The Truth About Regulation in America

Rena Steinzor*

I. THE IMPLICATIONS OF COGNITIVE DISSONANCE

Acute cognitive dissonance reigns supreme among American politicians.¹ Consider the proposition that we need to cut taxes across the income spectrum to stimulate an economy that is burdened by national debt. Or contemplate the enthusiastic attacks against big government's "job-killing" regulations despite widespread recognition that under-regulation was at the root of the recession that has left the economy reeling and millions out of work.

The ramifications of under-regulation include the mortgage scams that triggered the recession in the first place; the explosion of the Deepwater Horizon drilling platform operated by British Petroleum (BP) and Transocean, in the Gulf of Mexico, which killed eleven and wreaked havoc on natural resources; the Big Branch mine collapse that took twenty-nine lives, the worst such accident in four decades; the BP Texas City refinery explosion that killed fifteen after the plant manager warned top London executives that cost cutting had taken a dangerous toll on safety; peanut paste laced with salmonella and found in 2100 consumer products, which caused nine deaths and sickened hundreds; the recall of six million lead paint-coated toys imported from China, where safer paint is more expensive than the toxic version and 80% of toys sold in the U.S. are produced; and a slew of comparable, less-publicized incidents.

The people leading the deregulatory crusade have reignited a potent coalition of industry lobbyists, traditional conservatives, and grassroots Tea Party activists. The politicians speak in generic terms for public consumption: "the nation is broke," "big government is bad," "regulation costs trillions." Behind the scenes, the lobbyists target for repeal dozens of regulations that are designed to control pollution; ensure drug, product, and food safety; and eliminate workplace hazards.

^{*} Rena Steinzor is professor at the University of Maryland School of Law. She also serves as the president of the Center for Progressive Reform, www.progressivereform.org, a think tank composed of fifty working academics at universities across the country specializing in health, safety, and environmental protection law and policy. She thanks Matthew Freeman, Shana Jones, and Matthew Shudtz for their wise advice on this essay. Research Fellow Alice Johnson was of tremendous help in sourcing the essay.

¹ By "cognitive dissonance," I mean the theory that people feel discomfort as a result of holding two inherently contradictory ideas simultaneously, although among American politicians that discomfort is well hidden. The phrase is attributed to Leon Festinger, the social psychologist who first wrote about it in his 1956 co-authored book. Leon Festinger et al., When Prophecy Fails (1956).

In an effort to bring light and air to an often misleading and always opportunistic national debate, this essay presents five truths about the state of health, safety, and environmental regulation in America. These truths are the reasons why any close watcher of the regulatory system is unsure whether to laugh or cry as conservative Fox News commentator Glenn Beck screams that the government must get its hands off our food on the eve of congressional passage of a law giving the Food and Drug Administration (FDA) the power to recall poisoned food for the first time in its ninety-year history.² Before the enactment of this legislation, the agency depended on voluntary recalls.

In a nutshell, I argue that stringent regulation has enabled this country to achieve an outstanding level of industrialization while maintaining its natural environment to a remarkable degree, with the admittedly huge exceptions of the eroding ozone layer and the large-scale emission of greenhouse gases, which are causing severe climate change. For verification of this observation, we have only to consider China, where a breakneck pace toward industrial development has left the environment in shambles, causing as many as 2.4 million deaths annually as a direct result of contaminated water and air (adjusted for population, the American equivalent would be 558,000 deaths).³

The regulatory system we painstakingly constructed over four decades to protect health, safety, and the environment is sufficiently strong that the American people are lulled into a false sense of security despite the steady erosion of capacity among the agencies that administer it. Regulated industries have galloped into the gap created by this complacence, aided by politicians for whom ranting against regulation is an appealing distraction from their chronic inability to make tough choices and tell the truth to American voters. The Supreme Court's decision in *Citizens United v. Federal Election Commission*⁴ accelerated the trend toward making any institutional entity that can write a campaign check more important than public opinion. It has also made undermining regulatory agencies like shooting fish in a barrel. The agencies are defunded, denied effective legal authority, and badgered relentlessly every time they propose a new initiative.

² See, e.g., Food Safety Bill Has Passed, Glennbeck.com (Nov. 30, 2010), http://www.glennbeck.com/content/articles/article/198/48687/ (on file with the Harvard Law School Library) ("I don't understand how you can have so many people surrounding this president and this administration that believe in horrific things, horrific things. And we give them access to our food supply!"). The bill in question was the Food Safety Modernization Act, Pub. L. No. 111-353, 124 Stat. 3885 (2011).

³ Junfeng Zhang et al., *Environmental Health in China: Progress Towards Clean Air and Safe Water*, 375 Lancet 1110, 1110 (2010). The authors attribute the 2.4 million deaths primarily to "air pollution levels well above health-based standards" in "many" Chinese cities, and the fact that "half of China's water resources are considered too polluted for human use." *Id.* While experts could undoubtedly quibble with this estimate, it is a reasonable proxy for the deadly toll of uncontrolled pollution of the air and water of the kind that was eliminated in the U.S. decades ago.

^{4 130} S. Ct. 876 (2010).

The truth about regulation in America is that we cannot prosper without it, as many corporate executives will admit when they are standing outside the herd. So-called big government and powerful regulation are two different things: the agencies that protect health, safety, and the environment cost less than one percent of the federal budget and projected benefits exceed costs by at least two to one.5 The agencies' weakness means they cannot enforce the law effectively and, as happened on Wall Street, even egregious violators continue business as usual until disaster strikes (and, in some painfully notorious cases, even afterwards—for example, BP's chronic violations of worker safety and environmental laws were left undeterred over the decade leading up to the Gulf oil spill). Regulated industries have learned to be opportunistic about regulation, insisting on federal rules when states begin to construct a patchwork of inconsistent requirements. This pragmatic behavior suggests that promising solutions to regulatory dysfunction are available as soon as the political pandering stops and a critical mass of stakeholders across the ideological spectrum begins to negotiate. If that day comes, and the agencies are revived, they could stabilize the dangerously sharp edges of the global marketplace—saving lives, preventing illness and injury, and preserving the natural legacy we should leave to our children.

II. REGULATORY EROSION

A. Protector Agencies

Six "protector agencies" with the mission to safeguard people and the environment from the hazards of the industrial age are the focus of this essay. In the order of the size of their workforces in fiscal year (FY) 2009, they are: the Environmental Protection Agency (EPA);⁶ the Food and Drug Administration (FDA);⁷ the Mine Safety and Health Administration (MSHA);⁸ the Occupational Safety and Health Administration (OSHA);⁹

⁵ See infra notes 6-11, 43 and accompanying text.

⁶ The EPA's enacted FY 2009 budget totaled \$10.5 billion and 17,384 "full-time equivalent" (FTE) staff positions. U.S. EPA, FY 2010: EPA BUDGET IN BRIEF 7 (2009), available at http://epa.gov (search "2010 budget in brief"; then follow "FY 2010 Budget in Brief" hyperlink).

⁷ The FDA's enacted FY 2009 budget totaled \$2.1 billion and 8524 FTEs. U.S. FDA, FY 2011 President's Budget Request All-Purpose Table – Budget Authority, available at http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/BudgetReports/UC M202313.pdf.

⁸ MSHA's enacted FY 2009 budget totaled \$347 million and 2361 FTEs. U.S. Dep't of Labor, FY 2011 Congressional Budget Justification: Mine Safety and Health Administration 4, available at http://www.dol.gov/dol/budget/2011/PDF/CBJ-2011-V2-12.pdf.

⁹ OSHA's enacted FY 2009 budget totaled \$513 million and 2147 FTEs. U.S. DEP'T OF LABOR, FY 2011 CONGRESSIONAL BUDGET JUSTIFICATION: OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION 4, *available at* http://www.dol.gov/dol/budget/2011/PDF/CBJ-2011-V2-11.pdf.

the National Highway Traffic and Safety Administration;¹⁰ and the Consumer Product Safety Commission (CPSC).¹¹

The EPA, the largest and most powerful of the six, has a vast jurisdiction, administering more than a dozen laws covering thousands of pages. ¹² It is responsible for controlling emissions and discharges into air, water, and soil by all of the manufacturing plants and electric utilities in the country, with the exception of nuclear power plants. ¹³ The agency regulates the purity of public drinking water; tells gas station owners what kinds of tanks to use when they store fuel underground; compels dump site owners to track the waste they receive and keep it in highly engineered landfills; orders the cleanup of hundreds of abandoned toxic waste sites across the country; controls tailpipe emissions from motor vehicles; and sets permitting standards for large hog and chicken farms that discharge waste into waterways. ¹⁴

Part of the much larger Department of Health and Human Services, the FDA is staffed by medical doctors and other scientific experts and is responsible for ensuring the safety of 80% of the nation's food (it does not cover meat and poultry, which are under the Department of Agriculture's jurisdiction). The FDA also regulates over-the-counter and prescription human and veterinary drugs, the blood supply, human vaccines, cosmetics, and medical devices such as pacemakers. Together, these items total over \$1 trillion in sales annually, or twenty-five cents of every dollar that consumers spend.

