BUDGET, FINAL REPORT OF THE SMALL BUSINESS PAPERWORK RELIEF TASK FORCE 7 (June 27, 2003) (emphasis omitted).

its approval to market new drugs.[90] The Federal Aviation Administration (FAA) requires manufacturers of new aircraft to submit extensive test results before the Agency will certify the design as meeting applicable safety standards.[91] While such transfers of information take place in case-by-case proceedings instead of general policymaking, the industry information the Agency gains may prove helpful in subsequent rulemaking by the Agency.

At times, regulators can use information from firms' applications submitted to other agencies. For example, to understand the tobacco industry's techniques, the FDA relied on information submitted to the Patent Office in support of tobacco companies' patent applications. Tobacco companies touted their innovative methods of controlling nicotine levels when applying for patents related to cigarette manufacturing; this information later helped the FDA build its case that cigarettes were sophisticated drug delivery devices that warranted the FDA's regulatory control.[92]

Even though regulators may obtain information from individual applications, when they require information as a condi-

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90. Pharmaceutical firms must file new drug applications that include all the data and findings from any clinical trial performed on a drug they would like to market. 21 U.S.C. § 355(b) (2000). If the Agency finds that the data show that the drug meets the requirements for safety and efficacy, it will approve the drug for market. § 355(c), (d).

91. *See* Federal Aviation Act of 1958, Pub. L. No. 94-12, 72 Stat. 731 (codified as amended in 5, 14, 15, 16, 31, 39, 40, 43, 48, 49 and 50 U.S.C. (2000)); Inspection and Tests, 14 C.F.R. § 21.33(b) (2004) (stating that a manufacturer must make all inspections and tests); Flight Tests, 14 C.F.R. § 21.35(b) (requiring manufacturers to make all flight tests). *See generally* Mark A. Valetti, Comment, *Preemption of State Law Tort Claims in the Context of Aircraft Manufacturers*, 60 J. AIR L. & COM. 699, 705–10 (1994–1995) (describing the FAA certification process). In addition, the manufacturer must demonstrate that it has in place a quality control system to ensure that its production process will consistently produce aircraft that meet the approved design. *See* Quality Control, 14 C.F.R. § 21.139 (noting what data must be provided to demonstrate quality control); Quality Control Data Requirements; Prime Manufacturer, 14 C.F.R. § 21.143 (discussing the same); *see also* Requirements for Issuance, 14 C.F.R. § 21.135 (providing that certification will be issued only if an application meets requirements of §§ 21.139 and 21.143). These detailed plans describe the processes manufacturers use to meet safety requirements, providing information about each firms' production.

92. KESSLER, *supra* note 31, at 122–24 (noting that evidence from patent applications showed that industry had developed the means of manipulating nicotine levels in cigarettes). Of course, the FDA's efforts to regulate tobacco ultimately were not sustained in court, as the U.S. Supreme Court held that tobacco products were excluded by statute from the FDA's jurisdiction. FDA v. Brown & Williamson Tobacco Corp., 529 U.S. 120 (2000).

tion for approval they are often at a disadvantage. Firms have incentives to submit selective, biased, or even false information to satisfy disclosure requirements. Moreover, inaccurate submissions are hard to police, particularly if the inaccuracies are subtle, since regulators usually cannot independently verify the information firms provide.[93] For example, in its application to market a drug called Oraflex, the pharmaceutical company Eli Lilly failed to disclose overseas deaths associated with the use of Oraflex.[94] By the time the company pleaded guilty and was forced to withdraw the drug from the market, the drug reportedly had caused about fifty deaths in the United States.[95]

To be sure, the expected penalties for submitting inaccurate materials will temper any incentives firms have to submit selective or biased applications. Both the magnitude of the penalties and the probability of getting caught matter. For repeat players who depend on government approvals for their business, the penalties will include informal ones, such as intensive scrutiny or foot dragging by the agency over future applications. More formal penalties for false disclosure, especially if applied to individual decision makers directly, also counteract any incentives to mislead if they are large enough. Congress recognized as much in passing the Sarbanes-Oxley Act of 2002, which increased penalties for corporate fraud and required individual certification by CEOs of the accuracy of company filings.[96]

B. MANDATORY REPORTING AND ACCESS

Regulators can mandate that firms release information or submit to government audits or inspections, with the threat of penalties if firms do not comply.[97] Mandated information dis-

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93. *See* Sidney A. Shapiro, *Divorcing Profit Motivation From New Drug Research: A Consideration of Proposals to Provide the FDA with Reliable Test Data*, DUKE L.J. 155, 170 (1978) (questioning the ability of FDA officials to detect subtle biases in the data they receive).

94. Teresa Moran Schwartz, *The Role of Federal Safety Regulations in Products Liability Actions*, 41 VAND. L. REV. 1121, 1148 n.124 (1988); *see also* Morton Mintz, *Indictment Accuses Drug-Testing Firm of Falsifying Results*, WASH. POST, June 1, 1979, at A9 (describing allegations of falsification by another drug company).

95. *See* Teresa Moran Schwartz, *Punitive Damages and Regulated Products*, 42 AM. U. L. REV. 1335, 1348 (1993).

96. Sarbanes-Oxley Act of 2002, Pub. L. No. 107-204, 116 Stat. 745 (to be codified in scattered sections of 11, 15, 18, 28 and 29 U.S.C.).

97. The OMB estimates that 38.4% of all authorized information collec-

closure can take the form of subpoenas, reporting requirements, and government inspections of facilities.

It is well established that Congress and the courts have the authority to order the disclosure of information.[98] Regulatory agencies also can compel businesses or individuals to answer questions or produce documents, as long as Congress has given them this authority by statute and they request information relevant to a legitimate agency purpose and not patently unreasonable.[99] The courts allow agencies with such authority to use it to obtain information for rulemaking as well as enforcement.[100] Courts have generally deferred to regulators when it comes to enforcing information requests, even upholding broad requests for "all papers" or "all documents" related to issues of concern to the regulator.[101] Indeed, the courts have held that

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tion requests "are *mandatory* where failure to provide the information required can result in civil, or criminal, sanctions." OFFICE OF MGMT. & BUDGET, *supra* note 89, at 7.

98. Congress has the power to compel witnesses to testify or produce documents so that it can more competently exercise its legislative authority. McGrain v. Daugherty, 273 U.S. 135 (1927). *See generally* James M. Landis, *Constitutional Limitations on the Congressional Power of Investigation*, 40 HARV. L. REV. 153, 189 (1926) (providing historical background on Congress' rationale for compelling information). Courts can compel the disclosure of information in litigation, FED. R. CIV. P. 37, 45; FED. R. CRIM. P. 17, which on occasion will prove to be an additional source of information for regulators. The litigation filed by smokers yielded documents helpful to the FDA in its rulemaking on cigarettes. KESSLER, *supra* note 31, at 205–06, 251–55, 258–59.

99. United States v. Morton Salt Co., 338 U.S. 632, 654 (1950); Endicott Johnson Corp. v. Perkins, 317 U.S. 501, 509 (1943) (stating that agency subpoenas will be sustained unless "plainly incompetent or irrelevant to any lawful purpose" of the agency). For example, the Federal Trade Commission has the authority "to require by subpoena the attendance and testimony of witnesses and the production of all such documentary evidence relating to any matter under investigation." 15 U.S.C. § 49 (2000). However, even when statutes contain authorizations to conduct physical inspections of facilities, the Supreme Court has held that in certain situations regulators may be required to obtain search warrants prior to making an inspection in the absence of a firm's consent. Marshall v. Barlow's, Inc., 436 U.S. 307 (1978).

100. *In re* FTC Line of Business Report Litig., 595 F.2d 685, 702 (D.C. Cir. 1978) (per curiam).

101. *Id.* at 703 ("When the inquiry is conducted pursuant to a lawful purpose and the request is relevant to that objective, its reasonableness will be presumed absent a showing that compliance threatens to disrupt or unduly hinder the normal operations of a business."); *see also Morton Salt Co.*, 338 U.S. at 652; Phillips Petroleum Co. v. Lujan, 951 F.2d 257, 260 (10th Cir. 1991). The main limitations on agencies' information gathering are political ones. *See* STRAUSS ET AL., *supra* note 4, at 874 (noting that "the principal checks on administrative information requirements are legislative and administrative").

mere "official curiosity" is a sufficient purpose for mandatory information requests, provided the information requested pertains to a matter within the agency's authority.[102]

Regulators can also compel firms to file routine reports that effectively enable government to monitor relevant aspects of an industry. For example, under the Toxic Substances Control Act (TSCA), the Environmental Protection Agency (EPA) requires companies to disclose scientific studies they have conducted on toxic substances[103] and to report data on production levels of chemicals listed on the Agency's Chemical Substances Inventory.[104] The EPA uses such data to help set priorities, assess new risks, and establish and implement Agency regulations.[105] Firms that fail to report the required information can face court-ordered fines of up to $25,000 per day for each violation.[106]

Mandatory reporting has the advantage that it may overcome selection bias, as voluntary disclosure would be more likely to elicit information from an unrepresentative sample of firms, namely those with favorable information to reveal.[107] Unfortunately, such mandatory extractions suffer three shortcomings. First, requests for information can be politically unpopular, particularly if they require a lot of effort by the industry to respond. To limit government information requests, for example, Congress has adopted the Paperwork Reduction Act,

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102. *Morton Salt Co.*, 338 U.S. at 652.

103. Toxic Substances Control Act, 15 U.S.C. § 2607(d) (2000); Health and Safety Data Reporting, 40 C.F.R. § 716 (2003).

104. *See* 15 U.S.C. § 2607; Partial Updating of TSCA Inventory Data Base; Production and Site Reports, 51 Fed. Reg. 21,438 (June 12, 1986) (to be codified at 40 C.F.R. pt. 710).

105. Partial Updating of TSCA Inventory Data Base; Production and Site Reports, 50 Fed. Reg. 9944, 9945 (proposed Mar. 12, 1985) (to be codified at 40 C.F.R. pt. 710) (stating that the EPA uses the information it receives to "set priorities for further investigation . . . to estimate, along with other data, the potential for human and environmental exposure to specific substances, to support the implementation of various TSCA regulations, and to perform economic impact analyses for potential TSCA regulations").

106. 15 U.S.C. § 2615 (2000).

