

REGULATION AND DISTRIBUTION

Richard L. Revesz[†]

This Article tackles a question that has vexed the administrative state for the last half century: how to seriously take account of the distributional consequences of regulation. The academic literature has largely accepted the view that distributional concerns should be moved out of the regulatory domain and into Congress' tax policy portfolio. In doing so, it has overlooked the fact that tax policy is ill suited to provide compensation for significant environmental, health, and safety harms. And the congressional gridlock that has bedeviled us for several decades makes this enterprise even more of a non-starter.

The focus on negative distributional consequences has become particularly salient recently, playing a significant role in the 2016 presidential election and threatening important, socially beneficial regulatory measures. For example, on opposite sides of the political spectrum, environmental justice groups and coal miner interests have forcefully opposed the regulation of greenhouse gases through flexible regulatory tools, in California and at the federal level, respectively.

The time has come to make distributional consequences a core concern of the regulatory state; otherwise, future socially beneficial regulations could well encounter significant roadblocks. The success of this enterprise requires significant institutional changes in the way in which distributional issues are handled within the Executive Branch. Every President from Ronald Reagan to Barack Obama has made cost-benefit analysis a key feature of the regulatory state as a result of the role played by the Office of Information and Regulatory Affairs, and the Trump Administration is keeping that structure in place. In contrast, executive orders addressing distributional concerns have languished because of the lack of a similar enforcement structure within the Executive Branch. This Article provides the blueprint for the establishment of a standing, broadly constituted interagency body charged with addressing serious negative consequences of regulatory measures on particular groups. Poor or minority communities already disproportionately burdened by

[†] Lawrence King Professor of Law and Dean Emeritus, New York University School of Law. The generous financial support of the Filomen D'Agostino and Max Greenberg Research Fund at NYU Law School is gratefully acknowledged. A prior version of this Article was presented at a faculty workshop at New York University School of Law and I benefitted greatly from the discussion and for the additional comments of Barry Adler, Rachel Barkow, Vicki Been, Bethany Davis Noll, Barry Friedman, Mark Geistfeld, Denise Grab, Samuel Issacharoff, David Kamin, Mitchell Kane, Daryl Levinson, Rick Pildes, Peter Schuck, Catherine Sharkey, and Katrina Wyman. Elizabeth Aronson, Megan Brattain, Alex Duran, Natalie Jacewicz, Nicholas Krafft, Kelly Lester, Pablo Rojas, and William Taylor provided excellent research assistance.

environmental harms and communities that lose a significant portion of their employment base are paradigmatic candidates for such action.

INTRODUCTION.....	2
I. THE ORTHODOX VIEW.....	11
A. <i>Common Law Rules</i>	12
B. <i>Regulatory Policy</i>	15
C. <i>Influence</i>	17
II. CHALLENGING THE ORTHODOXY.....	18
A. <i>Compensating Non-Monetary Harms</i>	19
B. <i>Gridlock in Congress</i>	24
III. INEFFECTIVE APPROACHES TO ADDRESSING DISTRIBUTIONAL CONCERNS...29	
A. <i>Environmental Justice Measures</i>	29
1. <i>Title VI</i>	30
2. <i>Executive Orders on Environmental Justice and Distribution</i>	36
B. <i>Coal Miner Compensation</i>	43
1. <i>Clean Air Act Amendments of 1990</i>	44
2. <i>POWER Initiative and POWER+ Plan</i>	49
IV. EMPOWERING THE EXECUTIVE BRANCH.....	53
A. <i>Institutional Capabilities of the President</i>	53
1. <i>Centralization, Politicization, and Pooling Powers</i>	54
2. <i>Spending Power</i>	58
3. <i>Coordinated Executive Policy</i>	61
B. <i>Addressing Distributional Inequities</i>	62
1. <i>Trigger</i>	63
2. <i>The POWER Initiative and IWG as Models for Action and Structure</i>	66
CONCLUSION.....	71

INTRODUCTION

The dominant academic view with respect to regulatory policy holds that individual regulations should not concern themselves with questions of distribution. Instead, rules should be designed to maximize net benefits—their benefits minus their costs. Doing so expands the size of the proverbial pie, which, other things being equal, is clearly desirable. The academic support for this view is generally traced to an influential book by Professors Louis Kaplow and Steven Shavell.¹

¹ See LOUIS KAPLOW & STEVEN SHAVELL, *FAIRNESS VERSUS WELFARE* (2002). For earlier work, see Louis Kaplow & Steven Shavell, *Fairness Versus Welfare* 114 HARV. L. REV. 961 (2001) [hereinafter

Perhaps the key component of federal regulatory policy reflects this view. Since 1981, administrations of both parties have operated under Executive Orders requiring that major federal rules be justified by reference to cost-benefit analysis. The Executive Order currently in effect, promulgated by President Clinton in 1993, states that distribution must be taken into account. But distribution has never been an important component of the administration of this Order, under which the Office of Information and Regulatory Affairs reviews significant rules. Its inquiry, instead, focuses on whether the benefits of the rule “justify” its costs. While President Obama promulgated an additional Executive Order that deals more explicitly with distributional issues, it has had limited effect. And none of the regulatory pronouncements of the Trump Administration have dealt with distributional issues in a general way, though they have focused significant attention on the plight of coal miners and others who allegedly lost their jobs as a result of regulatory initiatives.