OSHA has jurisdiction over 8.7 million private sector workplaces.¹⁸ It issues two kinds of rules: (1) safety standards to prevent physical injuries—for example, regulations governing equipment guards, automatic shutoff valves, scaffolding, and lighting; and (2) "permissible exposure limits" to

¹⁰ NHTSA's enacted FY 2009 budget totaled \$935 million and 607 FTEs. NAT'L HIGHWAY TRAFFIC SAFETY ADMIN., U.S. DEP'T OF TRANSP., BUDGET ESTIMATES: FISCAL YEAR 2010, 12, 14, *available at* http://www.dot.gov/budget/2010/budgetestimates/nhtsa.pdf.

¹¹ The CPSC does not report enacted budget levels. In FY 2009, it reported appropriations totaling \$105 million and 483 FTEs. U.S. CPSC, 2010 Performance Budget Request, at vi (2009), available at http://www.cpsc.gov/cpscpub/pubs/reports/2010plan.pdf. Apparent discrepancies between the size of an agency's budget appropriations and its full-time staff are explained by the fact that the agencies commit significant amounts of their budgets to state grants. In rounded numbers, the total staff for all six agencies was 31,300. Their total budgets equaled \$12.5 billion. Outlays for the U.S. government in FY 2009 totaled \$3.517 trillion, and employment, excluding the Department of Defense, totaled 1.288 million. See Office Mgmt. & Budget, Historicals. Tables, at 1.1, 17.1, available at http://www.whitehouse.gov/omb/budget/Historicals. In sum, employment at the agencies was 0.4% of total employment, and agency budgets were 0.3% of total expenditures.

¹² See Laws & Executive Orders, EPA, http://www.epa.gov/lawsregs/laws/index.html#env (last updated Apr. 7, 2011) (on file with the Harvard Law School Library).

¹³ Rena Steinzor & Sidney Shapiro, The People's Agents and the Battle to Protect the American Public: Special Interests, Government, and Threats to Health, Safety, and the Environment 30 (2010).

¹⁴ *Id*.

¹⁵ Id. at 24.

¹⁶ *Id*.

¹⁷ *Id*.

¹⁸ Id. at 19.

prevent exposures to toxic substances.¹⁹ In cooperation with the states, OSHA inspects facilities considered especially risky and issues citations requiring the installation or use of new safety equipment or changes in the manufacturing process to reduce chemical exposures.²⁰

MSHA employees inspect the nation's 15,000 surface and underground mines at the rate of twice annually for those on the surface and four times annually for those underground. Inspections determine whether any imminent danger exists, as well as whether the mine operator has complied with health and safety standards. MSHA also issues mine safety standards, investigates mine accidents, and reviews miner complaints of hazardous conditions and retaliatory discrimination.

NHTSA, working in partnership with the states, is charged with the ambitious mission of preventing traffic accidents in a road network that accommodates some 257 million vehicles.²¹ The federal agency is supposed to do its best to ensure vehicle safety, or "crashworthiness," while state agencies police the roads and take first-line responsibility for driver errors, including drunk-driving, falling asleep at the wheel, and mistakes made by very young or very old drivers.²²

The CPSC has jurisdiction over some 15,000 product categories and is assigned to prevent the sale of items with problems in design or manufacture that make them dangerous during normal use.²³ The export of the nation's manufacturing footprint to countries without meaningful regulatory systems makes its job infinitely more difficult.

B. Four Destructive Trends

Progressives and conservatives alike criticize the protector agencies for their ineptitude, albeit with diametrically opposed goals in mind. In the immortal words of Grover Norquist, the colorful head of the right-wing group Americans for Tax Reform, conservatives' goal is "to get [government] down to the size where we can drown it in the bath tub." Progressives lament regulatory dysfunction, which they attribute to four accelerating trends. Dire funding shortfalls make it impossible for the agencies to fulfill

¹⁹ *Id*.

²⁰ Id.

²¹ NATL'L HIGHWAY TRAFFIC SAFETY ADMIN., FATALITY ANALYSIS REPORTING SYSTEM (FARS) ENCYCLOPEDIA, http://www-fars.nhtsa.dot.gov/Main/index.aspx (on file with the Harvard Law School library).

²² See Steinzor & Shapiro, supra note 13, at 12.

²³ Id. at 6.

²⁴ The origin of this quote, which is a Norquist trademark, is generally attributed to an article in the *The Nation* magazine. Robert Dreyfuss, *Grover Norquist: "Field Marshal" of the Bush Plan*, The Nation, May 14, 2001, at 11, 12.

²⁵ For a more extensive discussion of all these issues, see Steinzor & Shapiro, *supra* note 13; *see also* Alyson Flournoy et al., Ctr. for Progressive Reform, White Paper No. 1007, Regulatory Blowout: How Regulatory Failures Made the BP Disaster Possible, and How the System Can Be Fixed to Avoid a Recurrence (2010), *available at* http://www.progressivereform.org/articles/BP_Reg_Blowout_1007.pdf (explaining that con-

critical statutory mandates, much less address emerging threats. Five of the six have not had significant funding increases since the mid-1980s, and the sixth—the FDA—has received additional funding primarily to hasten its new drug approval process. Nevertheless, Congress has saddled them with more demanding, more technically complex, and more politically controversial mandates even as the nation's population has increased significantly.²⁶

Compounding the effects of these funding gaps, weak and outmoded statutory authority prevents the agencies from implementing appropriately stringent controls on the harmful effects of industrial activities and bringing enforcement actions that effectively deter future violations of those requirements. For example, the statute imposing penalties on employers whose "willful" disregard of safety standards results in deaths on the job caps the term of imprisonment at six months, but people who harass a wild burro or horse in a national park face up to one year of imprisonment.²⁷ And the EPA does not have the authority under the federal Clean Water Act to regulate run-off into lakes, rivers, and streams from parking lots and pesticide- and fertilizer-laden agricultural land whenever it rains.

Even where the agencies have adequate statutory authority, the corrosive effects of overwhelming domination of administrative and legislative processes by regulated industries make it difficult for them to formulate tough rules. This dominance is documented by a series of empirical studies. For example, a 2009 study by the Center for Public Integrity reported that industry groups worried about legislation and potential EPA rulemaking with respect to climate change hired four lobbyists for each individual member of Congress, as compared with approximately 185 lobbyists who work for en-

flicts of interest and lax standards at the Minerals Management Agency set the stage for the spill); Thomas McGarity et al., Ctr. for Progressive Reform, White Paper No. 1003, Workers at Risk: Regulatory Dysfunction at OSHA (2010), available at http://www. progressivereform.org/articles/OSHA_1003.pdf (describing how funding shortfalls, inadequate statutory authority, and a persistent hostility toward worker protection on the part of conservatives have hobbled OSHA's efforts to fulfill its statutory missions); CATHERINE O'NEILL ET AL., CTR. FOR PROGRESSIVE REFORM, WHITE PAPER NO. 907, THE HIDDEN HUMAN AND ENVIRON-MENTAL COSTS OF REGULATORY DELAY (2009), available at http://www.progressivereform. org/articles/CostofDelay_907.pdf (giving several examples of instances in which lives were lost and the public's health sacrificed because regulations were delayed by red tape and industry challenges); and Sidney Shapiro et al., CTR. for Progressive Reform, White Paper No. 906, REGULATORY DYSFUNCTION: HOW INSUFFICIENT RESOURCES, OUTDATED LAWS, AND POLITICAL INTERFERENCE CRIPPLE THE 'PROTECTOR AGENCIES' (2009), available at http:// www.progressivereform.org/articles/RegDysfunction_906.pdf (discussing the impact of budgetary shortfalls and inadequate laws on the CPSC, the EPA, the FDA, NHTSA, and OSHA). ²⁶ For a discussion of the impact of increasingly hollow government, see STEINZOR &

²⁷ Compare Wild Free-Roaming Horses and Burros Act of 1971, 16 U.S.C. §§ 1331–40 (2006) (imposing up to one year imprisonment on any person who "maliciously causes the death or harassment of any wild free-roaming horse or burro" because "Congress finds and declares that wild free-roaming horses and burros are living symbols of the historic and pioneer spirit of the West"), with Occupational Safety and Health Act, 29 U.S.C. § 666(e) (2006) (imposing a term not to exceed six months imprisonment for a "willful violation causing death to employee").