107. For an analogous scenario in the regulation of disclosure of information to consumers, see Howard Beales et al., *The Efficient Regulation of Consumer Information*, 24 J.L. & ECON. 491, 537 (1981) (noting that when disclosure is voluntary "information will usually be disclosed only by sellers of whom it speaks well"); Pauline M. Ippolito & Alan D. Mathios, *Health Claims in Food Marketing: Evidence on Knowledge and Behavior in the Cereal Market*, 10 J. PUB. POL'Y & MARKETING 15, 20 (1991) (discussing the incentives of manufacturers of high-fiber cereal to advertise their health advantages).

which requires agencies to obtain approval from the Office of Management and Budget (OMB) for any information requests that ask identical questions of more than ten individuals or companies.[108] Second, to be effective, mandatory information requests require that the regulator already have enough information to know what issues to ask about. Firms are unlikely to respond to a subpoena by volunteering information beyond what is required. Third, it is generally hard for government to determine whether firms have provided complete responses. A failure to make any response will be clear, but it is extremely difficult to demonstrate omission or evasion if the firm responds with at least some information. A recent amnesty program administered by the EPA under TSCA suggests that the nondisclosure problem can be extensive. The EPA established a five-year amnesty period, waiving penalties for firms that came forward with studies on toxic substances they had previously failed to disclose.[109] Companies disclosed 11,000 old studies that had previously gone undisclosed.[110]

C. REWARDS FOR DISCLOSURE

The EPA's amnesty program in effect gave a backhanded reward for disclosure by reducing a potential penalty. It offered firms something of value—namely, amnesty—in exchange for information. Regulators' rewards are often much more discreet. For example, regulators may become valued and trusted sources of information about agency activities for industry representatives who are valued and trusted sources of information for regulators.

Regulators can also create rewards by bluffing that they will recklessly proceed with a costly regulation even if industry does not disclose relevant information.[111] Firms that fear that government will proceed on the basis of insufficient information will sometimes disclose in an effort to avert or soften the eventual regulation. In these cases, the resulting reward for disclo-

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108. 44 U.S.C. § 3502(3) (2000).

109. *See* Marianne Lavelle, *EPA's Amnesty Has Become a Mixed Blessing: Be Careful What You Ask For*, NAT'L L.J., Feb. 24, 1997, at A1.

110. *Id.* Some companies claimed that they had failed to submit the older studies not because of any obstructionist intent, but due to previous ambiguity about TSCA regulations. They further claimed that this ambiguity had finally been addressed by a new EPA guidance. A similar amnesty program for production data for chemicals listed on the EPA's inventory apparently netted new information from about 250 companies. *Id.* at A18.

111. *See supra* text accompanying notes 53 and 75.

sure will be a more sensible or less costly regulation. Of course, this type of reward will be shared with others in the industry. Although difficult to document, it is plausible that regulators sometimes will design rules that subtly reward the individual firms that provide information.[112] In negotiations over multistate tobacco litigation, for example, the Liggett Group sought special treatment in part because the company had previously reached a deal releasing documents that revealed the tobacco industry's efforts to cover up smoking's hazards.[113]

Over an extended time, many opportunities will arise for regulators to offer implicit benefits to specific firms that release relevant and accurate information.[114] In repeated interaction, especially when information is the currency of exchange, building a reputation matters because a regulator needs to be able to trust the information provided by an industry source. By providing information adverse to its interests, at least once in a while, a firm can bolster its credibility as an industry source, making it more likely that the government will grant the firm some implicit discretionary benefit—if only by believing the firm other times when information it shares seems self-serving. Such credibility could prove especially valuable when providing information about industry costs or technological feasibility.

Regulators also have developed programs that deliver explicit inducements to firms if they deliver helpful information to the government. These programs, often justified as efforts to reward firms for achieving outcomes beyond what existing regulations require, serve a second purpose: they allow regulators to learn about best practices. For example, in the area of

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112. For example, government could adopt a technology-based standard that locks in a technology that the firm already uses. This would put competitors at a disadvantage, whereas a performance-based standard might not.

113. *Tobacco's Crumbling Barricades*, N.Y. TIMES, Mar. 22, 1997, at A22. Liggett also claimed it could not afford its share of the settlement. CARRICK MOLLENKAMP ET AL., THE PEOPLE VS. BIG TOBACCO 224 (1998). In the end, however, Liggett was unable to secure an exemption from the terms of the settlement, in large part because the rest of the industry closed ranks. *Id.* at 224–25, 233. Although this is an example of information disclosure in litigation, for a discussion of how large-scale litigation over social issues such as tobacco has effectively become a form of regulation, see generally REGULATION THROUGH LITIGATION (W. Kip Viscusi ed., 2002).

114. Given that many firms and trade associations are engaged in long-term, repeated interaction with regulatory officials, they will find benefits over the long term from cooperative and open dealing with government. ROBERT AXELROD, THE EVOLUTION OF COOPERATION 156 (1984); *see* Coglianese, *supra* note 7.

environmental and occupational safety regulation, agencies now offer explicit benefits to encourage firms to participate in various pilot projects or reveal information about their management practices. Firms that commit to taking on extra measures and are willing to provide the government with more information about their products or practices than is normally required receive special recognition, reduced enforcement scrutiny, and in some cases outright exemptions from existing standards.[115]

For example, after receiving a series of health complaints from neighbors of large animal feedlot operations, the EPA began investigating whether it should take regulatory action to address the situation. To collect information, the EPA initiated negotiations with firms to induce them to implement monitoring systems on their facilities to provide the EPA with data on the pollutants in the air at feedlots.[116] In exchange for firms' willingness to install monitoring devices, the EPA reportedly offered to "give farm operators amnesty for any Clean Air Act violations" that the Agency uncovered through the monitoring program.[117]

Another type of inducement is to offer exemptions from existing regulations.[118] The EPA's Project XL, established in the mid-1990s, allows the EPA to grant waivers if firms show that they will use alternative methods of pollution reduction that will yield better environmental results than the methods specified under current regulations.[119] Intel, for example, devised an alternative strategy for reducing air pollution at one of its Arizona semiconductor facilities in exchange for the EPA's waiving certain regulatory permitting requirements.[120] Project XL was

115. *See generally* David W. Case, *The EPA's Environmental Stewardship Initiative: Attempting to Revitalize a Floundering Regulatory Reform Agenda*, 50 EMORY L.J. 1, 4, 66 (2001); Cary Coglianese & Jennifer Nash, *Policy Options for Improving Environmental Management in the Private Sector*, ENVIRONMENT, Nov. 2002, at 10, 19 (describing government programs to recognize best practices).

116. Jennifer 8. Lee, *Neighbors of Vast Hog Farms Say Foul Air Endangers Their Health*, N.Y. TIMES, May 11, 2003, at A1.

117. *Id.*

118. *See* Bradley C. Karkkainen, *Adaptive Ecosystem Management and Regulatory Penalty Defaults: Toward a Bounded Pragmatism*, 87 MINN. L. REV. 943, 965–70 (2003).

119. *See* Regulatory Reinvention (XL) Pilot Projects, 60 Fed. Reg. 27,282 (May 23, 1995).

120. *See* ALLEN BLACKMAN & JANICE MAZUREK, THE COST OF DEVELOPING SITE-SPECIFIC ENVIRONMENTAL REGULATIONS: EVIDENCE FROM EPA'S

designed in part to provide the EPA with information about alternative environmental strategies that the Agency could use to develop new environmental regulations or revise old ones.[121] Firms applying for waivers must provide the EPA with a substantial amount of information about the alternative strategies they propose and submit to an ongoing monitoring regimen.[122]

Both the EPA and the Occupational Safety and Health Administration (OSHA) offer public recognition as an inducement to gather information from firms that exhibit best practices in environmental and workplace safety management. OSHA's Voluntary Protection Programs (VPP), created in 1982, has more than 1000 member facilities nationwide.[123] Under the VPP, OSHA exempts employers from regular inspections if they demonstrate a strong record in health and safety and have approved health and safety programs in place.[124] As part of the application process, OSHA conducts a rigorous "pre-approval review" that provides the Agency with information about firms' health and safety measures.[125] OSHA also goes on-site to inspect the employer's past safety records, review its policies and procedures for ensuring health and safety, and interview man-

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PROJECT XL 11–13 (Resources for the Future, Discussion Paper No. 99-35-REV, 2000); John H. Cushman, Jr., *E.P.A. and Arizona Factory Agree on Innovative Regulatory Plan*, N.Y. TIMES, Nov. 20, 1996, at A18; *see also* Daniel J. Fiorino, *Toward a New System of Environmental Regulation*, 26 ENVTL. L. 457, 473 (1996); Lawrence E. Susskind & Joshua Secunda, *The Risks and the Advantages of Agency Discretion: Evidence from EPA's Project XL*, 17 UCLA J. ENVTL. L. & POL'Y 67, 111 (1998–1999).

121. Thomas E. Caballero, *Project XL: Making It Legal, Making It Work*, 17 STAN. ENVTL. L.J. 399, 435 (1998) ("The Clinton administration conceived Project XL as a means of experimenting with new methods of controlling and reducing pollution through pilot projects. The knowledge gained from the projects was supposed to facilitate the modification of environmental regulations and controls."). For a further discussion of the purposes of Project XL, see ALFRED A. MARCUS ET AL., REINVENTING ENVIRONMENTAL REGULATION (2002); Dennis D. Hirsch, *Project XL and the Special Case: The EPA's Untold Success Story*, 26 COLUM. J. ENVTL. L. 219, 220–27 (2001).

122. *See* Regulatory Reinvention (XL) Pilot Projects, 60 Fed. Reg. at 27,287 (noting that one of the requirements is monitoring, reporting, and evaluation of the program).

123. *See* Voluntary Protection Programs to Supplement Enforcement and to Provide Safe and Healthful Working Conditions, 47 Fed. Reg. 29,025 (Jul. 2, 1982).

124. *See id.* at 29,025. Of course, OSHA still reviews worker complaints and accidents and retains its enforcement authority if the site is not meeting its regulatory obligations. *See id.* at 29,030.

125. *See id.* at 29,030; *see also* Michael, *supra* note 30, at 559–61 (discussing generally the requirements for the program).

agers and employees about the policies and controls.[126] These visits ensure that facilities meet the program requirements, but they also allow OSHA to secure a great deal of information about workplace safety that it can later use to identify problems at nonparticipating firms. The participating firms, in return, escape from the regular rulebook inspections.

In 1993, the EPA launched an Environmental Leadership Program (ELP), modeled on OSHA's VPP, which recognized industrial facilities that had delivered exemplary environmental results.[127] This program, and other EPA programs like it, eventually grew into what the EPA now calls its National Environmental Performance Track (NEPT). Through NEPT, the EPA recognizes more than 300 facilities across the nation for their environmental excellence.[128]

Facilities admitted into OSHA's VPP and the EPA's NEPT are eligible to join membership associations—the VPP Participants Association and the Performance Track Participants Association, respectively. These associations have regular meetings with the agencies that provide beneficial opportunities for industry representatives and agency staff to communicate. Regulators report that that they have learned valuable information from these programs about industry practices and management techniques.[129] As one EPA official summed up the information value from programs like the NEPT, "We need people we can talk to."[130]

D. NONMANDATORY INFORMATION REQUESTS

Regulators can ask firms to provide information without offering any rewards or threatening any penalties.[131] The OMB

126. *See* 47 Fed. Reg. at 29,030.