The view that regulation should concern itself with increasing the size of the pie (maximizing net benefits), and not the size of each slice (distribution), should not be equated with lack of concern for distribution. In arguing that the efficiency of regulations should not be compromised for distributional concerns, Kaplow and Shavell do not claim that distributional concerns are unimportant.² Instead, they maintain that whatever preferences our society might have for distribution should best be addressed through the income tax system, not the regulatory process. Compromising the efficiency of legal rules, the argument goes, is less desirable than promoting distributional goals through the tax system,³ which can be done in a manner that gives rise to less serious undesirable distortions.⁴

Because regulations are promulgated by administrative agencies but tax reform needs to be done by Congress,⁵ the dominant view has an important institutional corollary.

Kaplow & Shavell, *Fairness*]; Louis Kaplow & Steven Shavell, *Should Legal Rules Favor the Poor? Clarifying the Role of Legal Rules and the Income Tax in Redistributing Income*, 29 J. LEGAL STUD. 821 (2000) [hereinafter Kaplow & Shavell, *Clarifying the Role*]; Louis Kaplow & Steven Shavell, *Why the Legal System Is Less Efficient than the Income Tax in Redistributing Income*, 23 J. LEGAL STUD. 667 (1994) [hereinafter Kaplow & Shavell, *Why the Legal System*].

² See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 667 (responding to criticisms of the economic approach to legal rules by pointing out that distribution could be achieved through the income tax system instead).

³ See *id.* (saying “redistribution through legal rules offers no advantage over redistribution through the income tax system and typically is less efficient”).

⁴ See *id.* at 667–68.

⁵ See U.S. CONST. art. I, § 8, cl. 1 (declaring “Congress shall have the power to lay and collect taxes”). See also U.S. DEP’T OF TREASURY, WRITING AND ENACTING TAX LEGISLATION (last updated Dec. 5, 2010), available at <https://www.treasury.gov/resource-center/faqs/Taxes/Pages/writing.aspx> (saying all legislation concerning taxes must originate in the House of Representatives); Michael Fitts & Robert Inman, *Controlling Congress: Presidential Influence in Domestic Fiscal Policy*, 80 GEO. L.J. 1737, 1756–57 (1992) (summarizing the President’s ability to influence domestic fiscal policy and finding both Congress-related: either through veto power or through informal influence over Congress); Sheldon D. Pollack, *A New Dynamics of Tax Policy*, 12 AM. J. TAX. POL’Y 61, 63–64 (1995) (saying tax policy is made “within the confines of the congressional tax committees”); Barack Obama, President of the U.S., Remarks by the President on the Economy (Apr. 5, 2016), <https://www.whitehouse.gov/the-press-office/2016/>

It implies that the Executive branch, where the bulk of administrative agencies reside, should be in the business of increasing the sizes of pies, whereas Congress should be in charge of figuring out the sizes of the respective slices.

This Article challenges the dominant view, arguing that it suffers from two serious practical shortcomings: one conceptual and the other political. As to the first, the largest benefit of health and safety regulation is the prevention of premature deaths.⁶ But the resulting loss of life years, which in some cases happens from risks of instantaneous deaths and in other cases comes from latent harms, such as those posed by carcinogens, is not the type of loss that traditional income tax regimes are well suited to compensate. Indeed, they are not sufficiently correlated with the types of variables, primarily income, on which tax regimes are based.⁷

On the political front, distribution through the tax system is premised on the notion that Congress will in fact act to provide the necessary distributional adjustments to the tax system. But we now live in a world of congressional gridlock, where significant policy decisions once made in Congress are now done through administrative action.⁸

We are also witnessing a time in which, across both sides of the political spectrum, groups adversely affected by government action have been able to organize effectively to mount frontal challenges, based on distributional arguments, against welfare-enhancing regulations. Take, for example, the case of the Trans-Pacific Agreement (TPP), which most economists regard as highly desirable for the U.S. economy.⁹ One feature of the agreement, though, is that it would lead to the loss of certain U.S. jobs.¹⁰ The plight of these displaced

04/05/remarks-president-economy-0 [perma.cc/DPC8-ZHBM] (saying that while Treasury Department has some control over closing tax loopholes, only Congress can close these loopholes for good).