SHAPIRO, supra note 13, at 54-71.

vironmental and health groups.²⁸ This dominance on Capitol Hill is mirrored by higher rates of industry participation in administrative proceedings. A survey of Washington-based interest groups found that individual businesses participated in over twice the number of rulemakings as other types of organizations.²⁹ Another study, examining comments filed on eleven proposed regulations at three agencies, found the same business dominance.³⁰ At the EPA and NHTSA, corporations, public utilities, and trade associations filed between 66.7% and 100% of the comments concerning these rules, and neither the EPA nor NHTSA received any comments from public interest groups concerning five of the eight rules.³¹ Because public interest groups have lagged far behind their industry counterparts in effort and intensity, the agencies are under tremendous pressure to default to proposals that weaken regulatory requirements.

Last but by no means least, attacks by Congress, the White House, and popular commentators, dubbed "bureaucracy bashing" by political scientists, chill initiative and creativity among civil servants already demoralized by underfunding, weak authority, and corrupted processes.³² This practice involves blaming civil servants when anything goes wrong that is perceived to be within the authority of government to control or prevent. As Jim Hoagland, veteran columnist for the *Washington Post*, once wrote: "Americans distrust government's powers and motives. They immediately get the joke that has a federal inspector or a state administrator fatuously saying: 'We're from the government and here to help.' Such suspicion is a healthy instinct—but one that is being carried to destructive and demagogic lengths."³³

Civil servants, or, to use the more pejorative term, bureaucrats, have experienced three decades of antipathy from national political leaders. Republican presidents Ronald Reagan and George W. Bush staked their legacies on bringing bureaucrats to heel. Democrats Jimmy Carter and Bill Clinton bought into this trend, although they used disdain for the civil service more as a defense against the charge that they were free-spending Democrats than a battle cry. To his credit, President Barack Obama has foresworn this approach, although as this essay goes to press, he is entering a

²⁸ Marianne Lavelle, *The Climate Change Lobby Explosion: Will Thousands of Lobbyists Imperil Action on Global Warming?*, CTR. FOR PUB. INTEGRITY (Feb. 25, 2009), http://www.publicintegrity.org/investigations/climate_change/articles/entry/1171/ (on file with the Harvard Law School Library).

²⁹ Scott R. Furlong & Cornelius M. Kerwin, *Interest Group Participation in Rule Making:* A Decade of Change, 15 J. Pub. Admin. Res. & Theory 353, 361 (2005).

³⁰ Marissa Martino Golden, *Interest Groups in the Rule-Making Process: Who Participates? Whose Voices Get Heard?*, 8 J. Pub. Admin. Res. & Theory 245, 250, 252 (1998). The three agencies were the EPA, NHTSA, and the Department of Housing and Urban Development.

 $^{^{31}}$ *Id.* at 252–53.

³² See, e.g., Larry Hubbell, Ronald Reagan as Presidential Symbol Maker: The Federal Bureaucrat as Loafer, Incompetent Buffoon, Good Ole Boy, and Tyrant, 21 Am. Rev. Pub. Admin. 237, 244 (1991).

³³ Jim Hoagland, *Dissing Government*, WASH. Post, Nov. 30, 2003, at B7.

period when challenges from conservative Republicans will test his resolve to take the high road.

Over time, the cumulative effects of bureaucracy bashing have taken their toll on the civil service, most tellingly in its ability to renew its ranks. The typical federal civilian employee is 46.9 years old and has been in her job for 16.3 years.³⁴ A blue ribbon panel convened in 2003 and chaired by Paul Volcker confirmed the negative impression given by these stark figures:

The notion of public service, once a noble calling proudly pursued by the most talented Americans of every generation, draws an indifferent response from today's young people and repels many of the country's leading private citizens. Those with policy responsibility find their decisionmaking frustrated by overlapping jurisdictions, competing special interests, and sluggish administrative response. [Civil servants] often find themselves trapped in a maze of rules and regulations that thwart their personal development and stifle their creativity. The best are underpaid; the worst, overpaid. Too many of the most talented leave the public service too early; too many of the least talented stay too long.³⁵

Because protector agencies, and not the industries that they regulate, are so beleaguered, vehement arguments about the need to restrain the runaway bureaucracy seem anomalous, to say the least. Whether they admit it or not, close observers of the process realize that the agencies can barely hold their own, even if they do not choose to acknowledge the implications of regulatory dysfunction.

III. FIVE TRUTHS

A. Regulatory Dysfunction Hurts Many People

A surprising amount of controversy accompanies research to determine how much illness, injury, and death is caused by industrialization. At the threshold, the gaps in our understanding of the effects of exposure to common pollutants are wide and deep. For example, many people wrongly assume that chemicals used in consumer products are tested before they are marketed. In fact, the EPA has estimated that basic screening data is available for only 7% of the substances that account for 95% of total U.S. chemical production annually.³⁶ In a similar vein, the federal Centers for Disease

³⁴ STEINZOR & SHAPIRO, *supra* note 13, at 192.

³⁵ PAUL A. VOLCKER, NAT'L COMM'N ON THE PUB. SERV., URGENT BUSINESS FOR AMERICA: REVITALIZING THE FEDERAL GOVERNMENT FOR THE 21st CENTURY 1 (2003), available at http://www.brookings.edu/~/media/Files/rc/reports/2003/01governance/01governance.pdf.

³⁶ EPA Analysis of Test Data Availability for HPV Chemicals, 22 Chem. Reg. Rep. (BNA) 261 (1998).

Control (CDC) abandoned initial efforts to track waterborne illness in the U.S. The only piece of data available on its web site is a 2006 estimate that between 4.26–11.69 million people contract waterborne diseases annually, but the confidence interval on this broad range is described as "unknown."³⁷

This startling ignorance is amplified by the intense battles that erupt every time scientists report research indicating that a specific chemical causes human harm. A slew of books document well-financed campaigns sponsored by regulated industries against the scientists and the research that link adverse effects with chemical exposures.³⁸ These attacks were pioneered by the tobacco industry in response to early reports that smoking causes cancer;³⁹ one in five deaths is now estimated to be caused by tobacco use.⁴⁰ The attacks continue with respect to the toxicity of common chemicals⁴¹ and the existence of climate change.⁴²

Despite these glaring data gaps and the well-financed campaigns that exert an unwarranted chilling effect on the scientific research needed to justify regulation, a rising tide of troubling data emerges from the political scrum demonstrating how badly the nation needs stronger regulation in key areas.

Unhealthy levels of ozone (smog) and fine particulates (small bits of matter, often laced with harmful chemicals such as butadiene) continue to trigger or exacerbate asthma and chronic respiratory ailments and cause cardiovascular disease.⁴³ Fifty-eight of Americans live in counties that regularly have levels of either ozone or particulate pollution considered to be unhealthy.⁴⁴ More than 3.9 million children and 10.7 million adults suffer-

³⁷ CTR. FOR DISEASE CONTROL & PREVENTION, NATIONAL ESTIMATE OF WATERBORNE DISEASE ASSOCIATED WITH PUBLIC DRINKING WATER: 2006 NATIONAL ESTIMATE, http://www.cdc.gov/healthywater/statistics/surveillance/national_estimate_waterborne_disease.html (last updated Apr. 10, 2009) (on file with the Harvard Law School Library). The studies and conferences referred to at this and a companion EPA web page were conducted under a mandate imposed by the Safe Drinking Water Act, 42 U.S.C. §§ 300f–300j (West 2010), which is now expired.

³⁸ See, e.g., David Michaels, Doubt Is Their Product: How Industry's Assault on Science Threatens Your Health (2008); Thomas O. McGarity & Wendy E. Wagner, Bending Science: How Special Interests Corrupt Public Health Research (2008); Seth Shulman, Undermining Science: Suppression and Distortion in the Bush Administration (2006); Rescuing Science from Politics: Regulation and the Distortion of Scientific Research (Wendy Wagner & Rena Steinzor eds., 2006).

³⁹ See, e.g., MICHAELS, supra note 38, at 79–96 (describing the tobacco companies' efforts to suppress research on the health risks of second-hand smoke).

⁴⁰CTR. FOR DISEASE CONTROL & PREVENTION, HEALTH EFFECTS OF CIGARETTE SMOKING, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/ (last updated Sept. 15, 2010) (on file with the Harvard Law School Library) (stating that "[t]he adverse health effects from cigarette smoking account for an estimated 443,000 deaths, or nearly one of every five deaths, each year in the United States").