127. *See* Environmental Leadership Program, 58 Fed. Reg. 4,802 (Jan. 15, 1993).

128. EPA, National Environmental Performance Track: Basic Information, *available at* http://www.epa.gov/performancetrack/about.htm (last visited Sept. 27, 2004). Other forerunners to the NEPT included the Strategic Goals Program in the metal finishing sector and the StarTrack program implemented in EPA Region 1. *See* David B. Spence, *The Shadow of the Rational Polluter: Rethinking the Role of Rational Actor Models in Environmental Law*, 89 CAL. L. REV. 917, 954–56 (2001).

129. *Id.* at 955.

130. *See supra* note 57.

131. Even though such requests are technically nonbinding, some firms may perceive that they have little choice but to cooperate. Here, we mean to address instances where firms have, and perceive that they have, a choice about whether to disclose. However, in many cases what looks like a voluntary

estimates that 21.9% of authorized information collection requests "are *voluntary* where a response is entirely discretionary and has no direct effect on any benefit or privilege for the respondent."[132] Undoubtedly, many more such requests are either made without authorization or do not rise to the level where OMB authorization is needed.

Regulators often send voluntary surveys to firms to collect data on regulatory problems, industry conditions, and the financial costs of regulation. For example, the EPA has surveyed regulated water systems about every five years since 1976,[133] collecting information about the current conditions of water systems to help it calculate the costs of drinking water regulations and assess any potential needs for new water quality technologies.[134] In 2000, the Agency surveyed about 1800 different water systems, mailing surveys to about 1200 medium and large systems and sending representatives from consulting firms to collect data in person from 603 small systems. The response rate for the small systems was ninety percent, while the rate for all systems was sixty-nine percent.[135]

In the late 1980s, OSHA surveyed more than 5000 companies on the use of personal protective equipment, such as safety goggles and hearing protectors, in various industrial sectors.[136] The study was designed to enable OSHA to identify workplace risks, determine the feasibility of new or revised standards, and provide a baseline for assessing the effectiveness of any regulatory changes.[137] To help ensure the adequacy and accuracy of

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request may well be tacitly backed up with some threat of punitive response for those who do not participate.

132. OFFICE OF MGMT. & BUDGET, *supra* note 89, at 7. Even purely voluntary surveys must still receive approval by the OMB under the Paperwork Reduction Act (PRA), 44 U.S.C. §§ 3501–08 (2000). *See* Jeffrey S. Lubbers, *Paperwork Redux: The (Stronger) Paperwork Reduction Act of 1995*, 49 ADMIN. L. REV. 111, 114 (1997). The burden on responding companies with respect to cost and time is one factor that the OMB considers when deciding whether to approve information collection requests by agencies.

133. Agency Information Collection Activities: Proposed Collection; Comment Request; Community Water System Survey, 65 Fed. Reg. 7544 (Feb. 15, 2000) (describing the purpose and design of the survey).

134. *Id.* at 7545.

135. *See* 1 ENVIRONMENTAL PROTECTION AGENCY, COMMUNITY WATER SYSTEM SURVEY 2000 vi (2002), *available at* http://www.epa.gov/safewater/consumer/cwss_2000_volume_i.pdf.

136. *See* Agency Information Collection Activities Under OMB Review; Personal Protective Equipment, Survey, 53 Fed. Reg. 28,462 (Jul. 28, 1988).

137. *Id.*

responses, OSHA conducted the survey by telephone and used strict measures to protect the confidentiality of survey responses.

Regulators also can ask firms to submit to voluntary inspections. Following September 11, 2001, the EPA asked several dozen chemical facilities to submit to site visits so the Agency could gather information about the adequacy of security practices at chemical facilities, as well as assess security vulnerabilities and identify potential solutions.[138] The EPA currently has little legal authority to compel firms to submit to such inspections, but was able to elicit cooperation from a few facilities. The FDA similarly had no authority to inspect cigarette plants, but once Commissioner Kessler began to take an interest in regulating tobacco, the CEO of Philip Morris agreed to show the FDA around one of his company's facilities.[139] Until that visit, "no one on the team [developing the FDA rule] had ever been inside a tobacco manufacturing plant."[140]

Regulators need to be mindful of factors that cast doubt on the generalizability of the findings from voluntary surveys or site inspections. While regulations bind all the firms within a sector, firms may be most eager to volunteer information when they differ from their competitors. Regulators must also worry about the accuracy of self-reported survey results, as firms' responses may be biased.

E. FORMAL INTERACTION

Formal interaction between industry and regulatory officials provides another mode of gathering information. Formal interaction takes place in public and usually follows a variety of procedural steps. Examples include public hearings, where agency staff sit and listen to testimony from industry,[141] as well

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138. Neil Franz, *ACC Pushes for Compromise on Security Legislation*, CHEMICAL WK., Dec. 18/25, 2002, at 12; James L. Nash, *EPA Addresses Chemical Site Security, Slowly*, OCCUPATIONAL HAZARDS, Dec. 20, 2002, *at* http://www.occupationalhazards.com/articles/5314; Robert Westervelt, *GAO Calls for National Chemical Security Plan . . .*, CHEMICAL WK., Mar. 26, 2003, at 7.

139. KESSLER, *supra* note 31, at 140–41. Of course, this probably is an example of the situation noted *supra*, in note 131, where a firm's cooperation was not strictly voluntary. Given the background threat of the FDA regulating tobacco, Philip Morris most likely was using this gesture of voluntary disclosure in an effort to stave off or at least mitigate the FDA's regulatory initiative.

140. *Id.* at 141.

141. Public hearings can take place as part of what is known as "formal

as the written comments that industry and others submit to the agency during the rulemaking process.[142] Industry tends to submit the largest proportion of comments in most rulemakings, comments that are often filled with extensive data, suggestions, and objections that can sometimes span hundreds of pages (and are undoubtedly mostly self-serving).[143] All written comments and transcripts from hearings are documented in an agency's records and are available to the public.[144]

The approximately 1000 advisory committees established by federal regulatory agencies[145] provide another opportunity for formal interaction. Congress has recognized that such advisory groups "are frequently a useful and beneficial means of furnishing expert advice, ideas, and diverse opinions."[146] The FAA, for example, uses the Aviation Rulemaking Advisory Committee (ARAC) "to obtain direct, firsthand information and insight from the substantially affected interests [by] meeting together and exchanging ideas with respect to proposed rules and existing rules."[147] ARAC advises the FAA on most major policy issues, including equipment safety, flight crew training, communication systems, and aircraft noise. The FAA believes

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rulemaking" under the Administrative Procedure Act, but proceedings that require this on-the-record, trial-type procedure are much less common. However, public hearings can also be used to provide supplementary input into so-called "informal" or "notice-and-comment" rulemaking. 5 U.S.C. § 553 (2000).

142. The drafters of the Administrative Procedure Act, which requires that agencies provide opportunities for public comment, specifically had in mind that the "the objective should be to assure informed administrative action." U.S. DEP'T OF JUSTICE, ATTORNEY GENERAL'S MANUAL ON THE ADMINISTRATIVE PROCEDURE ACT 31 (1947).

143. Coglianese, *supra* note 7, at 741 (noting that "industry groups (i.e., business firms and trade associations) participated the most" in the comment process); *see* WESLEY MAGAT ET AL., RULES IN THE MAKING 40 (1986); Golden, *supra* note 64, at 252–53.

144. Anyone interested in the information must still visit the agency to obtain it, at least for most agencies. A few agencies, like the EPA and the Department of Transportation, have begun to post all their comments in internet-accessible dockets. Within a few years, regulatory comments submitted to all agencies will probably be accessible online.

145. U.S. General Services Administration, FACA Database at FIDO GOV, *at* http://fido.gov/facadatabase (last visited Oct. 4, 2004). The number of advisory bodies is actually larger than the widely cited figure of 1000 because some advisory committees have distinct subcommittees or other associated working groups.

146. Federal Advisory Committee Act, 5 U.S.C. app. § 2 (2000).

147. FAA, Order No. 1110.119G, ARAC Charter, 1, *available at* http://www.airweb.faa.gov/Regulatory_and_Guidance_Library/rgOrders.nsf/0/c6e88dac47d8418186256c4d006ed3b2/$FILE/1110.119G.pdf (last visited Sept. 20, 2004).

this information enables the Agency to craft "better rules in less overall time."[148]

In 1994, the EPA established a new advisory committee that met regularly for several years in an effort to identify innovative approaches to environmental regulation across six industrial sectors.[149] Called the Common Sense Initiative (CSI) Council, the advisory committee included about thirty representatives from industry, trade associations, state and local government, labor, environmental groups, and community organizations.[150] In addition, subcommittees were created for each of the six sectors included in the CSI: metal finishing, computers and electronics, automobile manufacturing, printing, petroleum refining, and iron and steel.[151] Although the CSI process did not ultimately lead to major changes in environmental regulation, it did help inform EPA policymakers about technical issues in each of its industrial sectors.[152] Indeed, much of the activity undertaken in the CSI consisted of research and information collection.[153]

Formal interaction enables regulators to gather information, but the openness associated with these processes limits

148. *Id.* The Department of Transportation employs similar committees, with similar objectives, in its other branches, such as the Railroad Safety Advisory Committee used by the Federal Railroad Administration and the Technical Hazardous Liquid Pipeline Safety Standards Committee used by the Office of Pipeline Safety.

149. Common Sense Initiative Council Federal Advisory Committee; Establishment, 59 Fed. Reg. 55,117 (Nov. 3, 1994).

150. *See* Case, *supra* note 115, at 41–43 (discussing the CSI program in general).

151. Cary Coglianese & Laurie Allen, *Does Consensus Make Common Sense?*, ENVIRONMENT, Jan./Feb. 2004, at 10, 13.

152. *Id.* at 14–17. Some observers of consensus-based advisory committees like the CSI have argued that these processes help provide regulatory decision makers with better information. *See, e.g.*, Neil Eisner, *Regulatory Negotiation: A Real World Experience*, 31 FED. BAR NEWS & J. 371, 374 (1984) (concluding that a negotiated rulemaking advisory committee established by the FAA resulted in deliberations that "were informative" and that "a better understanding of the problems was developed on all sides"). It is far from clear, however, that information disclosure is significantly increased when advisory committees are charged with reaching a consensus on a regulatory proposal. *See* Cary Coglianese, *Assessing the Advocacy of Negotiated Rulemaking*, 9 N.Y.U. ENVTL. L.J. 386, 442 (2001) (noting that forms of interaction not organized around consensus provide the same kinds of opportunities for public input and that "it is the deliberation—not the consensus—that generates the information that enables agencies to craft their policy decisions").