⁶ Agencies often justify regulations through the number of premature deaths prevented. *See, e.g.*, U.S. ENVTL. PROTECTION AGENCY, BENEFITS AND COSTS OF THE CLEAN AIR ACT AMENDMENTS OF 1990, FACT SHEET (updated Apr. 2011), <https://www.epa.gov/sites/production/files/2015-07/documents/factsheet.pdf> (hereinafter EPA BCA) (estimating more than 160,000 premature deaths prevented as of 2010 by emissions control programs resulting from the 1990 amendments to the Clean Air Act).

⁷ *See infra* text accompany notes 93–114.

⁸ *See* Josh Blackman, *Gridlock*, 130 HARV. L. REV. 241, 265–66 (2016) (noting that in the current gridlocked system, executive agencies can take actions Congress cannot); Jody Freeman & David B. Spence, *Old Statutes, New Problems*, 163 U. PA. L. REV. 1, 6 (2014) (explaining that gridlock and polarization have left agencies to deal with policy problems Congress cannot); William G. Howell & David E. Lewis, *Agencies by Presidential Design*, 64 J. POL. 1095, 1102 (2002) (explaining that presidents frequently establish agencies because Congress is mired in gridlock).

⁹ PETER A. PETRI & MICHAEL G. PLUMMER, PETERSON INST. FOR INT’L ECON., THE ECONOMIC EFFECTS OF THE TRANS-PACIFIC PARTNERSHIP: NEW ESTIMATES 1 (2016), https://piee.com/system/files/documents/wp16-2_0.pdf (naming the United States the “largest beneficiary of the TPP” and estimating that real incomes in the United States would increase by \$131 billion); WORLD BANK, POTENTIAL IMPLICATIONS OF THE TRANS-PACIFIC PARTNERSHIP 1 (2016), <http://pubdocs.worldbank.org/en/287761451945044333/Global-Economic-Prospect-2016-Highlights-Trans-Pacific-Partnership.pdf> (estimating that NAFTA countries’ GDPs would improve by 0.6 percent as a result of the TPP); Jeffrey H. Bergstrand, *Should TPP Be Formed? On the Potential Economic, Governance, and Conflict-Reducing Impacts of the Trans-Pacific Partnership Agreement*, 20 E. ASIAN ECON. REV. 279, 279 (2016) (concluding that the TPP should be formed because of its benefits for the United States).

¹⁰ For example, despite overall economic benefits, the TPP is predicted to dampen job growth in the United States manufacturing sector. *See* IAN F. FERGUSSON & BROCK R. WILLIAMS, CONG. RES. SERV., THE

workers played a significant role in the 2016 election, and both major candidates eventually indicated their opposition to the TPP.¹¹ These concerns led President Trump to withdraw from the agreement shortly after taking office.¹² Similar concerns had led him during the campaign to rail against the North American Free Trade Agreement (NAFTA),¹³ which has long been considered as beneficial to the U.S. economy.¹⁴

Distributional concerns also played a significant role in the defeat of a 2016 Washington state initiative to impose a state-wide carbon tax—the first in the country—in order to reduce greenhouse gas emissions.¹⁵ Carbon taxes are generally regarded as a desirable way to control greenhouse gases,¹⁶ and support for such control was widespread in the state.¹⁷ The dispute centered on how the tax proceeds would be used. The initiative contemplated a reduction in existing taxes, including the sales tax.¹⁸ But environmental justice advocates sought instead to use a significant portion of the revenues to aid communities that had been negatively affected by pollution and climate change.¹⁹ The

TRANS-PACIFIC PARTNERSHIP (TPP): KEY PROVISIONS AND ISSUES FOR CONGRESS i (2016), <https://fas.org/sgp/crs/row/R44489.pdf>; PETRI & PLUMMER, *supra* note 9, at 13.

¹¹ See Amy Chozyck, *Hillary Clinton Opposes Obama's Trans-Pacific Trade Deal*, N.Y. TIMES (Oct. 7, 2015), <https://www.nytimes.com/politics/first-draft/2015/10/07/hillary-clinton-opposes-obamas-trans-pacific-trade-deal/>; Cristiano Lima, *Trump Calls Trade Deal 'a Rape of Our Country'*, POLITICO (June 28, 2016), <http://www.politico.com/story/2016/06/donald-trump-trans-pacific-partnership-224916>.