⁴¹ See, e.g., Thomas McGarity, Defending Clean Science from Dirty Attacks by Special Interests, in Rescuing Science from Politics: Regulation and the Distortion of Scientific Research 24, 24–45 (Wendy Wagner & Rena Steinzor eds., 2006).

⁴² See, e.g., McGarity & Wagner, supra note 38, at 204–28.

⁴³ See AM. Lung Ass'n, State of the Air 2010 6–8 (2010), available at http://www.stateoftheair.org/2010/assets/SOTA2010.pdf.

⁴⁴ *Id*. at 7.

ing from asthma live in parts of the country with very high ozone or particulate pollution.⁴⁵ Over 5.4 million people suffering from chronic bronchitis and over 2.1 million with emphysema live in areas with unhealthy levels of ozone or particulate matter.⁴⁶

Some 5214 workers were killed on the job, an average of fourteen workers each day, in 2008, the last year when the economy was functioning normally.⁴⁷ About 4.6 million work-related injuries were reported, but this number almost certainly underestimates the problem, with some estimates of the true number of such injuries running as high as nine to fourteen million.⁴⁸

The Centers for Disease Control and Prevention estimate that 48 million people (one in six Americans) get sick, 128,000 are hospitalized, and 3000 die each year from food-borne diseases.⁴⁹ About thirty-one known pathogens cause 9.4 million of those illnesses, with the rest resulting from agents that the government has not yet identified.⁵⁰

Scientists who participate in the International Panel on Climate Change (IPCC) estimate that 20–30% of the world's animal species could be obliterated if global temperatures rise by 1.5–2.5°C; 40–70% of species could become extinct if temperature rises more than 3.5°C.⁵¹ These increases are likely unless strong steps to reduce carbon emissions and arrest the accelerating trends in global warming are initiated world-wide in the next few years. With the spectacular failure of cap and trade legislation in the 111th Congress,⁵² it is far from clear when the largest emitting countries will take such action.

Even if the campaign against regulation does not result in specific changes to the law, it will almost certainly amplify hostility toward regulatory agencies and slow the pace of research and rulemaking. Lack of federal investment in such research is penny wise and pound foolish, not least because it obscures the price exacted by under-regulation.

⁴⁵ Id. at 8.

⁴⁶ I.A

⁴⁷ AFL-CIO, DEATH ON THE JOB: THE TOLL OF NEGLECT 1 (2010), available at http://www.aflcio.org/issues/safety/memorial/upload/dotj_2010.pdf. Employers often penalize workers who report injuries, or offer incentives to those who endure their injuries without reporting them. In tough economic times and with lower levels of unionization, these trends are exacerbated. See, e.g., Kenneth D. Rosenman et al., How Much Work-Related Injury and Illness Is Missed by the Current National Surveillance System?, 48 J. Occupational & Envil. Med. 357 (2006).

⁴⁸ AFL-CIO, supra note 47, at 1.

⁴⁹ See Ctr. for Disease Control & Prevention, Estimates of Foodborne Illnesses in the United States, http://www.cdc.gov/foodborneburden/2011-foodborne-estimates.html (last updated Apr. 19, 2011) (on file with the Harvard Law School Library).

⁵¹ INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2007: SYNTHE-SIS REPORT, SUMMARY FOR POLICYMAKERS 13–14 (2007), available at http://www.ipcc.ch/pdf/ assessment-report/ar4/syr/ar4_syr_spm.pdf. The IPCC is the most exceptional effort to organize scientific expertise in history.

⁵² See, e.g., Comprehensive Energy Bill Dies in Senate, CBSNEws.com, July 22, 2010, http://www.cbsnews.com/stories/2010/07/22/politics/main6703205.shtml (on file with the Harvard Law School Library).

B. Big, Bad Government and Powerful, Protective Regulation Are Two Different Things

A cornerstone of the arguments against regulation is that it represents big government in its most odious iteration, causing the deficit to spin out of control, interfering with business, killing American jobs, and depressing the economic recovery, all for no good reason.⁵³ But like American attitudes regarding the nation's debt burden, the truth is significantly more complex. For example, people dislike big and expensive government in the abstract but do not want to cut programs of great value to them, such as Medicare and Social Security. Similarly, people believe hostile characterizations of excessive regulation until the issue is framed in terms of enforcing laws against polluters in order to keep air and water clean.

Ostensibly acting on a mandate conferred by the 2010 mid-term election that returned Republicans to the majority in the House of Representatives by a wide margin, Speaker John Boehner has emphasized deficit reduction as among the most important priorities for the 112th Congress. Explore public attitudes toward possible solutions to the problem, however, and consensus disappears. In a poll conducted by the Pew Research Center for the People and the Press (Pew), 70% agreed that the federal budget deficit "is a major problem that must be addressed right away," but "this general consensus evaporates when concrete deficit proposals are tested."54 Clear majorities (over 60%) opposed measures like raising Medicare contributions or reducing the number serving in the military; 71% opposed reducing federal education and road funding to the states; and respondents were split down the middle on reducing Social Security for high-income seniors.⁵⁵ By February 2011, this ambivalence was even more pronounced, with most people backing away from spending increases, while at the same time expressing reluctance to cut popular programs any further.⁵⁶ The upshot, as

⁵³ See, e.g., Thomas J. Donohue, Regulations Devastate Economic Growth, U.S. CHAMBER OF COM. (Oct. 14, 2010), http://www.uschamber.com/press/opeds/regulations-devastate-economic-growth (on file with the Harvard Law School Library) (condemning the "regulatory hurricane" that threatens the U.S. economy); James Gattuso et al., Red Tape Rising: Obama's Torrent of New Regulation, Heritage Found. (Oct. 26, 2010), http://www.heritage.org/research/reports/2010/10/red-tape-rising-obamas-torrent-of-new-regulation (on file with the Harvard Law School Library) (contending that burden of regulation has grown at alarming rate); and Stephen F. Hayward, The EPA's Power Grab, Am. Enter. Inst. for Pub. Pol.'y Res. (Dec. 28, 2009), http://www.aei.org/article/101456 (on file with the Harvard Law School Library) (condemning EPA's proposals to regulate greenhouse gas emissions).

⁵⁴ Pew Res. Ctr. for People & Press, Deficit Solutions Meet with Public Skepticism (Dec. 9, 2010), http://people-press.org/2010/12/09/deficit-solutions-meet-with-public-skepticism-2/.

³³ Id.

⁵⁶ Pew Res. Ctr. for People & Press, Rethinking Budget Cutting, Fewer Want Spending to Grow, but Most Cuts Remain Unpopular (Feb. 10, 2011), http://pewresearch.org/pubs/1889/poll-federal-spending-programs-budget-cuts-raise-taxes-state-budgets (on file with the Harvard Law School Library).

Nobel Prize-winning economist Paul Krugman has observed, is an "[electoral] mandate to repeal the laws of arithmetic."57

Antipathy toward regulation may seem like an easier target, but the same level of ambivalence prevails. Government Reform and Oversight Committee Chairman Darrell Issa (R-CA) recently wrote to approximately 160 trade associations representing business large, medium, and small, soliciting their "assistance in identifying existing and proposed regulations that have negatively impacted job growth in your members' industry."58 He got back 1947 pages worth of commentary, identifying dozens of rules, from those that implement the newly enacted Dodd-Frank financial reform and health care laws to existing and pending rules in the public health, consumer and worker safety, and environmental protection arena.⁵⁹

But check out public opinion polling on regulation, and Issa's mandate appears far more questionable. A Harris poll released in June 2010 concluded that "many more people support stricter rather than less strict regulation of business . . . [but their attitudes depend] on who or what is being regulated."60 A plurality (40%) "favors more strict regulation," with 19% preferring less strict, 27% "wanting neither more nor less strict regulation," and 14% "saying they are not at all sure." 61 A 64% to 11% majority favor more controls on "big business," and a 45% to 14% plurality favors "less strict regulation on small business."62 The strongest support for stricter regulation relates to food safety (73%), executive pay and bonuses (70%), the safety of pharmaceuticals (70%), banks and financial services (69%), air and water pollution (68%), consumer product safety (67%), and environmental safety (66%).63

What could explain these inconsistencies? The most likely possibility is that the House Republicans are taking advantage of one of the most profound contradictions in American politics, described best by former Senator William Cohen (R-ME): "[G]overnment is the enemy until you need a friend."64 Until and unless politicians start talking about what government

⁵⁷ Paul Krugman, Op-Ed., Eat the Future, N.Y. Times, Feb. 14, 2011, at A27.