153. Coglianese & Allen, *supra* note 151, at 18 tbl.2.

the sharing of information.[154] Less formal interaction facilitates information transmission to regulators, just as it facilitates gossip in everyday life. Advisory committees, which must include members of competing interests and be open to the public, inhibit frank informational exchange between regulators and industry.[155] While procedures that promote openness may well help address concerns about illegitimate influence by industry on government policymaking,[156] they can hamper the ability to gather information from industry.[157]

F. INFORMAL INTERACTION

Informal interaction, which is not nearly as visible as formal exchange, is a staple of regulatory life.[158] One of the ways

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154. A recent empirical study of the public comment process confirms the limitations of formal processes. *See* William F. West, *Formal Procedures, Informal Processes, Accountability, and Responsiveness in Bureaucratic Policy Making*, 64 PUB. ADMIN. REV. 66 (2004). In the study, out of sixteen proposed rules that agencies changed prior to promulgation, "only one . . . was substantially influenced by the introduction of new empirical information through public comment." *Id.* at 71. In contrast, fourteen of the sixteen rules were changed due to "[i]nformal political processes." *Id.* tbl.1.

155. David M. Welborn et al., *Background Report for Recommendation 84.3*, *in* ADMINISTRATIVE CONFERENCE OF THE UNITED STATES 199, 247 (1984); Ashley C. Brown, *Sunshine May Cloud Good Decision Making*, FORUM FOR APPLIED RES. & PUB. POL'Y, Summer 1992, at 113. The burden associated with establishing Federal Advisory Committee Act (FACA) committees may also limit the extent to which they are used by regulators. *See* Steven P. Croley & William F. Funk, *The Federal Advisory Committee Act and Good Government*, 14 YALE J. ON REG. 451, 549 (1997). Whenever agencies convene a series of ongoing meetings with a group of industry or other nongovernmental representatives, they must follow the requirements of the Federal Advisory Committee Act, 5 U.S.C. app. §§ 1–15 (2000). However, the requirements under FACA do not apply to the individual and sporadic meetings with industry that take place most frequently in regulatory policymaking. *See* Croley & Funk, *supra* at 453, 475. FACA requires that agencies have balanced committee memberships drawn from different interest groups, that meetings be announced in advance and open to the public, and that the agency take accurate minutes of the committee's proceedings. 5 U.S.C. app. §§ 5(b)(2), 10(a), 10(c) (2000). For example, the OMB must approve all new proposals for advisory committees. Management of Federal Advisory Committees, 59 Fed. Reg. 53,856, 53,856 (Oct. 5, 1994). The OMB has also established ceilings for the number of advisory committees. *Id.*

156. Croley & Funk, *supra* note 155, at 453 (noting that in enacting FACA Congress attempted to address concerns that "some interests had come to enjoy unchecked and perhaps illicit access to federal executive decision makers").

157. *See infra* Part IV.D.

158. Over fifty percent of the Washington interest groups surveyed by Neil Kerwin and Scott Furlong reported that government proactively initiated contact with their organizations "on a regular basis." CORNELIUS M. KERWIN,

regulators interact informally is by using the telephone. When Justice Stephen Breyer taught regulatory policy at Harvard Law School in the 1980s, he often remarked that picking up the telephone was the most useful way for regulators to secure information.[159] For example, in a recent rulemaking proceeding on motorcycle brake systems, a staff member at NHTSA simply called up a representative at the motorcycle trade association to learn more about the effect of temperature on the friction between brake linings and discs.[160]

In addition to the telephone, informal communication takes place in person, in meetings that regulators hold with individual representatives from industry, and in working groups of such representatives arranged in ways that avoid the requirements of the Federal Advisory Committee Act (FACA).[161] Regu-

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RULEMAKING 189 (3d ed. 2003). According to Kerwin, "a common reason for these contacts is to get information for the rule under development." *Id.*; *see also* Home Box Office, Inc. v. FCC, 567 F.2d 9, 57 (D.C. Cir. 1977) (stating that "informal contacts between agencies and the public are the 'bread and butter' of the process of administration").

159. Over many years, then-Professor Breyer taught regulatory policy at Harvard Law School with Richard Zeckhauser. More recently Justice Breyer remarked that in developing a policy proposal it would be natural for government personnel to "phone everyone in sight who knows about it." Oral Argument Transcript at 45, Cheney v. United States Dist. Court for the D.C., 24 S. Ct. 2576 (2004) (No. 03-475). Indeed, one of the potential concerns in that case was that certain interpretations of FACA might "stop every lower level official in government when he is creating legislative policy from getting on the phone and calling up whoever he pleases." *Id.* at 36; *see also* BREYER, *supra* note 1, at 103 (noting that in developing a regulatory proposal agency "[s]taff members will telephone, write letters to, and arrange meetings with independent experts, industry experts—in fact, anyone they consider knowledgeable").

160. Memorandum of George Soodoo, Division Leader, National Highway Traffic Safety Administration (June 18, 2001), *at* http://dmses.dot.gov/docimages/pdf66/133039_web.pdf.

161. FACA does not apply to all meetings between regulators and members of industry. For example, agency officials are permitted to meet alone with "any group . . . when advice is sought from the attendees on an individual basis and not from the group as a whole." Federal Advisory Committee Management, 41 C.F.R. § 102-3.40(e) (2003). Moreover, meetings between a federal official and any group for "the purpose of exchanging facts or information," as opposed to giving advice or making a recommendation are permitted. § 102-3.40(f); *see also* 5 U.S.C. app. § 3(2) (2000) (defining an advisory committee as one that is "established or utilized . . . in the interest of obtaining advice or recommendations"). *But see* Croley & Funk, *supra* note 155, at 486–88 (questioning this interpretation). Even meetings where advice is given can be excluded from FACA if the advice is given individually by participants, as opposed to meetings that lead to collective recommendations. *See* Federal Advisory Committee Management, 41 C.F.R. § 102-3.40(e); Croley & Funk, *supra* note 155, at 474. Finally, ad hoc or unstructured gatherings generally

lators also interact informally with industry personnel at professional meetings, academic conferences, and wherever both industry and government representatives are present.[162] By being available in settings where communication can take place confidentially, regulators also provide a climate that is more conducive to whistle-blowing.

Government regulators and industry representatives often develop relationships over periods of years, or even decades, and will work closely with each other on the development of regulations.[163] As one EPA staff member explained:

> We try to bring them in as early as possible on what we are required to do and request their help very early on. And usually this is appreciated because that way they have input as opposed to EPA unilaterally going out and looking at various textbooks and writing rules that are ridiculous because we don't fully understand what the hell we are regulating. So it works out better by working very closely with the people that we are going to regulate and we do this in various ways . . . . We meet with them[;] we have industry-agency workgroups that will meet together.[164]

Another EPA staff member expressed the same thought: "The more information [industry groups] can help us with, the better the rule will turn out—in their interest as well as everyone else's."[165]

Industry representatives in Washington, D.C. also seek out information from regulators and try to learn of opportunities to influence the shape of regulatory policy.[166] As one corporate

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need not meet FACA's requirements. *See* Croley & Funk, *supra* note 155, at 483–84.

162. *See, e.g.*, Coglianese, *supra* note 7, at 750; *cf.* Steven Kelman, *Remaking Federal Procurement*, 31 PUB. CONT. L.J. 581, 615 (2002) (advising government officials to "attend[] trade association or other professional meetings . . . as a way to get informal information"). Some settings are specifically designed to promote such informal interaction. The Harvard Electricity Policy Group (HEPG), established by our colleague, William Hogan, is an excellent example. HEPG brings together representatives from industry, government, academe, and environmental groups for discussions aimed at "informing and analyzing" policy development. HARVARD ELEC. POLICY GROUP, RESHAPING THE ELECTRICITY INDUSTRY: A PUBLIC POLICY DEBATE 2 (June 2001), *available at* http://www.ksg.harvard.edu/hepg/images/2001%20brochure.pdf.

163. *See, e.g.*, Errol Meidinger, *Regulatory Culture: A Theoretical Outline*, 9 LAW & POL'Y 355, 367 (1987).

164. Coglianese, *supra* note 7, at 750–51.

165. *Id.* at 751.

166. Political scientists who study the role of interest groups in policymaking have long acknowledged that lobbyists traffic in information. *See* LEWIS ANTHONY DEXTER, HOW ORGANIZATIONS ARE REPRESENTED IN WASHINGTON 130 (1969) ("The effective Washington representative provides influence for

vice president for regulatory affairs remarked when asked about his staff's relationship with regulators:

> [O]ur Washington office—they know the [EPA] regulators down in the bowels of that agency personally. They are over there all the time; they've become friends with them; they supply data and assist them in any way that it's legitimate to do. So we have open communications constantly about what they're thinking, what we'd like them to do, what we think they're gonna [sic] do. It's almost like becoming joined at the hip with the staff over there.[167]

In this way, informal interaction serves industry's interests as well as government's needs, which means that regulators are in a position to offer information about their plans to industry in exchange for industry providing government with information.[168]

In formal regulatory proceedings conducted through a trial-type hearing, such so-called ex parte communications are prohibited under section 557(d)(1) of the Administrative Procedure Act. However, there is no corresponding provision for ex parte communications during informal or notice-and-comment rulemaking. The D.C. Circuit Court of Appeals' controversial decision in *Home Box Office, Inc. v. FCC*,[169] while subsequently

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his client by acquiring and translating relevant information.") (emphasis omitted).

167. Coglianese, *supra* note 7, at 751.

168. *Id.* at 750 (noting that "informational dependence . . . lead[s] interest group representatives and agency staff to find themselves engaged in ongoing and often mutually beneficial relationships").

169. 567 F.2d 9 (D.C. Cir. 1977). The *Home Box Office, Inc.*, case involved a challenge to an FCC rulemaking on subscription cable services. *See id.* at 17. One of the litigants argued that the FCC staff acted improperly by meeting with broadcasters and other interest groups nearly thirty-five times after the close of the Agency's formal time for soliciting public feedback. *See id.* at 53. The court agreed that secret deliberations with affected interests were inconsistent "with fundamental notions of fairness implicit in due process and with the ideal of reasoned decisionmaking on the merits which undergirds all of our administrative law." *Id.* at 56. The court held that:

> [o]nce a notice of proposed rulemaking has been issued . . . any agency official or employee . . . should 'refus[e] to discuss matters relating to the disposition of a [rulemaking proceeding] with any interested private party . . . prior to the [agency's] decision . . . .