¹² See Peter Baker, *Trump Abandons Trans-Pacific Partnership, Obama's Signature Trade Deal*, N.Y. TIMES (Jan. 23, 2017), <https://www.nytimes.com/2017/01/23/us/politics/tpp-trump-trade-nafta.html>.

¹³ See Neil Irwin, *Donald Trump Trashes NAFTA. But Unwinding It Would Come at a Huge Cost*, N.Y. TIMES (Oct. 3, 2016), <https://www.nytimes.com/2016/10/04/upshot/donald-trump-trashes-nafta-but-unwinding-it-would-come-at-a-huge-cost.html>.

¹⁴ See Mary E. Burfisher et al., *The Impact of NAFTA on the United States*, 15 J. ECON. PERSP. 125, 141 (2001) (concluding that as anticipated, NAFTA had small but positive effects on the U.S. economy and large positive effects on Mexico); Carla A. Hills, *NAFTA's Economic Upsides: The View from the United States*, 93 FOREIGN AFF. 122, 122 (2014) (referring to NAFTA's economic "success"); Irwin, *supra* note 13 (reporting that the view among economists is that NAFTA has raised incomes overall in the United States, despite costing the country thousands of manufacturing jobs).

¹⁵ See Lewis Kamb, *Washington Voters Reject Initiative to Impose Carbon Tax on Fossil Fuels*, SEATTLE TIMES (Nov. 8, 2016), <http://www.seattletimes.com/seattle-news/politics/carbon-emissions-tax-initiative-732/>.

¹⁶ See Kevin A. Hassett et al., *The Incidence of a U.S. Carbon Tax: A Lifetime and Regional Analysis* 15 (Nat'l Bureau of Econ. Research, Working Paper No. 13554, 2007) (concluding that the regressive effects of carbon tax are overstated); Gary M. Lucas, *Behavioral Public Choice and the Carbon Tax*, 2017 UTAH L. REV. 115, 121 (observing that "[o]n the political right and left, economists generally favor a carbon tax as the primary policy tool for addressing global warming") (2017); Gilbert E. Metcalf & David Weisbach, *The Design of a Carbon Tax*, 33 HARV. ENVTL. L. REV. 499, 556 (2009) (arguing that a well designed carbon tax could cover most U.S. emissions through low tax rates on a broad tax base).

¹⁷ According to a poll shortly before the state voted on the measure, 42 percent of Washington residents supported the carbon tax, while 37 percent opposed it. See Editorial, *Washington State's Ambitious Carbon Tax Proposal*, N.Y. TIMES (Oct. 24, 2016), <https://www.nytimes.com/2016/10/24/opinion/washington-states-ambitious-carbon-tax-proposal.html>. The proposal was backed by climate scientists and the state's Audubon Society chapter. *Id.*

¹⁸ Initiative Measure No. 732 § 1 (2016), available at https://www.sos.wa.gov/_assets/elections/initiatives/FinalText_779.pdf (offsetting the carbon tax with a reduction in the state sales tax and a reduction in the occupation tax on manufacturers).

¹⁹ See Shonkoff et al., *The Climate Gap: Environmental Health and Equity Implications of Climate Change and Mitigation Policies in California—A Review of the Literature*, 109 CLIMATE CHANGE (SUPP. 1) S485, S494 (2011) (advocating for revenues from cap-and-trade to be used to offset the regressive aspects of

environmental justice opposition, together with that of the fossil fuel industry ultimately doomed the measure.²⁰

The unusual alliance that opposed the Washington carbon tax illustrates the connection between the demands of two interest groups that have long been regarded as occupying diametrically opposed positions on the political spectrum: the environmental justice movement on the one hand,²¹ and workers in polluting industries on the other. The environmental justice movement aligns itself on the progressive side of the political spectrum and is generally supportive of more protective regulatory measures.²² In contrast, the plight of workers in polluting industries has been a rallying cry for the anti-regulatory right,²³ as perhaps best exemplified by President Trump's repeated statements about putting coal miners back to work.²⁴ Nonetheless, as the fight over the Washington carbon tax illustrates, the actions of these two groups sometimes coalesce.

This phenomenon is well illustrated by the opposition to what are perhaps the two most salient recent environmental controversies: the extension of the California cap-and-

the program, for example, by investing in public transit in areas hard hit by air pollution); Bill Corcoran & Byron Gudiel, *Column: Washington's Carbon Tax Doesn't Address Environmental Justice*, PBS NEWSHOUR (Nov. 8, 2016), <http://www.pbs.org/newshour/making-sense/column-washingtons-carbon-tax-doesnt-address-environmental-justice/> (arguing, on behalf of the Sierra Club and Communities for a Better Environment, that the carbon pricing plan should be rejected in part because none of the revenues from pricing carbon would be used to invest in green infrastructure or help "communities on the frontlines of climate change").