⁵⁸ Darren Goode, Darrell Issa Asks Business: Tell Me What to Change, Politico (Jan. 3, 2011), http://www.politico.com/news/stories/0111/46995.html (on file with the Harvard Law

⁵⁹ See Issa Makes Submissions Reflecting Input from Job Creators on Regulatory Barriers to Job Creation Public, COMM. ON OVERSIGHT & GOV'T REF., http://oversight.house.gov/index.php?option=com_content&task=view&id=1115&Itemid=29 (last visited Feb. 21, 2011) (on file with the Harvard Law School Library). A searchable version of the letters is available at the website of OMB Watch, a nonprofit organization critical of Rep. Issa's agenda. See OMB WATCH, LETTERS TO DARRELL ISSA, available at http://www.ombwatch.org/files/regs/ issaltrswoattachments.pdf.

⁶⁰ HARRIS INTERACTIVE, DO WE WANT MORE OR LESS REGULATION OF BUSINESS? IT ALL DEPENDS ON WHAT IS BEING REGULATED (June 10, 2010), http://www.harrisinteractive.com/ NewsRoom/HarrisPolls/tabid/447/ctl/ReadCustom%20Default/mid/1508/ArticleId/407/Default .aspx (on file with the Harvard Law School Library).

 $^{^{62}}$ *Id*.

⁶³ *Id*.

⁶⁴ E.J. Dionne, Op-Ed., Three of a Kind, WASH. Post, June 11, 1996, at A17.

should—and should not—do in concrete, affirmative terms, the rhetoric about big government is a distraction that makes people angry but does not help form solutions to any of the nation's pressing problems that even bare majorities can support.

A second explanation is that politicians increasingly play to two diverse audiences—business campaign contributors and the voting public. Should politicians let their performances for these conflicting masters diverge in a way that is noticed by a fragmented and distracted media, they risk forceful electoral backlash. In addition to the Harris poll results cited above, a Pew poll done in April 2010 found that financial institutions, large corporations, Congress, and the federal government were viewed negatively by anywhere from 64% to 69% of adults surveyed.⁶⁵

In addition to the popularity of health and safety regulatory programs, and the volatility of public perceptions regarding the influence of big business on the legislative process, the argument that taxpayers spend excessive amounts for little benefit on the regulatory system—and the closely related contention that health, safety, and environmental regulation destroys jobs—remain unsupported. Such regulation does not equal big government, either in terms of how much we spend on regulators or how much regulated industries spend on compliance.

About 31,000 employees, of a total civilian, non-Defense Department federal workforce of 1.3 million, work at the six protector agencies, and the agencies' budgets total about \$14.6 billion of the \$3.5 trillion budget Congress approved in April 2009.⁶⁶ These modest amounts are not nearly enough to get the job done, but even if we increased them by orders of magnitude, they would still account for a small fraction of overall federal spending.

Among the most telling examples of under-funding—or "hollow government" as this phenomenon is commonly known—is the CPSC, which received \$105 million in its FY 2009 appropriation.⁶⁷ The agency is responsible for ensuring the absence of dangerous defects in 15,000 product categories—literally everything Americans buy except vehicles, airplanes, boats, food, drugs, firearms, and tobacco.⁶⁸ In FY 1981, the CPSC employed 891 "full-time equivalents" (FTEs).⁶⁹ As of April 2010, it had 502 FTE

 $^{^{65}\,\}mathrm{Pew}$ Res. Ctr. for People & Press, Distrust, Discontent, Anger and Partisan Rancor 104 (2010), available at http://people-press.org/files/legacy-pdf/606.pdf.

⁶⁶ See Office Mgmt. & Budget, Historical Tables, at 1.1, 17.1, http://www.white house.gov/omb/budget/Historicals (last visited Apr. 25, 2011) (on file with the Harvard Law School Library).

⁶⁷ U.S. CPSC, 2010 Performance Budget Request, at vi (2009), *available at* http://www.cpsc.gov/cpscpub/pubs/reports/2010plan.pdf.

⁶⁸ Frequently Asked Questions, U.S. Consumer Prod. Safety Comm'n, http://www.cpsc.gov/about/faq.html (last visited Apr. 10, 2011) (on file with the Harvard Law School library).
⁶⁹ Steinzor & Shapiro, supra note 13, at 6.

employees. 70 The American population increased by 34% during that same period. 71

The difficulty the CPSC has in achieving its statutory mission with shrinking resources is compounded by the gradual export of the U.S. manufacturing footprint abroad, largely to Asian countries that have no effective regulatory systems. The CPSC recalled forty-five million units of Chinese products in 2007, dubbed the "year of the recall" by consumer groups. Ye this large number is almost certainly the tip of the iceberg because the CPSC had only fifteen inspectors available to police 300 airports, seaports, and border crossings and billions of individual goods imported by an estimated 825,000 companies. Expecting the CPSC to systematically inspect the vast number of imported consumer products is not realistic. But Congress could provide the agency with the authority to impose far more stringent civil and criminal penalties for the importation of dangerous products and a budget sufficient to allow it to establish a meaningful deterrence-based enforcement system.

As for the claim that excessive regulations result in job loss, deregulators talk about compliance requirements as if they were a mechanism for sweeping money into a pile and setting it on fire. Of course, money spent on eliminating hazards is not burned to a cinder, but rather is channeled back into the economy. Taking the remedial steps that regulations require, especially when capital investments are involved, creates jobs. Pollution control equipment must be designed, manufactured, and installed. People must be hired to construct and operate highly engineered landfills that can safely contain hazardous waste and treat sewage and drinking water. Moreover, the money not spent treating cancers, asthma, broken limbs, or neurological disease can be used in other, more productive ways. Projecting all of these pathways in a mathematically accurate way is impossible, but pretending that they do not exist is specious.

The impossibility of counting the costs of all the rules now in effect has not deterred people from churning out such figures, of course. The most prevalent report on regulatory costs was authored by Nicole and Mark Crain

⁷⁰ FY 2011 CPSC Budget: Hearing Before the Subcomm. on Financial Servs. and General Government of the S. Comm. on Appropriations, 111th Cong. 1 (2010) (statement of Inez Tenenbaum, Chairman, U.S. Consumer Product Safety Commission), available at http://www.cpsc.gov/pr/tenenbaum04142010.pdf.

⁷¹ STEINZOR & SHAPIRO, *supra* note 13, at 65.

⁷² Press Release, Consumers Union, CPSC Data Show Safety Recalls Increased 22% over Last Year Leading Consumer Groups Urge Congress to Enact Strong Reforms Before Recess (July 23, 2008), http://www.consumersunion.org/pub/core_product_safety/005867.html (on file with the Harvard Law School Library).

⁷³ STEINZOR & SHAPIRO, *supra* note 15, at 55.

⁷⁴ Cary Coglianese et al., *Consumer Protection in an Era of Globalization* (Scholarship at Penn Law, Paper No. 360, 2009), http://lsr.nellco.org/upenn_wps/360 (on file with the Harvard Law School Library).

for the Small Business Administration's (SBA) Office of Advocacy.75 It claimed that regulation cost the U.S. economy \$1.75 trillion in 2008.76 This estimate is far larger than the cost estimate generated by the Office of Management and Budget that same year—not incidentally, the last year of the Bush Administration. OMB said that costs ranged from \$62 billion to \$73 billion, while benefits ranged from \$153 billion to \$806 billion.⁷⁷ The width of this range illustrates the methodological difficulty of arriving at accurate estimates in an economy as complex as ours. The Crains attribute this massive difference to the fact that their report considers many more rules than do the annual OMB reports, but they refuse to make available either a list of the rules they did count or data that explain the many other assumptions made to get to the \$1.75 trillion figure.⁷⁸ As for the assertion that regulation drives firms overseas, an excellent analysis by Eban Goodstein entitled The Tradeoff Myth: Fact and Fiction about Jobs and the Economy refutes such claims, concluding that factors like energy and labor costs influence such decisions 79

C. Even Scoundrels Are Not Stopped

The protector agencies' enforcement programs are anemic to the point of being shameful. Sadly, poor performance occurs only in part because of resource shortfalls; more significant factors are regulators' lack of determination to pursue cases through the court system if necessary, political interference in their efforts to enforce the law, and, in many cases, woefully inadequate legal authority. Obama appointees are making an effort to reverse these conditions, but ennui is so deeply engrained that it could take years to re-establish credible programs. From workers to consumers to the general population, victims pay a huge price for letting scoundrels go free.