Id. at 57 (quoting Exec. Order No. 11920 § 4, 12 WEEKLY COMP. PRES. DOC. 1040, 1041 (1976)). However, the court did not entirely ban agencies from engaging in ex parte communications. Rather,

> [i]f ex parte contacts [occur after the issuance of a notice of proposed rulemaking], we think that any written document or a summary of any oral communication must be placed in the public file established for each rulemaking docket immediately after the communication is received so that interested parties may comment thereon.

Id. Moreover, "communications which are received prior to issuance of a for-

abandoned by the courts,[170] has been reinforced by agency policies requiring the documentation of informal contacts that take place after the publication of a notice of proposed rulemaking.[171] Even though some agencies require their staff to document all ex parte communications whenever they occur, it is extremely difficult to ensure that staff members comply fully with these requirements. In addition, the memoranda that agency staff members prepare to describe their ex parte communications are often quite brief and formulaic. Since the informal communications frequently involve contact with only a single agency staff member, there is often no way to know for sure whether documentation of ex parte communications is complete. The upshot is that informal contacts with industry continue to take place largely below the radar, especially prior to the filing of a notice of proposed rulemaking.[172]

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mal notice of rulemaking do not, in general, have to be put in a public file." *Id.*

170. Since 1977, *Home Box Office, Inc.*, has been construed narrowly by subsequent courts to the point of virtual obsolescence as a judicial precedent. *See, e.g.*, Sierra Club v. Costle, 657 F.2d 298 (D.C. Cir. 1981) (declining to follow *Home Box Office, Inc.*, requirement in EPA notice-and-comment rulemaking); United Steelworkers of Am. v. Marshall, 647 F.2d 1189 (D.C. Cir. 1980) (declining to apply the ex parte requirement in *Home Box Office, Inc.*, to OSHA notice-and-comment rulemaking).

171. STRAUSS ET AL., *supra* note 4, at 1056 (noting that "the general approach of HBO has been widely adopted, without legislative or judicial enforcement, by agency rulemakers"). For examples of agency policies reinforcing the tenets of *Home Box Office, Inc.*, see, e.g., DEP'T OF TRANSP., ORDER NO. 2100.2 at 2 (1970), *available at* http://www.faa.gov/avr/arm/dot2100-2.pdf (requiring prompt and public documentation of ex parte communications after the publication of the notice of proposed rulemaking); Memorandum from Carol M. Browner, Administrator, Environmental Protection Agency, to all Employees (Aug. 6, 1993) (on file with author) (requiring rulemaking staff to prepare a memorandum summarizing meetings or discussions held after a rule has been proposed); Memorandum from William D. Ruckelshaus, Administrator, Environmental Protection Agency, to all EPA employees (May 19, 1983) (requiring Agency staff to place in the docket "a memorandum summarizing any significant new factual information [or data] likely to affect the final decision received during a meeting or other conversations"), *noted in* Press Release, United States Environmental Protection Agency, Ruckelshaus Takes Steps to Improve Flow of Agency Information [Fishbowl Policy] (May 19, 1983), *available at* http://www.epa.gov/history/topics/policy/fishbowl.htm; Memorandum from Gerald H. Yamada, Deputy General Counsel, Environmental Protection Agency (Mar. 1, 1990) (on file with author) (directing Agency staff to include in the regulatory docket summaries of ex parte communications).

172. *Cf.* Cary Coglianese, Challenging the Rules 75 (1994) (unpublished Ph.D. dissertation, University of Michigan) (on file with author) ("In the rule development phase, industry groups tend to dominate because of the information they can provide to the agency staff as they write a rule.").

One additional pattern of interaction deserves mention: the so-called "revolving door."[173] Movement by regulators from government into jobs within industry facilitates future informal contacts between the regulatory agency and relevant firms or trade associations. Similarly, movement by industry leaders into government facilitates informal contacts and brings insiders' knowledge about private firms into a regulatory agency.[174] FDA Commissioner David Kessler made sure to include on the cigarette regulation project an FDA staff member who had previously worked for "the other side"—the tobacco industry.[175]

IV. IMPLICATIONS OF THE INFORMATION GAME

How can regulators best use the information-gathering tactics at their disposal to gather reliable information from firms that would prefer to remain silent? In this part, we connect the information-gathering tactics presented in Part III with the general informational strategies developed in Part II, showing how the tactic of informal interaction serves both strategies well. The strategic advantages of informal interaction hold some striking implications for administrative law, which we explain in the final section. For at least the past three decades, administrative law has promoted greater procedural transparency of government decision making to discourage regulatory capture and other special deals between regulators and the firms they regulate.[176] Until now, however, the potential adverse impacts of transparency and formalism on government's ability to collect essential information from industry have been largely overlooked.

A. CONNECTING TACTICS WITH STRATEGIES

We have identified two basic strategies that regulators employ to secure information: exploit asymmetries of interests

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173. *See, e.g.*, William T. Gormley Jr., *A Test of the Revolving Door Hypothesis at the FCC*, 23 AM. J. POL. SCI. 665 (1979).

174. *See, e.g.*, BREYER, *supra* note 1, at 345 (noting that the NHTSA might never have completed a rulemaking on tire labeling "had the job of doing so not been placed in the hands of an Agency official who had previously worked for a tire company for thirty-five years"). The issues we have raised about informal contacts and the revolving door apply to groups other than business organizations. Especially in Democratic administrations, environmentalists and safety advocates get appointed to positions in relevant regulatory agencies.

175. KESSLER, *supra* note 31, at 125.

176. *See infra* notes 206–15 and accompanying text.

across or within firms, and create incentives for disclosure. To play their game more effectively, regulators will wish to know how various tactics match up with these strategies. In this section, we connect the tactics with the general strategies in order to provide a roadmap that reinforces both the tactics and the strategies.

In matching tactics with strategies, some cases are clear. Issuing subpoenas and rewarding disclosure are obvious ways to create incentives. Nonmandatory requests for information clearly, on the other hand, seek to exploit asymmetries of interest, as the firms or facilities that open themselves up to voluntary inspection by the regulator, or that voluntarily respond to information requests, presumably have an interest in being forthright with the regulator.[177]

In other situations, the connection between strategy and tactics is murkier, at least at first glance. Making regulatory approvals contingent on disclosure might appear to reward firms for disclosing information, since firms only obtain their license or other regulatory permission after they have provided the regulator with information. Yet firms are rewarded only for disclosing a certain kind of information—information favorable to the firm—not when they disclose adverse information showing their products or drugs are unsafe. Cases of fraud in FDA applications for new drugs indicate that the tactic of conditioning approval on disclosure does not necessarily help the regulator obtain information that most industrial players would prefer not to reveal.[178] Linking approval to disclosure can exacerbate industry's predisposition to disclose self-serving information.

Conditioning decisions on disclosure works best when firms' disclosure interests are asymmetric—say, if the information that helps one firm win regulatory approval also helps the regulator in regulating other firms in the future, on the same or some other issue. When the FDA relied on information submitted with tobacco company patent applications, it actually

177. Moreover, the fact that regulators treat surveys or inspections confidentially means that participating firms can usually transmit information without fear of any reprisals from others in their industry. In some cases, others will know that the agency is asking for information, but they generally will not be able to identify what information has actually been conveyed or by whom.

178. *See supra* notes 94–95 and accompanying text.

exploited an asymmetry in interest that cut across time.[179] When they submitted patent applications, tobacco companies had an interest in disclosing information about their ability to manipulate nicotine to the Patent Office; they may not have even envisioned that a different regulator, the FDA, would later use that information against them in trying to regulate cigarettes. Similarly, in large, compartmentalized organizations, individuals in one office may release certain information when applying for regulatory approvals falling within their domain, overlooking or underestimating the negative implications for future policymaking or on regulatory matters outside their purview.

The tactic of formal interaction serves neither of the regulators' main strategies very well. It generally places regulators in a relatively passive role in which they receive information but do not actively seek it. While information is obviously transmitted in public hearings and formal comment periods, it is only information that the parties want regulators to receive, not necessarily the information that regulators most need. As with respondents to nonmandatory requests for information, those who attend hearings or take the time to file comments are a self-selected group of interested parties. Moreover, unlike with nonmandatory requests, formal modes of interaction such as hearings and comment processes typically place regulators in a reactive posture. Regulators must remain open to any and all comments that the public wishes to convey on an issue, which naturally limits their ability to direct the line of inquiry. It is hard to see how regulators could make much use of such passive modes to exploit asymmetric incentives or create new ones.[180]

Other types of formal interaction, such as advisory committees, may better enable regulators to exploit asymmetries or create incentives for revealing adverse information. Since membership on an advisory committee can reward firms by giving them greater access to the agency, the ability to appoint members to these committees may allow regulators to reward

179. *See supra* note 92 and accompanying text.

180. *See* John S. Applegate, *Beyond the Usual Suspects: The Use of Citizens Advisory Boards in Environmental Decisionmaking*, 73 IND. L.J. 903, 910 (1998) ("While procedures like public hearings can be a good opportunity for many people to hear presentations, to express their views, and perhaps to engage in question-and-answer sessions, they cannot provide the forum for extensive development of information . . . .").

firms that have a track record of providing reliable and useful information. However, a variety of factors constrain the effectiveness of advisory committees. Once a committee is constituted, regulators have little opportunity within the confines of the formal process to reward firms that reveal needed information during committee deliberations. Any "deals" that the regulator might like to make with individuals firms are inhibited by the transparency of the advisory committee process. Also, advisory committees must represent a balanced collection of members so that regulators cannot merely appoint members from firms that reveal information.[181] Most important, the requirement that advisory committee deliberations remain open to the public[182] means that any firm's decision to break an industry's collective silence would be known to those who could punish the firm and its executives. For these reasons, advisory committees do not provide regulators with a powerful tool for breaking industry silence. Surely the FDA never would have gathered much information for its cigarette rulemaking by appointing tobacco representatives to an advisory committee.

Advisory committees may make their chief contribution, ironically, by facilitating informal interactions. Even though regulators may not learn much from the formal meetings of advisory committees, these sessions do give regulators and industry representatives opportunities to get to know each other and build relationships that can lead to productive informal interaction. In many cases, the most valuable communications among members of advisory committees take place in the hallways before or after the formal meetings or during breaks.[183]

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181. Federal Advisory Committee Management, 41 C.F.R. § 102-3.60(b)(3) (2003) (requiring agency plan to ensure that the agency strives "to attain fairly balanced membership"). Of course, some advisory committees will be more wide-ranging than others, based on the makeup of the interest group community around the issue. On those issues that are relatively obscure or technical, and where the interest group universe is relatively tight, it might be possible for regulators to choose precisely the actors most likely to disclose. On issues where there is a broader and more conflicted range of interests, this will be harder to achieve.