²⁰ See Editorial, *supra* note 17; Kamb, *supra* note 15.

²¹ For primers on the environmental justice movement, see ROBERT D. BULLARD, *DUMPING IN DIXIE: RACE, CLASS, AND ENVIRONMENTAL QUALITY* (1990); Vicki Been, *Locally Undesirable Land Uses in Minority Neighborhoods: Disproportionate Siting or Market Dynamics?*, 103 YALE L.J. 1383 (1994); Richard J. Lazarus, *Pursuing "Environmental Justice": The Distributional Effects of Environmental Protection*, 87 NW. U. L. REV. 787 (1993).

²² See Lazarus, *supra* note 21, at 814 (explaining that environmental justice calls for closing gaps in environmental statutes, for example, by focusing not only on the overall pollution of a metropolitan area, but on toxic hotspots in the city).

²³ See INST. FOR POLICY INTEGRITY, *THE REGULATORY RED HERRING 2* (2012) (discussing criticisms in the wake of the 2008 recession that regulation causes unemployment); Jean Chemnick, *Sen. Collins to Offer Bill to Delay "Boiler MACT,"* E&E DAILY (July 19, 2011), <https://www.eenews.net/eedaily/stories/1059951736> (reporting that Senator Collins introduced a bill to delay an EPA regulation because she believed the regulation threatened manufacturing jobs); Rep. Fred Upton, *Declaring War on the Regulatory State*, WASH. TIMES (Oct. 18, 2010), <https://upton.house.gov/news/documentsingle.aspx?DocumentID=212358> (referring to regulations from the EPA as "smothering the economy" and arguing that regulations send jobs overseas).

²⁴ Immediately after the election, President Trump promised: "I will cancel job-killing restrictions on the production of American energy, including shale energy and clean coal, creating many millions of high paying jobs." Transition 2017, *A Message from President-Elect Donald J. Trump*, YOUTUBE (Nov. 21, 2016), https://www.youtube.com/watch?v=7xX_KaStFT8. And, before signing his Executive Order to Create Energy Independence, President Trump said to coal miners present at the signing: "Come on, fellas. Basically, you know what this is? You know what it says, right? You're going back to work." Press Release, The White House, Remarks by President Trump at Signing of Executive Order to Create Energy Independence (Mar. 28, 2017), <https://www.whitehouse.gov/the-press-office/2017/03/28/remarks-president-trump-signing-executive-order-create-energy>.

trade program²⁵ and the federal Clean Power Plan,²⁶ both of which seek to reduce greenhouse gas emissions through flexible regulatory tools, including cap-and-trade schemes.²⁷ The main opposition to the California cap-and-trade program came from the environmental justice movement.²⁸ In contrast, the sustained invocation of the plight of coal miners provided the impetus for making opposition to the Clean Power Plan, a

²⁵ A.B. 398, 2017 Assemb., Reg. Sess. (Cal. 2017). In 2006, California passed the California Global Warming Solutions Act of 2006, directing the California Air Resources Board (ARB) to design a program to reduce overall state greenhouse gas emissions to 1990 levels by 2020. ARB released its finalized Scoping Plan in 2009, which featured a state-wide carbon cap-and-trade market as the cornerstone of its overall program—covering approximately 85% of the California carbon market. *See* CALIFORNIA AIR RESOURCES BOARD, OVERVIEW OF ARB EMISSIONS TRADING PROGRAM (2015), https://www.arb.ca.gov/cc/capandtrade/guidance/cap_trade_overview.pdf. There was uncertainty as to what would happen beyond 2020, and A.B. 398 officially extended and modified the program. *See* Melanie Mason & Chris Megerian, *California Legislature Extends State’s Cap-and-Trade Program in Rare Bipartisan Effort to Address Climate Change*, L.A. TIMES (July 17, 2017), <http://www.latimes.com/politics/la-pol-ca-california-climate-change-vote-republicans-20170717-story.html>.

²⁶ Clean Power Plan, 80 Fed. Reg. 205, 64662 (Oct. 23, 2015). The Clean Power Plan (CPP) established carbon emission performance rates for both coal fired and gas fired power plants, established State-specific carbon reduction goals based on those performance rates as applied to each State’s electricity generation fleet and profile, and left implementation details to the States. Clean Power Plan, 80 Fed. Reg. at 64,820 (Oct. 23, 2015). The Obama administration estimated the CPP would cut national carbon emissions 32% from 2005 levels by 2030. Press Release, The White House, Fact Sheet: President Obama to Announce Historic Carbon Pollution Standards for Power Plants (Aug. 3, 2015), <https://obamawhitehouse.archives.gov/the-press-office/2015/08/03/fact-sheet-president-obama-announce-historic-carbon-pollution-standards>. The Supreme Court stayed implementation of the Final Rule in February 2016, pending resolution of legal challenges, and the D.C. Circuit later has placed this litigation in abeyance while the agency reconsiders it. Juan Carlos Rodriguez, *D.C. Circ. Pauses CPP Litigation for 2 More Months*, LAW360 (Aug. 8, 2017), <https://www.law360.com/articles/952545/dc-circ-pauses-cpp-litigation-for-2-more-months>.