When I say "scoundrel," I mean scoundrel, in the full *Webster's Third New International Dictionary* sense of the word: "a bold selfish man that has very low ethical standards." As difficult as it is to resist a sense of the surreal regarding the conduct I describe below, the real story here is that in

 $^{^{75}}$ Nicole V. Crain & W. Mark Crain, The Impact of Regulatory Costs on Small Firms, Small Bus. Admin. (2010), available at http://www.sba.gov/sites/default/files/rs371 tot.pdf.

⁷⁶ *Id.* at iv.

⁷⁷ Off. Mgmt. & Budget, Executive Off. President, 2009 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities 3 (2009), *available at* http://www.whitehouse.gov/sites/default/files/omb/assets/legislative_reports/2009_final_BC_Report_01272010.pdf (converted from 2001 to 2009 dollars).

⁷⁸ For a comprehensive critique of what information is available about the Crain report, see Sidney Shapiro et al., Ctr. for Progressive Reform, Setting the Record Straight: The Crain and Crain Report on Regulatory Costs (2011), *available at* http://www.progressivereform.org/articles/SBA_Regulatory_Costs_Analysis_1103.pdf.

 $^{^{79}}$ Eban Goodstein, The Trade-off Myth: Fact and Fiction About Jobs and the Environment (1999).

⁸⁰ Webster's Third New International Dictionary 2038 (1981).

the most powerful country in the world, with a supposedly overwhelming problem of government interference in business activities, criminal behavior of epic proportions is tolerated year after year. More disconcerting, future incidents of comparable severity are likely.

Management consultants use the term "position paradox" to connote the reality that executives with the most influence over decisions to invest in safety typically work at a great distance, physically and psychologically, from hazardous conditions.⁸¹ The best antidote to this phenomenon is personal accountability for the neglect that leads to disaster. When enforcement is limited to civil actions against the corporate entity, and the penalties assessed are easily absorbed as a cost of doing business, managers are increasingly willing to tolerate the transient bad publicity and accept breath-taking risks with regard to worker safety and environmental harm. To counteract this trend, enforcement programs must impose accountability in the form of criminal conviction of individuals, as opposed to corporate entities. Only career-ruining punishment has the capacity to focus managers' attention.

British Petroleum (BP) is the infamous example of the decade. Its executives have presided over multiple extraordinarily serious, chronic violations of American health and safety laws throughout its North American operations, with the worst resulting in four separate fiascos in the years leading up to the Deepwater Horizon spill. Throughout them all, regulators failed to connect the dots of what these episodes said about the huge corporation's casual attitudes toward safe operations and quality control. Three of these events should have won the behemoth corporation show-stopping punishment well before the spill got the world's attention.

On September 2, 2004, an accident involving superheated water killed two workers at the company's Texas City refinery, triggering soul searching at the plant but indifference at corporate headquarters.⁸² A mere six months later, a massive explosion at the same plant killed fifteen people. The proximate cause of that incident was a decision not to invest \$150,000 to upgrade equipment that was state-of-the-art in the 1950s.⁸³ In July 2005, BP's \$1 billion Thunder Horse facility in the Gulf of Mexico collapsed when a valve designed to prevent it from flooding in severe weather failed because it was

⁸² Michael Graczyk, *Texas City Sees Its Share of Disasters*, Killeen Daily Herald (Tex.) (Mar. 25, 2005), http://www.kdhnews.com/news/story.aspx?s=1607 (on file with the

Harvard Law School Library).

⁸¹ A poignant example of the use of this term is the *Telos Report*, a management consultant's evaluation of safety risks at BP's Texas City Refinery *before* a terrible explosion that killed fifteen workers there in 2005. The report was commissioned by Don Parus, the plant manager, who was worried that cost-cutting was costing lives. *See* Telos Grp., Executive Summary of Report of Findings (Jan. 21, 2005) (unpublished confidential report), *available at* http://www.csb.gov/assets/document/Executive_Summary_of_Report_of_Findings.pdf.

⁸³ Abrahm Lustgarten, Furious Growth and Cost Cuts Led to BP Accidents Past and Present, Propublica (Oct. 26, 2010), http://www.propublica.org/article/bp-accidents-past-and-present (on file with Harvard Law School Library) ("BP considered switching out [the blowdown drum] in 2002 but held off because of the \$150,000 cost. 'Capital expenditure is very tight,' said an internal BP e-mail from management about the decision at the time. 'Bank \$150k in savings now.'").

installed backwards.⁸⁴ The platform was re-installed and now produces oil, although it is plagued by construction problems, including a welding job so shoddy that it left underwater pipelines brittle and full of cracks.⁸⁵ And on March 2, 2006, a pipeline operating in Prudhoe Bay ruptured, releasing 267,000 gallons of oil, the largest spill ever on Alaska's North Slope.⁸⁶ This incident occurred two years after a whistleblower warned an EPA attorney that the company was systematically neglecting pipeline maintenance and falsifying inspection reports.⁸⁷

Evidence from a surprising variety of sources attributes all four incidents to frantic growth as the corporation's CEO, John Browne, and his leadership team raced to make BP the largest oil company in the world. BP swallowed American competitors like Amoco and Atlantic Richfield, neglecting crucial steps like knitting safety and compliance regimes together. Be It eliminated layers of middle management but became more dependent on outside contractors a step or more beyond its immediate control. It pushed the envelope of technology in its search for oil in the Alaska wilderness and the deepest waters of the Gulf of Mexico.

A casual observer might guess that such rapid growth would result in a free-wheeling atmosphere where decentralized management and profligate spending become the leading hazards for the company. But the assumption that sprawling size leads to diminished financial vigilance is not valid for BP. As top managers in London eyed the accumulation of burdensome debt that accompanies breakneck acquisitions, they felt irresistible pressure to cut costs with ruthless, but also mindless, intensity. London executives retained tight control over maintenance and other expenditures, as well as their operational effects, down to the lowest levels of its operations. As Tony Hayward, the man who replaced Browne, admitted in a speech to Stanford business students in 2007, "[w]e diagnosed . . . a company that was too top down, too directive, and not good at listening."

⁸⁴ Sarah Lyall, In BP's Record, a History of Boldness and Costly Blunders, N.Y. Times, July 13, 2010, at A1, http://www.nytimes.com/2010/07/13/business/energy-environment/13bp risk.html (on file with the Harvard Law School Library) ("Despite a catalog of crises and near misses in recent years, BP has been chronically unable or unwilling to learn from its mistakes, an examination of the record shows.").

⁸⁵ *Id*.

⁸⁶ Id. ("It was the worst spill ever on the North Slope, and once again, the cause was preventable. Investigators found widespread corrosion in several miles of under-maintained and poorly inspected pipes. BP eventually paid \$20 million in fines and restitution.").
⁸⁷ Scrutiny of BP Mounts in Alaska, N.Y. Times, Aug. 9, 2006, http://www.nytimes.com/

⁸⁷ Scrutiny of BP Mounts in Alaska, N.Y. Times, Aug. 9, 2006, http://www.nytimes.com/2006/08/09/business/worldbusiness/09iht-bp.2427230.html (on file with the Harvard Law School Library).

⁸⁸ For further information about the consequences of BP's growth, see *Frontline: The Spill* (PBS television broadcast Oct. 26, 2010), *available at* http://www.pbs.org/wgbh/pages/front line/the-spill/.

⁸⁹ See Lustgarten, supra note 83.

[&]quot; Ia

 $^{^{91}}$ Id. (reporting that when he took the office, Hayward also promised to turn the company around and maintain a "laser-like focus" on safety).

And so it was that Don Parus, the hand-picked manager of the Texas City plant, made frequent pilgrimages to London before the Texas City refinery explosion, begging top executives not to cut funding for minimal maintenance and upgrades of outmoded equipment.92 In 2004, Parus took the drastic step of presenting a PowerPoint containing photographs of workers killed in plant accidents to John Manzoni, the head of refining and marketing.93 He commissioned a consulting firm named Telos to conduct a confidential and anonymous survey of employees' concerns about safety and maintenance.94 Telos reported that "[w]e have never seen a site where the notion 'I could die today' was so real."95

Following the Texas City explosion, BP hired a blue-ribbon commission headed by former Secretary of State James A. Baker III to evaluate what went wrong.96 Its 2007 report did not equivocate, concluding that the accident was attributable to a culture that allowed crucial components of the physical plant to "run to failure" and penalized workers for expressing safety concerns. 97 A second report completed by the U.S. Chemical Safety and Hazard Investigation Board found that "organizational and safety deficiencies exist at all levels of the BP Corporation."98

Emerging investigations of the circumstances leading up to the Deepwater Horizon spill reveal eerily similar cost-cutting measures with even more catastrophic results. For example, four days before methane surged into the well causing the April 20 explosion that led to the release of an estimated 205 million gallons of oil into the Gulf, BP employees rejected a recommendation by employees of its contractor Halliburton that twenty-one centralizers be installed to secure the well against explosive gases.⁹⁹ "'It will take ten hours to install them,' a BP official said in an internal e-mail. 'I do not like this." 100

The government was not exactly sitting silent during these events, although the penalties it meted out to BP for health, safety, and environmental violations were akin to tossing a marble at the side of a battleship as it

⁹² See Frontline, supra note 88.