182. 5 U.S.C. app. § 10 (2000). To be sure, agencies can always interact with the members of advisory committees on an individual basis, outside of the open committee process. In some cases, regulators may use the formal process as a vehicle for forging closer relationships with potential sources of information who the regulators then approach individually and informally outside of the advisory committee process. For a related discussion of using a mixture of strategies for securing information, see *supra* Part II.D.

183. *See* Kelman, *supra* note 162, at 615 ("The point is not what's on the agenda; the point is what takes place at breaks and lunch."); Ellen Siegler,

Informal interaction provides excellent opportunities for regulators to use both information-gathering strategies. They can telephone those whom they believe are more disposed to talk and reward firms that participate through informal trades. The quid pro quos can consist of information from the agency or potentially desirable treatment in regulatory action. Agencies can also informally punish firms that refuse to disclose information by reducing access to the agency or subtly slowing the agency's responsiveness on other matters. We develop the virtues of informal interaction more fully in the next section.[184]

To summarize, Table 1 shows the connections between the basic informational strategies and the six main tactics. To create incentives for disclosure, the best tactics are: (1) mandating disclosure, (2) creating rewards for disclosure (such as through recognition programs like the EPA's National Environmental Performance Track), and (3) engaging in more subtle manipulation of interests through informal interaction. When regulators seek to exploit asymmetries, they should: (1) issue nonmandatory requests and take advantage of the information provided by volunteers, or (2) seek firms more inclined to disclose through informal (and hence more hidden) interaction. Relying on information provided in licensing or other approval processes where decisions are conditioned on disclosure will generally only help for policy issues that are more tangentially related to the approval processes. Finally, formal interaction, though perhaps serving purposes other than information acquisition, generally will not effectively advance either strategy for gathering adverse information.

B. THE VIRTUES OF INFORMALITY

Throughout the world, proponents of good government favor increased transparency (and thus usually formality) in regulatory decision making.[185] Informality is often viewed as

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Regulatory Negotiations: A Practical Perspective, 22 ENVTL. L. REP. 10,647, 10,648–49 (1992) (observing from personal experience that extensive communication takes place outside of the public sessions of negotiated rulemaking advisory committees).

184. *See infra* notes 186–97 and accompanying text.

185. *See* ORG. FOR ECON. CO-OPERATION & DEV., THE OECD REPORT ON REGULATORY REFORM 14 (1997) (noting that "[l]ack of transparency is a key problem" in OECD countries); *see also* ORG. FOR ECON. CO-OPERATION & DEV., STRENGTHENING REGULATORY TRANSPARENCY, (OECD Working Papers, Vol. 8, No. 68, 2000) (discussing the importance of transparency in domestic regulatory systems); Mock, *supra* note 44, at 1099 ("[T]ransparency is coming to be

Table 1: Potential Contributions of Information Tactics to Strategies

	Strategy	
Tactic	Exploit Asymmetries	Create Incentives
Contingent Decisions	Medium	Low
Mandated Disclosure	Low	High
Rewards and Recognition	Low	High
Nonmandatory Requests	High	Low
Formal Interaction	Medium	Low
Informal Interaction	High	High

suspect by reviewing courts and others who fear that informal business-government interaction will result in regulatory policies that favor industry over the broader interests of society.[186] Yet from the standpoint of the information game, these fears are misplaced: industry will not hesitate to provide the government with the kind of information that would support policies that favor industry, whether the process is formal or informal.[187] To obtain information needed to advance society's interests at the expense of industry interests, regulators must exploit or create different interests in disclosure, strategies that are actually made more cumbersome by formal, transparent processes. Whatever the drawbacks to informality, it pos-

recognized as essential to good governance and to establishment of the rule of law within ordered societies.").

186. *See, e.g.*, Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245, 2267 (2001) (noting that interaction taking place in "informal and nontransparent ways" has led to "concerns about inequalities of interest group access and resulting agency capture"); Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669, 1770 (1975) (noting that because "bias in agency policies is often attributed to informal decisions, courts have imposed requirements that force agencies to adopt formal procedures"). An emphasis on formality has also been observed in the U.S. regulatory enforcement process, another regulatory setting characterized by information asymmetries between the regulator and the regulated. *See, e.g.*, Steven Kelman, *Enforcement of Occupational Safety and Health Regulations*, *in* ENFORCING REGULATION 97, 99 (Keith Hawkins & John M. Thomas eds., 1984) (noting that "[p]erhaps the best single word to describe the American enforcement process . . . is formal").

187. Of course, the concern may center less on information than on firms using informality to offer explicit or implicit bribes to government officials. We discuss implicit trades for information in more detail in Part IV.D.

sesses distinct advantages for extracting adverse information.[188]

Informal interaction enables regulators to be more proactive and nimble in their efforts to gather information, partly due to the lower costs associated with informality.[189] It is very easy to pick up the phone and call a contact in industry. It is also usually less costly to craft and calibrate incentives when proceeding informally. Simply failing to return a phone call or to invite a trade association representative to an important meeting are cheap ways to punish an uncooperative firm. Returning phone calls, sharing information about agency initiatives, or involving industry in key meetings are cheap ways to reward cooperative firms.[190]

Informality also preserves the regulator's discretion and protects the privacy of communications, allowing regulators to target discreetly those firms that are more likely to disclose. When firms disclose information informally, other firms are less likely to know this, so the revealing firms and their executives will be less vulnerable to retribution. The opaque nature of informal interaction allows regulators to create incentives for disclosure without being accused of having created special deals, which they are in fact making, or of having treated firms unfairly by punishing them for failing to share information.[191] Regulators and industry representatives who interact with each other repeatedly will tacitly understand the incentives that regulators create informally, but these same incentives will often be nearly invisible to others.

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188. *See* Sierra Club v. Costle, 657 F.2d 298, 401 (D.C. Cir. 1981) ("Informal contacts may enable the agency to . . . spur the provision of information which the agency needs."); KERWIN, *supra* note 158, at 192 (noting that "informal mechanisms and difficult-to-observe mechanisms for communicating views to agencies are used a great deal and are thought to be as or more effective than the traditional means—such as written comment—that figure so prominently in the procedural law and academic literature on rulemaking").

189. *See supra* Part III.F.

190. These rewards and punishments may seem insignificant, but to firms in heavily regulated industries, the loss of reciprocal cooperation can be quite significant. These players know that even though they may make strenuous substantive objections to agency proposals, it is not in their interest to play hardball with regulatory staff. *See* Coglianese, *supra* note 7.

191. Making the case for punishing nondisclosure is usually difficult. After all, if a firm failed to disclose information, it may be because there was nothing to disclose or it may be because the firm was uncooperative. Since the "crime" of nondisclosure or inadequate disclosure seldom has its *corpus delecti* (dead body), regulators' efforts at punishment for nondisclosure will often be susceptible to charges of unfairness.

The opaque nature of informal interaction helps to preserve deniability. Though deniability can be used to hide actions that are illegal or inconsistent with the public interest, it also provides cover for whistle-blowers, firms that volunteer information adverse to others in their industry, and well-meaning regulators who need to make deals to gain crucial information. The pressures that work against the revelation of adverse information can be significant, but the ability to communicate confidentially increases the likelihood of transmitting socially valuable information.[192]

Deniability is especially important for representatives of trade associations, who often negotiate with both the agency and the managers and firms that they represent.[193] In order to win the favor of regulators, trade association representatives will sometimes provide information off the record, such as information about industry's general "bottom line." Individual lobbyists sometimes privately tell regulators that their industry will not ultimately challenge a specific policy provision, even as they maintain a public posture of resistance. As with leaks of government information to the press, those who provide the information to the government often need to preserve deniability for what they have disclosed.

Much more than with formal interaction, informal interaction allows government to derive information from the *behavior* of firms, not just from what they say. Regulators draw inferences about the intensity of different firms' interests from the extent of their involvement on specific regulatory issues.[194] Such intensities are better uncovered by informal processes, in which firms choose their own level of participation, than in formal processes which—due to their focus on fairness—tend to foster more equal levels of participation.

Extensive and active resistance to a regulation suggests that firms have information that the regulation will impose high compliance costs.[195] Firms will overstate these costs, but

192. STRAUSS ET AL., *supra* note 4, at 927 ("Where the government must solicit cooperation rather than force disclosure, confidentiality may have to be assured for that cooperation to be forthcoming.").

193. CARY COGLIANESE, UNEQUAL REPRESENTATION: MEMBERSHIP INPUT AND INTEREST GROUP DECISION-MAKING (Politics Research Group, Working Paper No. 96-02, 1996), *available at* http://www.ksg.harvard.edu/prg/cary/unequal.htm.

194. *See* RICHARD L. HALL, PARTICIPATION IN CONGRESS 3, 7, 237 (1996) (discussing the role of intensities of interests).

195. *See* Johnston, *supra* note 13, at 1353–54, 1366.

reveal their intensity through their observable lobbying efforts.[196] Moreover, when informal relationships with government are ongoing, firms are more constrained in their ability to overstate; they cannot repeatedly threaten that they are going to close down in the face of regulatory action without losing credibility.

For these reasons, regulators should rely on informal tactics before resorting to formal ones. Even when they are insufficient, informal tactics can inform regulators' use of other tactics, such as issuing subpoenas. To issue effective mandatory information requests, regulators need to know what to ask, and informal, off-the-record conversations can point the way. For example, New York Attorney General Eliot Spitzer took advantage of informal tips provided by industry insiders to lay the groundwork for several formal investigations of financial markets by his office and the SEC.[197]

C. DISCERNING TRUTH FROM A POSITION OF IGNORANCE

Information collection is ultimately about finding truth. How do regulators judge whether they have obtained accurate information? As former FDA Commissioner David Kessler has commented, "Because we did not understand exactly what we were looking for, we did not know how to press the company for more information. And when the company gave us answers, we had no way to challenge them."[198] While this problem can never

196. Regulators do not need to see the lobbyists' actual expenditures to draw these inferences, as has sometimes been suggested. *See, e.g.*, Matthew D. Adler, *The Positive Political Theory of Cost-Benefit Analysis*, 150 U. PENN. L. REV. 1429, 1442–43 (2002). Instead, regulators can gauge a firm's relative level of interest by comparing its lobbying on one issue with its lobbying on other issues—or with lobbying by other firms of comparable size on other issues.