²⁷ *See* Richard L. Revesz et al., *Familiar Territory: A Survey of Legal Precedents for the Clean Power Plan*, 46 ENVTL. L. REP. 10,190, 10,190—93 (2016) (arguing that the Clean Power Plan’s flexible design is supported by substantial precedents throughout the Clean Air Act’s history); Ann E. Carlson, *The Current State of Environmental Law: Part I: Essay: Regulatory Capacity and State Environmental Leadership: California’s Climate Policy*, 24 FORDHAM ENVTL. L. REV. 64 (2013) (arguing that California was able to pass its ambitious cap-and-trade program and other environmental regulations because its state agencies had the historical opportunity to develop “extraordinary sophistication and capacity and real political agility.”)

²⁸ *See The California Environmental Justice Movement’s Declaration in Support of Carbon Pricing Reform in California* (2017), https://www.arb.ca.gov/cc/ejac/meetings/01182017/20170112ca_ej_declaration_on_carbon_pricing_reform.pdf; Press Release, California Environmental Justice Alliance, California Environmental Justice Alliance Announces Opposition to Cap and Trade Extension Deal Rife with Industry Give Aways, (July 14, 2017), <http://caleja.org/wp-content/uploads/2015/10/AB398PressRelease.pdf>.

These groups also opposed the initial cap-and-trade program. *See, e.g., The California Environmental Justice Movement’s Declaration on Use of Carbon Trading Schemes to Address Climate Change* (2008), https://www.arb.ca.gov/cc/ejac/meetings/01182017/20170112ca_ej_declaration_on_carbon_pricing_reform.pdf (declaring support for measures “only if they directly and significantly reduce emissions, require the shift away from use of fossil fuels and nuclear power, and do not cause or exacerbate the pollution burden of poor communities of color in the United States and developing nations around the world”); ENVIRONMENTAL JUSTICE ADVISORY COMMITTEE, *Recommendations and Comments of the Environmental Justice Advisory Committee on the Implementation of the Global Warming Solutions act of 2006 (AB 32)* 8 (Oct. 2008), https://www.arb.ca.gov/cc/ejac/ejac_comments_final.pdf (“It is market-based decisions, within a framework of structural racism in planning and zoning decisions, that has created the disparate impact of pollution that exists today; relying on that same mechanism as the ‘solution’ will only deepen the disparate impact.”).

centerpiece of President Obama’s environmental accomplishments,²⁹ a rallying cry of the Republican rhetoric during the 2016 presidential election cycle.³⁰

Admittedly, the two groups had different end goals. California environmental justice advocates believed that if their opposition succeeded, the alternative outcome would be equally stringent regulatory caps on greenhouse gases implemented through less flexible regulatory tools, which might have the effect of reducing the concentrations of toxic co-pollutants,³¹ particularly around some industrial facilities with disproportionately high poor and minority populations.³² In contrast, the miner-inspired opposition to the Clean

²⁹ See Dan Farber, *Obama’s Remarkable Environmental Achievements*, LEGALPLANET (Nov. 2, 2016), <http://legal-planet.org/2016/11/02/obamas-remarkable-environmental-achievements/>.

³⁰ Throughout his campaign, Trump promised to end the “war on coal and the war on miners.”³⁰ Coral Davenport, *Donald Trump, in Pittsburgh, Pledges to Boost Both Coal and Gas*, N.Y. TIMES (Sept. 22, 2016), <https://www.nytimes.com/2016/09/23/us/politics/donald-trump-fracking.html>; see Alex Swoyer, *Trump Campaign: ‘Hillary’s War on Coal is Wrong for American Workers,’* BREITBART (Aug. 10, 2016), <http://www.breitbart.com/2016-presidential-race/2016/08/10/trump-campaign-hillarys-war-coal-wrong-american-workers/>. More vividly, during a rally in West Virginia in May 2016, after putting on a hard hat and mimicking shoveling coal, Trump declared, “For those miners, get ready, because you’re going to be working your a** off.” *Trump on the Economy in Coal Country*, N.Y. TIMES (May 6, 2016), <https://www.nytimes.com/video/us/elections/100000004389874/trump-on-the-economy-in-coal-country.html>.