⁹³ Don Parus, BP, Texas City Is Not a Safe Place to Work (2004) (unpublished presentation), available at http://s3.documentcloud.org/documents/11343/don-parus-powerpoint-pres-

⁹⁴ Telos Grp., BP City Site Report of Findings 3 (2005) (unpublished confidential report), http://www.propublica.org/documents/item/the-telos-report (on file with Harvard Law School Library); Parus, supra note 93.

⁹⁵ Lyall, supra note 84.

⁹⁶ Safety Review Panel, The Report of the B.P. U.S. Refineries Independent SAFETY REVIEW PANEL (2007), available at http://www.bp.com/liveassets/bp_internet/global bp/globalbp_uk_english/SP/STAGING/local_assets/assets/pdfs/Baker_panel_report.pdf.

⁹⁷ Id. at 122.

⁹⁸ U.S. Chem. Safety & Hazard Investigation Bd., Report No. 2005-04-I-TX, Inves-TIGATION REPORT: REFINERY EXPLOSION AND FIRE (15 KILLED, 180 INJURED) 18 (2007), available at http://www.csb.gov/assets/document/CSBFinalReportBP.pdf.

⁹⁹ Ryan Knutson, Blast at BP Texas Refinery in '05 Foreshadowed Gulf Disaster, PROPUB-LICA, July 2, 2010, http://www.propublica.org/article/blast-at-bp-texas-refinery-in-05-foreshad owed-gulf-disaster (on file with Harvard Law School Library).

100 Id.

steams out of port. OSHA embarrassed itself by assessing \$109,500 in civil penalties for violations that led up to the superheated water incident that killed two workers. OSHA's penalty authority is sharply limited by law, but it has been in the habit of underusing this authority, as this example shows. Despite all of the evidence of severe noncompliance prior to the Texas City Refinery explosion and the government's discovery of hundreds of safety violations, OSHA fined BP only \$21 million for that fatal incident, a record amount in the context of other enforcement actions but clearly not enough to get top executives' attention. When the Obama administration took office, new leadership at the agency fined BP an additional \$50.6 million because, among other things, it was not implementing the terms the consent decree put in place after the explosion.

EPA investigators were also active. BP subsidiary companies and contractors were convicted of environmental crimes three times in Alaska and Texas. Two of the cases involved felony charges, one under the Clean Air Act and the second under the Clean Water Act, with the company directed to pay \$20 million in fines. Yet because the prosecution was against the corporate entity itself, as opposed to individual managers, even those serious charges were shrugged off.

To put all of these penalties in perspective, the Commodity Futures Trading Commission settled a case against the company for manipulating prices in the propane market, collecting \$303 million in civil penalties, six times the top fine for gross negligence that caused fatalities at the plant. ¹⁰⁵ BP's total 2005 profits were \$19.31 billion and \$17.29 billion in 2007. ¹⁰⁶ If you tend to think that you have to spend money to make money, and have grown numb to the human costs imposed by your avid pursuit of business at a breakneck pace, nothing but direct individual accountability or ruinous economic liability has a chance of changing standard operating procedures.

¹⁰¹ Press Release, OSHA, OSHA Cites Houston Refinery \$109,500 Following Fatal Texas City Accident (Mar. 4, 2005), http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=11296 (on file with Harvard Law School Library).

¹⁰² BP Penalized \$50.6 Million for Texas City Refinery Explosion, ENVT. News Serv., Aug. 12, 2010, http://www.ens-newswire.com/ens/aug2010/2010-08-12-091.html (on file with Harvard Law School Library) (reporting on both the first, \$21 million, and second, \$50.9 million, penalties).

¹⁰³ Richard Mauer & Anna M. Tinsley, *Gulf Oil Spill: BP Has a Long Record of Legal Ethical Violations*, McClatchy, May 8, 2010, http://www.mcclatchydc.com/2010/05/08/93779/bp-has-a-long-record-of-legal.html (on file with the Harvard Law School Library).

Press Release, Commodity Futures Trading Comm'n, BP Agrees to Pay a Total of \$303 Million in Sanctions to Settle Charges of Manipulation and Attempted Manipulation in the Propane Market (Oct. 25, 2007), available at http://www.cftc.gov/pressroom/pressreleases/pr5405-07.html.

bp. Making Energy More: Annual Review 2005 4 (2006), available at http://www.bp.com/liveassets/bp_internet/globalbp/STAGING/global_assets/downloads/bp_ara_2005_annual_review.pdf; BP, Our Key Priorities Safety People Performance: Annual Review 2007 3 (2008), available at http://www.bp.com/liveassets/bp_internet/globalbp/globalbp_uk_english/set_branch/STAGING/common_assets/downloads/pdf/ara_2007_annual_review.pdf.

In the wake of the Gulf spill, BP's competitors are doing their best to persuade decision-makers that BP is a rogue company, beginning life as a corporate cowboy and becoming a pariah. But a special commission appointed by the President to investigate the Deepwater Horizon spill dismissed this self-serving explanation:

The blowout was not the product of . . . aberrational decisions made by rogue industry or government officials [T]he root causes are systemic and, absent significant reform . . . might well recur. The missteps were rooted in systemic failures by industry management (extending beyond BP to contractors that serve many in the industry), and also by [government failures] to provide effective regulatory oversight 107

D. Regulated Industries Understand the Benefits of Regulation and Could Negotiate Compromises with Agencies and Public Interest Representatives if Deregulatory Opportunists Would Back Off

The notion that businesses—especially big businesses—hate regulation across-the-board is naïve and misleading, despite its popularity as deregulatory dogma. Let just a handful of state governments start regulating in earnest and something close to hysteria breaks out, triggering fervent demands that the national government step in to eliminate this intolerable patchwork of inconsistent requirements. These objections incorporate a noteworthy paradox. Traditional conservatives believe in diminished national government, arguing that the Constitution reserves the power to govern the vast majority of domestic activities to the states, and regulated firms appear to tolerate this doctrine. But when states begin to act affirmatively, business leaders quickly shed their ideology-driven allies to pursue their own self-interest.

In many ways, then, the solution to the gridlock that confronts us is to find reasonable voices at either end of the spectrum and give them adequate incentives to negotiate a compromise. This outcome is easier said than done, of course, because politics is nine-tenths perception. My arguments here—that the regulatory agencies are weak and law enforcement anemic—are rejected by deregulatory ideologues out of hand. Instead, they say, the twin threats of unreasonable regulatory mandates and tort liability force responsible companies to squander resources that would save the economy. Yet in their heart of hearts the companies themselves know better. Especially if they have made the effort to comply with major rules, weak enforcement

¹⁰⁷ Nat'l Comm'n on the BP Deepwater Horizon Oil Spill & Offshore Drilling, Deepwater: The Gulf Oil Disaster and the Future of Offshore Drilling 122 (2010), available at https://s3.amazonaws.com/pdf_final/DEEPWATER_ReporttothePresident_FI-NAL.pdf.

means that their less scrupulous competitors have a substantial financial advantage, in effect earning a dividend by ignoring the law.

Discipline among industry is overpowering. Even where a particular version of regulation would help one industrial sector over another, ranks are rarely broken in favor of regulatory action. Public interest groups inch along these industry fault lines trying to provoke disputes, but business lobbyists keep a careful eye on emerging cracks and rush to mend them. Anomalies exist, of course. A large and influential segment of the environmental community made a well-publicized deal with a small but prominent contingent of large corporate players on climate change legislation, which lasted through House of Representatives passage of so-called "cap and trade" legislation last year. With the showy evisceration of that effort in the Senate, disincentives for future coalitions were reinstated.

In addition to this discipline, polarization in Congress dooms prospects for law reform. Most of the statutes discussed here have not been revised in two decades or more and are long overdue for an update. The people who participate as experts in these debates know how to make deals; every major health, safety, and environmental statute is the product of elaborate, lengthy negotiations. But no external pressure drives people to the negotiating table, to the detriment of both sides. Until matters get a great deal worse, the gridlock will continue. On that fateful day—when, for example, environmental damage becomes so visible that public backlash drives Congress and the President to the bargaining table—one can imagine a dialogue between an environmentalist and an industry executive to prepare the way for compromise.