197. *See, e.g.*, Abigail Rayner, *Ten-Minute Call Sparked Inquiry*, TIMES (London), Dec. 10, 2003, at 33. The charges filed against Putnam Investments for market timing followed a tip-off by an employee at a Putnam call-center to Massachusetts' regulators. John Hechinger, *How One Call Taker Spurred the Putnam Mutual-Fund Case*, WALL ST. J., Oct. 28, 2003, at C1.

198. KESSLER, *supra* note 31, at 182. This problem is compounded when, as happens on many important regulatory issues, regulators actually have before them an abundance of bits of data given to them by industry, but they need to know which of these bits are accurate and relevant. This is why, earlier in this Article, in defining the problem of collective "silence," we made a point to acknowledge that we were making a simplifying assumption in treating disclosure as a binary choice. *See supra* note 46. Even if this assumption were relaxed, the problem we have elucidated in this Article remains basically the same. The collective silence problem is not necessarily a problem of getting in-

be fully overcome, regulators can address it in two principal ways.

The first is to draw upon multiple sources of information, a method social scientists call triangulation.[199] If different sources and methods generate reasonably consistent answers, then regulators can have greater confidence in the accuracy of the information.[200] If the information proves inconsistent, regulators must consider the interests of those providing information and their reputations for credibility.

When regulators routinely seek out multiple sources of information, firms have an added incentive to be honest, knowing that others will provide a check on what they say.[201] In addition, the more sources the regulator approaches, the more likely one or more will squeal. Not surprisingly, regulators and former regulators have told us that they gather information by pursuing many different avenues, seeking information from multiple sources. They vet information gathered from one source using other sources; employ information obtained through one tactic to bolster and refine other tactics; and sometimes bring parties with disparate interests together to test competing claims in informal, adversarial meetings.[202]

Regulators can also improve the reliability of information by fostering closer and longer relationships with industry. While close, ongoing relationships between regulators and industry have long been deplored, often characterized pejora-

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dustry to say something at all, but rather of getting firms to say something *accurate* when doing so would ordinarily be against their interests.

199. Alan Bryman, *Triangulation*, *in* 3 ENCYCLOPEDIA OF SOCIAL SCIENCE RESEARCH METHODS 1142–43 (Michael S. Lewis-Beck et al. eds., 2004).

200. If the information is not consistent, regulators should consider the interests of those providing the information and their reputations for credibility. If some firms provide data showing that a regulation will be extremely costly, but other similar firms in the same industry provide data showing that it will not be as costly, regulators might appropriately discount the data provided by the first set of firms, as claims of high compliance costs are self-serving. The claims by firms reporting lower compliance costs will be properly viewed as more credible, all other things being equal. On the other hand, if industry reports that compliance costs will be high but consumer or environmental activists provide information indicating that the costs will be low, then without anything further regulators will be unable to credit either of the two claims, since the information provided by consumer groups would also be self-serving.

201. This can also serve as a check on any "groupthink" bias that might emerge over time in government's ongoing relationships with industry.

202. David Kessler's account of the FDA's efforts to regulate cigarettes is a good illustration of how an agency deploys multiple tactics and tries to triangulate. *See* KESSLER, *supra* note 31.

tively as "cozy iron triangles,"[203] they also allow regulators and representatives from industry to learn to cooperate with each other and gain a basis for establishing credibility and trust.[204] A firm may wish to distort information given to the regulator in any given round of the regulatory game, but if the regulator uncovers a deception it can retaliate against the firm in later rounds (albeit perhaps in subtle ways). For heavily regulated industries, regulators are civil servants who tend to remain in their positions for a long time; hence, the shadow of the future will be long.[205]

D. IMPLICATIONS FOR ADMINISTRATIVE LAW

For at least the past half-century, social scientists and legal scholars have viewed closeness between regulators and industry as a matter of concern, a problem to be overcome through the design of administrative law.[206] Closeness has implied influence and bias, the risk of regulatory capture, and the creation of regulatory policy that systematically favors the interests of industry.[207] As a result, administrative law has through the years aimed to make the regulatory process more transparent, with little concern for the regulator's information deficit.[208]

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203. DOUGLASS CATER, POWER IN WASHINGTON (1964). The more neutral terms are "issue networks" and "regulatory cultures." Thomas L. Gais et al., *Interest Groups, Iron Triangles, and Representative Institutions in American National Government*, 14 BRIT. J. POL. SCI. 161 (1984); Hugh Heclo, *Issue Networks and the Executive Establishment*, *in* THE NEW AMERICAN POLITICAL SYSTEM 87, 102–05 (Anthony King ed., 1978); Meidinger, *supra* note 163; Mark A. Peterson, *Political Influence in the 1990s: From Iron Triangles to Policy Networks*, 18 J. HEALTH POL., POL'Y & L. 395 (1993).

204. *See* Coglianese, *supra* note 7, at 749–53.

205. *See id.* at 753.

206. *See, e.g.*, THEODORE J. LOWI, THE END OF LIBERALISM (1979); Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1669 (1975).

207. *See, e.g.*, Mark Seidenfeld, *A Civic Republican Justification for the Bureaucratic State*, 105 HARV. L. REV. 1511, 1565 (1992) ("According to the capture hypothesis, instead of providing meaningful input into deliberation about the public interest, industry representatives co-opt governmental regulatory power in order to satisfy their private desires.").

208. Home Box Office, Inc. v. FCC, 567 F.2d 9, 56 (D.C. Cir. 1977) ("[S]ecrecy [is inconsistent] with fundamental notions of fairness implicit in due process and with the ideal of reasoned decisionmaking on the merits which undergirds all of our administrative law."); Slater Steels Corp. v. United States, 279 F. Supp. 2d 1370, 1379 (Ct. Int'l Trade 2003) ("Agency transparency is a cornerstone of administrative law."); Alfred C. Aman, Jr., *Globalization, Democracy, and the Need for a New Administrative Law*, 10 IND. J.

Congress has pronounced that it is "the policy of the United States that the public is entitled to the fullest practicable information regarding the decision-making processes of the Federal Government."[209] This general commitment runs throughout administrative law.[210] For example, the Freedom of Information Act (FOIA) was adopted "to pierce the veil of administrative secrecy and to open agency action to the light of public scrutiny."[211] As such, FOIA established a presumption that government records will be accessible to the public.[212] For similar reasons, the Government in Sunshine Act and FACA require that critical regulatory meetings be announced in advance and made open to the public.[213] Regulators are expected to document ex parte communications that occur after the publication of a notice of proposed rulemaking.[214] In addition, regu-

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GLOBAL LEGAL STUD. 125, 147 (2003) ("Administrative law has always been grounded upon basic norms. These norms include transparency, participation, and fairness . . . ."); Cary Coglianese, *Administrative Law*, *in* 1 INTERNATIONAL ENCYCLOPEDIA OF SOCIAL & BEHAVIORAL SCIENCES 85–88 (Neil J. Smelser & Paul B. Bates eds., 2001) ("Transparent procedures and opportunities for public input give organized interests an ability to represent themselves, and their constituencies, in the administrative process. . . . These procedures may also protect against regulatory capture . . . ."); Thomas W. Merrill, *Capture Theory and the Courts: 1967–1983*, 72 CHI.-KENT L. REV. 1039, 1043 (1997) (noting the judicial thrust toward "changing the procedural rules that govern agency decision making . . . [to] force agencies to open their doors—and their minds—to formerly unrepresented points of view, with the result that capture would be eliminated or at least reduced"); James T. O'Reilly, *"Access to Records" Versus "Access to Evil": Should Disclosure Laws Consider Motives as a Barrier to Records Release?*, 12 KAN. J.L. & PUB. POL'Y 559, 559 (2003) ("The momentum supporting the 'freedom of information' concept has been flowing in only one direction, toward greater transparency and greater dissemination of more government information . . . ."); Martin Shapiro, *Administrative Law Unbounded: Reflections on Government and Governance*, 8 IND. J. GLOBAL LEGAL STUD. 369, 376 (2001) ("[A] fascination with transparency and participation remains central to administrative law.").

209. Government in Sunshine Act, Pub. L. 94-409, 90 Stat. 1241 (1976) (declaration of policy) (codified as amended at 5 U.S.C. § 552b (2000)). The values served by open government have also been said to be embedded within the First Amendment. *See, e.g.*, Detroit Free Press v. Ashcroft, 303 F.3d 681, 683 (6th Cir. 2002) ("[The Framers of the First Amendment] protected the people against secret government.").

210. Americans exhibit what Professor James O'Reilly has called an "information entitlement." O'Reilly, *supra* note 208, at 560 ("[T]he cultural expectation persists that 'government secrecy' is anathema.").

211. Rose v. Dep't of the Air Force, 495 F.2d 261, 263 (2d Cir. 1974) (citations omitted).

212. *See* 5 U.S.C. § 552 (2000).

213. *See* 5 U.S.C. § 552b (2000); 5 U.S.C. app. § 10 (2000).

214. *See supra* notes 169–71 and accompanying text.

lators must provide reasons for their policies and must base their decisions on an administrative record that is available to the public as well as to courts and members of Congress.[215]

These rules aim to prevent abuses and systematic bias, which are genuine concerns.[216] Nevertheless, they also constrain the ability of well-intentioned regulators to secure the reliable information they need to make better decisions.[217] Administrative law developments that make the regulatory process more transparent dampen the leverage the regulator has over industry in the information game. For example, under the Regulatory Flexibility Act, an agency must publish information twice a year about all the regulations it has in development,[218] and FOIA obligates agencies to disclose internal agency documents whenever industry requests them.[219] These laws weaken the regulator's position vis-à-vis industry in the information game, even though they do serve important values in a democracy. In the absence of these laws, regulators could be more selective about sharing such information, providing it more readily to those who in return provide the agency with information it needs.[220]

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215. Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 48–49 (1983). The presumption of judicial review combined with the establishment of executive and legislative oversight embeds regulatory policymaking within a constitutional system of checks and balances designed to keep decision making from being based on a narrow set of interests or factions. *See* Seidenfeld, *supra* note 207; Cass Sunstein, *Factions, Self-Interest, and the APA*, 72 VIRG. L. REV. 271 (1986).

216. *See* Mock, *supra* note 44, at 1092 ("Transparency about government operations and the finances of government officials is a primary means of deterring corruption and of uncovering it when it occurs."); *see also id.* at 1093 ("[T]ransparency has value in preventing and revealing rent-seeking.").

217. For a related argument, see Ashley C. Brown, *The Duty of Regulators to Have* Ex Parte *Communications*, ELECTRICITY J., Mar. 2002, at 10, *available at* http://www.electricity-online.com/online.html.