³¹ Greenhouse gases are global pollutants, meaning that they mix relatively uniformly in the atmosphere and their harm is not correlated with the location of their emissions. While carbon dioxide, the primary greenhouse gas, causes indirect harm through its contribution to climate change, localized carbon dioxide emissions do not directly negatively impact human health. Greenhouse gases are often emitted along with varying levels of co-pollutants, including criteria and toxic air pollutants. See RICHARD R. REVESZ & MICHAEL A. LIVERMORE, *RETAKING RATIONALITY: HOW COST-BENEFIT ANALYSIS CAN BETTER PROTECT THE ENVIRONMENT AND OUR HEALTH* 63–35 (2008).

³² A September 2016 study found that while overall state greenhouse gas emissions decreased since cap-and-trade kicked off in 2013, several industry sectors’ greenhouse gas emissions actually increased from the 2011-12 to 2013-14 period. LARA J. CUSHING ET AL., *A PRELIMINARY ENVIRONMENTAL EQUITY ASSESSMENT OF CALIFORNIA’S CAP-AND-TRADE PROGRAM* (2006), https://dornsife.usc.edu/assets/sites/242/docs/Climate_Equity_Brief_CA_Cap_and_Trade_Sept2016_FINAL2.pdf. Of 82 electric generation facilities, for example, the majority increased their emissions. *Id.* at 6. The study also confirmed that facilities that emit localized greenhouse gases are more likely to be located in disadvantaged communities, and that the largest greenhouse gas emitters are correlated with particulate matter emissions (a criteria pollutant). *Id.* at 2, 4. The study was not able to track changes in co-pollutant emissions because of differences in how greenhouse gas and co-pollutant data is gathered—California requires greenhouse gases be reported every year, while conventional pollutants only need to be reported every few years. Debra Kahn, *Does Cap and Trade Increase Air Pollution? It May Be Too Soon to Tell*, E&E REP., Sept. 20, 2016, <http://caleja.org/wp-content/uploads/2016/09/ClimateWire.092016.pdf>. Rather, the study presents a correlation pattern and a snapshot in time, and assumes that cross-sectional correlation would hold over time. *Id.*

Others have criticized the environmental justice “hotspot” argument as it relates to cap-and-trade programs. Todd Schatzki and Robert Stavins argue that a number of factual predicates would have to align for a greenhouse gas cap-and-trade program to cause co-pollutant hotspots, and that empirically, many of these predicates are not met. For example, they point out the highly variable relationships between greenhouse gas and co-pollutant emissions across different types of emissions sources, and between mitigation strategies to reduce greenhouse gas emission and those to reduce co-pollutant emissions. For example, power and manufacturing facilities collectively contribute 34% of state greenhouse gas emissions, but less than 5% of total criteria pollutant emissions. Given this complexity and variability, Schatzki and Stavins argue that attempting to indirectly regulate co-pollutants through climate policy is inefficient and likely to be less effective than direct, traditional pollution controls. TODD SCHATZKI & ROBERT STAVINS,

Power Plan seeks to derail greenhouse gas limits on existing power plants altogether.³³ Nonetheless, they both share strong concerns about the distributional consequences of the respective regulatory measures.

The environmental justice opponents of the extension of the California greenhouse gas program ultimately did not prevail,³⁴ though they were able to obtain some concessions in the final legislation.³⁵ The jury is still out on the ultimate fate of the Clean Power Plan.³⁶ But regardless of the final outcomes, one must reckon with the force of the distributional-based opposition to these programs. Ignoring the pleas of communities that disproportionately suffer serious harms is likely, in the future, to derail important welfare-enhancing regulations.

Unfortunately, the current tools are inadequate to the task of evaluating the significance of distributional claims and determining how to remedy those deemed worthy of attention. Our regulatory system has grappled for almost half a century with the question of how to deal with regulations that displace workers in communities where there are few other employment options.³⁷ And for a quarter century, it has tried, in fits and starts, to give meaning to environmental justice goals.³⁸ The respective results, however, have been far from encouraging.³⁹

One significant reason for the failure of distributional efforts is institutional. A good illustration of the problem is the disparate fates of three executive orders promulgated by

ADDRESSING ENVIRONMENTAL JUSTICE CONCERNS IN THE DESIGN OF CALIFORNIA'S CLIMATE POLICY (2009), http://www.analysisgroup.com/uploadedFiles/Publishing/Articles/Environmental_Justice.pdf. See also David E. Adelman, *The Collective Origins of Toxic Air Pollution: Implications for Greenhouse Gas Trading and Toxic Hotspots*, 88 IND. L.J. 276, 317 (2013) (finding that in California, industrial sources contributed a relatively small amount to overall state toxic emissions—about thirteen percent of the toxics emitted statewide in 2005—and only two percent of the overall cancer risk—far less than the emissions of the transportation sector.)