Environmentalist: "You *know* that strict, prescriptive regulation has many advantages for you. It achieves the elusive goal of certainty regarding business investments in pollution control equipment or safety testing protocols, and certainty is a cornerstone of running a successful corporation. If something goes wrong and you have done what the government told you to do, regulators end up sharing the blame."

Industrialist: "I hear you. But *you* know in your heart of hearts that some of these requirements are so excessively complex and just plain silly that business spends huge sums checking boxes without improving safety. Do you want the system to work, or would you rather cling to the congealed rules of the past?"

Environmentalist: "OK, to get the ball rolling here, make a list of everything you want cancelled and we'll go through it. If the problem is largely solved, or you have a better way to handle it, we'll agree to change the law. A key to resolving our disagreements may well be to require the best available technology for preventing or mitigating pollution, rather than having agencies struggle for years to define 'safe' levels of exposure. We've found that with your far superior resources, it's just too easy for you to influence

¹⁰⁸ For further information, see the U.S. Climate Action Partnership website. U. S. CLIMATE ACTION P'SHIP, http://www.us-cap.org/ (last visited Apr. 26, 2011).

risk assessments that attempt to predict who will get cancer in thirty years. Remedies based on pollution control equipment, industrial process changes, and chemical substitutions make what everyone has to do crystal clear. In return, we want a much better system for testing chemicals, monitoring pollution, and disclosing what's in the air, the water, and the soil, and what goes through the plant."

Industrialist: "That might work. But having required installation of technology-based controls, you can't change your mind every five years. And we won't accept testing or monitoring that is inordinately expensive. In areas where we still need agencies to tell us what pollution levels are acceptable, we could pass the question to a scientific panel to advise them. I see you sneering over there, just relax. We'll stipulate that the members of the panels must be free of conflicts of interests and that the group as a whole is balanced."

Environmentalist: "I can live with that as long as we both admit that a diverse group of scientists may never agree on the final answer and that political appointees like the EPA administrator must have the last word. And while we are on that subject, let's talk funding. It does no one any good for the EPA to crawl along, taking forever to make decisions. How about funding the agency under the model that applies to the Nuclear Regulatory Commission, which raises 90% of its budget through licensing fees?"

Industrialist: "That will be a very hard sell for me with my fellow executives. The only way to get it done would be to set strict deadlines in the laws for EPA action. If we are going to pay, we want the agency to produce." **Environmentalist**: "You'll get no problems from us on that, as long as the money is adequate. We invented deadlines, remember? One final sticking point—we won't trade liability under any circumstances; it's the ultimate safety net for the bad actors you know exist in industry."

Industrialist, starting to rise: "Let's talk about that problem tomorrow. It could be a deal breaker."

E. If Left Alone, the Protector Agencies Could Accomplish Great Things

When my students and I finish our study of the contemporary regulatory system, they express a pungent mixture of cynicism and disgust. They pay good money to get a degree that gives them entry to the policymaking world, but they have just spent a great deal of time examining government's worst problems up close. Sometimes, in an effort to restore perspective on how much worse matters could be if we did not have a regulatory system, however dysfunctional it may be, I show them a silent slide show of land-scapes from China—picture upon picture of people wearing face masks and peddling their bicycles down urban streets against the backdrop of thick smog that turns the sky gray, rivers choked with garbage where fishermen in isolated scows tend their lines, factories in rural landscapes spewing black

clouds of grit, or children in barren fields with their faces covered by perpetual, airborne grime. 109

An article by a multidisciplinary team in the March 27, 2010, edition of the top British medical journal *The Lancet* estimates total premature deaths caused annually by environmental pollution in China at 2.4 million. The authors distinguish between "traditional risks" such as poor sanitation and indoor air pollution from combustion of coal, wood, and crop residue and "modern risks" associated with industrialization and urbanization, including outdoor air pollution and industrial waste.¹¹¹ At the moment, the article makes clear, the Chinese people are suffering from the worst of both categories, with the prosperity of industrialization wreaking havoc with the environment in the cities and failing to bring enough to rural areas to clean up the water or put chimneys and other ventilation on crude housing. 112 Some have estimated that the pollution rate is unsustainable and that it could cost China as much as 2% of its GDP to clean up this legacy if it is motivated by even rudimentary cost/benefit analysis: that is, the costs of cleaning up balanced against the direct benefits of avoiding the losses in productivity, crop degradation, and the rising expense of health care attributable to such contamination. 113

For American workers bitter about the export of manufacturing jobs to China, 114 pointing out the grim truth of what it is like to live in that country would only inspire anger and resentment. Shrewd campaigners against regulation count on this reaction. Yet China's decisions about all these issues are out of our control, except at the margins, and globalization is definitely here to stay. Better, then, to end this essay with a backward look at what the regulatory system here has been able to accomplish over all these years, despite funding shortfalls, political interference, outmoded laws, and eviscerating attacks on its human actors. The best-documented evidence concerns the Clean Air Act.

An elaborate cost-benefit analysis conducted by the EPA estimates that air pollution control regulations saved 164,300 adult lives in 2010, and will save 237,000 lives by 2020.¹¹⁵ These requirements saved 13 million days of

¹⁰⁹ For those who think I exaggerate, please see *Amazing Pictures, Pollution in China*, China Hush (Oct. 21, 2009), http://www.chinahush.com/2009/10/21/amazing-pictures-pollution-in-china/ (on file with the Harvard Law School Library).

¹¹⁰ Zhang et al., supra note 3, at 1110.

¹¹¹ Id.

¹¹² Id. at 1110–11.

¹¹³ Glenys Sim et al., *China Is Set to Lose 2% of GDP Cleaning Up Decades of Pollution*, Вьоомвекс, Sept. 17, 2010, http://www.bloomberg.com/news/2010-09-16/china-set-to-lose-2-of-gdp-fighting-pollution-as-doing-nothing-costs-more.html (on file with the Harvard Law School Library).

¹¹⁴ Their concerns are no fantasy. See, e.g., Robert E. Scott, Costly Trade with China: Millions of U.S. Jobs Displaced with Net Job Loss in Every State, Econ. Pol'y Inst. (2007), http://www.epi.org/publications/entry/bp188/ (on file with the Harvard Law School Library).

115 See U.S. EPA, The Benefits and Costs of the Clean Air Act from 1990 to 2020,

at 5-25, tbl. 5-26 (2011), available at http://www.epa.gov/oar/sect812/feb11/fullreport.pdf.

work-loss and 3.2 million days of school-loss in 2010.¹¹⁶ By 2020, they will save 17 million work-loss days and 5.4 million school-loss days.¹¹⁷ The report estimates that the economic value of Clean Air Act regulatory controls will be \$2 trillion annually by 2020; costs of compliance in that year will be \$65 billion.¹¹⁸

In compiling these figures, the EPA used extraordinarily conservative assumptions regarding regulatory benefits. For example, the EPA assumes that a non-fatal heart attack in a person 0–24 years old is worth only \$84,000 and an emergency room visit to treat an asthma attack is worth only \$369 per incident.¹¹⁹ All cost-benefit analyses performed by the government suffer from such chronic low-balling of benefits, and many experts question the methodology of monetizing lives saved and injuries avoided on ethical, practical, and legal grounds.¹²⁰ When taken with a grain of salt as a rough demonstration of what regulation has accomplished, however, these figures are heartening, to say the least.

So next time you hear pundits excoriating regulation, think twice. The lives saved may well be their own.

¹¹⁶ Id.

¹¹⁷ *Id*.

¹¹⁸ Id. at 7-8, tbl. 7-4.

¹¹⁹ Id. at 5-18, 5-19.

¹²⁰ See, e.g., Frank Ackerman & Lisa Heinzerling, Priceless: On Knowing the Price of Everything and the Value of Nothing (2004) (raising the ethical and practical problems with this methodology); David M. Driesen, Is Cost-Benefit Neutral?, 77 U. Colo. L. Rev. 335 (2006) (demonstrating empirically that cost-benefit analysis is one of the factors that weakens the protectiveness of pending rules); Thomas O. McGarity & Ruth Ruttenberg, Counting the Cost of Health, Safety, and Environmental Regulation, 80 Tex. L. Rev. 1997 (2002) (concluding that cost estimates are provided by regulated industries and are generally not based on empirical analysis); Richard W. Parker, Grading the Government, 70 U. Chi. L. Rev. 1345 (2003) (rebutting arguments made by proponents of the methodology).