218. *See* 5 U.S.C. §§ 601–12 (2000).

219. *See* 5 U.S.C. § 552 (2000).

220. Of course, even with these laws, agencies still may be able to trade on the slippage between the law on the books and the law in action. They may, for example, be able to trade on more fine-grained information about the agency that cannot be obtained in any way other than through information trades. Moreover, just as mandatory disclosure is a limited tool for regulators, the mandatory disclosure requirements imposed upon agencies may be construed narrowly or evaded by regulators wishing to preserve some information for strategic purposes. This is why large and sophisticated industry players still acknowledge an advantage to becoming "joined at the hip" with the regulatory agency. *See supra* note 167 and accompanying text.

Transparency also can undercut regulators' ability to elicit information from firms that might fear retribution. Regulators do not want to risk exposing their best sources of information within industry, just as those who work for national security and intelligence agencies want to avoid exposing their sources. A bit of opacity protects the privacy of sources, and may allow firms or their representatives to be more forthcoming and honest about sharing adverse information.[221]

Requiring complete transparency about virtually every conversation in government, though perhaps now technologically possible,[222] would make regulators' jobs much more difficult.[223] What is needed is neither total transparency nor total opacity, but rather a mix that mitigates the risk of regulatory bias, whether from cognitive bias or outright corruption, and preserves some room for regulators to interact privately with industry in order to create openings in industry's wall of silence.

Despite administrative law's overall trend toward transparency, a few procedural features still leave some room for regulators to play the information game. For example, agency procedures, as well as even the D.C. Circuit Court's decision in *Home Box Office, Inc.*, do not prohibit ex parte communications altogether, nor do they generally require agency staff members to document all of their ex parte communications.[224] Rather, they only require documentation of those communications taking place after the agency issues a proposed rule.[225] Not surprisingly, interest groups have come to engage in extensive in-

221. STRAUSS ET AL., *supra* note 4, at 915 (acknowledging that, as a result of government transparency laws, "companies are less willing to cooperate with agencies' requests for their documents").

222. Cary Coglianese, *The Internet and Public Participation in Rulemaking*, KSG Working Papers Series No. RW03-022, *at* http://ssrn.com/abstract=421161 (Apr. 2003) ("[A]dvances in digital technology now make it feasible for agency staff . . . to creat[e] a digital recording of their ex parte communications . . . and load[] digital audio files onto the agency's on-line docket.").

223. Our point is not simply that transparency requirements can impose administrative burdens on agency officials, such as when they must divert their time to respond to information requests. *See* Antonin Scalia, *The Freedom of Information Act Has No Clothes*, REGULATION, Mar.–Apr. 1982, at 14, 16 (noting that it costs the government "many millions of dollars" to process FOIA requests). Rather, transparency also imposes another, heretofore unacknowledged, cost by making it more difficult for regulators to obtain adverse information from industry.

224. *See supra* notes 169–71.

225. *See supra* notes 169–71.

formal communication with regulators before any proposed rules are announced.[226]

Even FOIA preserves some protection for the privacy of business information by exempting certain types of records from required disclosure, including national security documents, personnel records, and trade secrets or other confidential business information.[227] Significantly, the D.C. Circuit, concerned with the impact of disclosure on future government efforts to secure information, has held that FOIA requires additional protection for confidential business information that industry voluntarily provides to government.[228] Congress has also recently added new protections against disclosure under FOIA for confidential information provided voluntarily by industry on "critical infrastructure," such as telecommunications, energy, financial, and transportation systems.[229] These measures strike a balance between openness and government's need to protect industry's confidential exchange of information with government regulators.[230]

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226. KERWIN, *supra* note 158, at 186–92.

227. *See* 5 U.S.C. § 552b (2000). FOIA does not prohibit the government from releasing confidential business information. Chrysler Corp. v. Brown, 441 U.S. 281, 292–93 (1979). Executive Order 12,600, however, directs agencies to notify firms prior to releasing any information they have submitted that is "arguably" exempt from FOIA, giving the firms opportunity to seek judicial review of the agency's decision to release. Predisclosure Notification Procedures for Confidential Commercial Information, 52 Fed. Reg. 23,781 (June 25, 1987). In addition, information falling within the narrower category of trade secrets must be protected under the terms of the Trade Secrets Act. 18 U.S.C. § 1905 (2000).

228. *See* Critical Mass Energy Project v. Nuclear Regulatory Comm'n, 975 F. 2d 871, 878 (D.C. Cir. 1992) (en banc) (finding that disclosure under FOIA of voluntarily disclosed business information "would frustrate Congress's purpose of 'encouraging cooperation with the Government by persons having information useful to officials'" (quoting Nat'l Parks & Conservation Ass'n v. Morton, 498 F.2d 765, 768 (D.C. Cir. 1974))).

229. *See* Critical Infrastructure Information Act of 2002, 6 U.S.C.A. § 133 (West. Supp. 2004). For a discussion of this Act, see Rena Steinzor, *"Democracies Die Behind Closed Doors": The Homeland Security Act and Corporate Accountability*, 12 KAN. J. L. & PUB. POL'Y 641 (2003); Kristen Elizabeth Uhl, *The Freedom of Information Act Post-9/11: Balancing the Public's Right to Know, Critical Infrastructure Protection, and Homeland Security*, 53 AM. U. L. REV. 261 (2003).

230. In addition, lurking beneath the recent Supreme Court litigation involving Vice President Cheney's energy task force was a policy dispute over the balance between transparency and governmental effectiveness. Cheney v. United States Dist. Court. of the D.C., 124 S. Ct. 2576 (2004). Although the Court did not address the underlying FACA issue, the vice president had argued that discovery of executive branch communications would inhibit candid

Against administrative law's overall march toward greater transparency, these measures stand out in their recognition of how government regulators must acquire information from industry. While transparency has important virtues, some level of informality and confidentiality is also needed if government is to preserve its ability to play the information game effectively.[231]

We recognize that informal relationships between regulators and industry bring potential problems, and that transparency offers important virtues. Indeed, our analysis of the information game leads us to call attention to an important but frequently overlooked tradeoff facing the design of administrative law. The challenge is to minimize the sum of two competing types of errors: (1) those associated with agency bias and nefarious conduct, and (2) those associated with regulators' failure to secure necessary information. Recognizing the tradeoff involved in addressing these competing errors represents an important step. It opens up a major avenue for future research and analysis; ultimately it should make it easier to find solutions that minimize the sum of the two error types.[232] Such solutions may vary across agencies and regulatory problems, but they will involve striking some balance between opacity and transparency.

One kind of balance could be struck by keeping parts of the regulatory process confidential, but only for limited periods. After the period of confidentiality had lapsed (say, after three to five years), agencies would need to release records of their communications with outsiders. Assurance of confidentiality might give sufficient cover to facilitate information exchange,

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and effective advice to the president. Against this need, amici favoring disclosure argued that "representative democracy can succeed only if information about government is broadly available" and that "secrecy is antithetical to representative government." Brief for Amicus Curiae American Library Association at 6, Cheney v. United States Dist. Court of the D.C., 124 S. Ct. 2576 (2004) (No. 03-475).

231. To say that some level of informality and opacity is needed, of course, is not to say that it alone is sufficient for optimal information acquisition by government. Other factors can affect an agency's ability to gather information, such as the talent and training of its workforce, its budgetary resources, and any procedural or legal barriers that may impede the collection of information.

232. Scholars have recognized the existence of risk-risk tradeoffs in health and safety regulation. *See, e.g.*, RISK VERSUS RISK (John D. Graham & Jonathan Baert Wiener eds., 1995). The basic structure of the tradeoff in the information game is the same, only it is a tradeoff between the risk of bias and the risk of ignorance.

but general awareness of a subsequent release could counteract temptations to abuse secrecy.

Another option is to keep parts of the regulatory process opaque but impose penalties for demonstrably objectionable conduct.[233] Given that opacity can be expected to lead to informal trading in information, greater care should be taken to avoid coercion or corrupt actions. Thus, auditing for such abuses by senior managers, agency inspector generals, or the Government Accountability Office should be in place, along with adequate penalties.

Finally, it bears noting that the amount of opacity that can occur in the administrative process is limited by the expectation that agency actions be supported by reasoned explanations, based on an available agency record. Courts, legislators, and others will continue to demand reasoned explanations of agencies' regulatory decisions.[234] As a result, agency officials can talk secretly with industry to ferret out adverse information, but information critical to any new regulation must still form part of the agency's public justification. As a result, any lead or information obtained through opaque channels subsequently needs to be corroborated through more open means, including the possibility of mandated disclosure.

The tradeoff between protecting against bias and ensuring regulators obtain necessary information means that transparency should not become transcendent in administrative law. Rather, the goal for administrative law lies in balancing between transparency and opacity along the lines of the alternatives we have outlined.

CONCLUSION

Regulators must rely on industry for significant amounts of information they need to craft effective and efficient regulatory policies. However, it is often not in a firm's or an industry's interest to provide that information. By working closely and informally with industry, regulators can identify specific firms or

233. *Cf. supra* notes 93–96 and accompanying text.

234. In *Sierra Club v. Costle*, Judge Wald offered a similar argument for the court's decision to permit agencies to engage in ex parte communications during informal rulemaking. 657 F.2d 298, 400–10 (D.C. Cir. 1981). After explaining some of the virtues and vices of informal contacts in rulemaking, she suggested that the vices would be counteracted by the requirement that the "EPA must justify its rulemaking solely on the basis of the record it compiles and makes public." *Id.* at 401.

employees whose interests in disclosure might differ from those of their competitors. Regulators can also try to create incentives—rewards and punishments—that might lead some firms to break with the industry's collective silence. Both strategies are easier to pursue when regulators can interact informally with industry in ways that are not transparent to others, including the overall public.

Ensuring that regulators make adequately informed decisions will demand that procedural designers resist any temptation to require total transparency. Transparency combats the dangers of cozy relationships between regulators and industry, to be sure, but it also detracts from regulators' abilities to exploit asymmetries of interest across firms and to engage in informal interactions. The challenge for administrative law is therefore to find an *optimal* level of visibility, one that minimizes both the problems that transparency seeks to combat and the problems resulting from ill-informed decision making. Striking the appropriate balance will require recognizing that sometimes government best advances the public interest by giving a company rewards in exchange for information or engaging in informal, off-the-record conversations, even though this behavior may appear indistinguishable from the kind of corruption or regulatory capture that administrative law has long sought to prevent. Regulatory procedures need to allow regulators to extract information from industry yet also counteract the kind of regulatory capture that has long been properly deplored.