³³ See, e.g., Terry Jarrett, *Good Riddance to Obama's Job-killing 'Clean Power Plan*, D. CTY. DAILY TIMES, Apr. 9, 2017, <http://www.delcotimes.com/article/DC/20170409/NEWS/170409683>.

³⁴ A.B. 398, 2017 Assemb., Reg. Sess. (Cal. 2017).

³⁵ A.B. 398 was passed with a companion bill, A.B. 617, which increases monitoring of pollutants in disadvantaged communities and imposes stricter enforcement penalties. Tony Barboza and Chris Megerian, *Questions Remain as Gov. Brown Signs Legislation to Address Neighborhood-Level Air Pollution*, L.A. TIMES (July 26, 2017), <http://www.latimes.com/local/lanow/la-me-ln-air-pollution-law-20170725-story.html>

³⁶ In 2016, the Supreme Court stayed implementation of the final Clean Power Plan pending resolution of legal challenges. The D.C. Circuit Court has twice delayed the litigation, most recently in August 2017. See Rodriguez, *supra* note 26. In March 2017, President Trump issued an Executive Order ordering immediate review of the Clean Power Plan. Exec. Order No. 13,783, 82 Fed. Reg. 16093 (Mar. 28, 2017). On October 16, 2017, EPA published the proposed repeal of the Clean Power Plan. See Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 82 Fed. Reg. 48,035 (Oct. 16, 2017). Comments are due on April 26, 2018. See 83 Fed. Reg. 4620 (Feb. 1, 2018). Any repeal or revision of the Clean Power Plan will undoubtedly be challenged by Clean Power Plan supporters.

³⁷ See *infra* Part III.B.

³⁸ See *infra* Part III.A.

³⁹ See *infra* Part III.

President Clinton. Executive Order 12,866⁴⁰ (and its Reagan Administration predecessor⁴¹) requires that significant federal rules be justified on cost-benefit grounds, fundamentally restructuring the regulatory state.⁴² In contrast, his Executive Orders on environmental justice⁴³ and federalism⁴⁴ hardly made a difference.⁴⁵ The most likely reason is that the cost-benefit order has a built-in enforcement mechanism administered by a single-mission institution within the Executive Office of the President: the now powerful Office of Information and Regulatory Affairs.⁴⁶ In contrast, no similar mechanism was established to administer the other two executive orders.

In light of the inadequacies of providing compensation for the negative distributional consequences of environmental, health, and safety regulation through the tax system,⁴⁷ the current gridlock that is plaguing Congress,⁴⁸ and the failures of efforts to address distribution in a decentralized, agency-by-agency manner,⁴⁹ what is needed is a fundamental rethinking of the role of the Executive Branch on distributional matters. This Article provides a blueprint for the establishment of appropriate institutional mechanisms.

⁴⁰ Exec. Order No. 12,866, 3 C.F.R. 638 (1993), reprinted in 5 U.S.C. § 601 app. at 557—61 (1994).

⁴¹ See Exec. Order No. 12,291, 3 C.F.R. 127 (1981), reprinted in 5 U.S.C. § 601 (1988).

⁴² When introduced, President Clinton's Executive Order 12,866 was seen as a strong embrace of cost-benefit analysis. See Richard H. Pildes & Cass R. Sunstein, 62 U. CHI. L. REV. 1, 128 (1995) (referring to Executive Order 12,866 as presaging a greater shift to economic incentives). Cost-benefit analysis still dominates regulatory decisionmaking today. See Bagley & Richard L. Revesz, *Centralized Oversight of the Regulatory State*, 106 COLUM. L. REV. 1260, 1262 (2006) (noting that the basic contours of the Reagan cost-benefit analysis remain in place today, in part because more recent presidents from both parties have embraced cost-benefit review of regulations); Michael A. Livermore & Richard L. Revesz, *Retaking Rationality Two Years Later*, 48 HOUS. L. REV. 1, 4 (2011) (noting that President Obama had taken several steps to cement the bipartisan consensus around cost-benefit analyses of regulations).

⁴³ Exec. Order No. 12,898, 59 Fed. Reg. 7629 (Feb. 16, 1994).

⁴⁴ Exec. Order No. 13,132, 64 Fed. Reg. 43,255 (Aug. 4, 1999).

⁴⁵ See Bagley & Revesz, *supra* note 42, at 1325 (calling Executive Order 12,898 “ineffective” and “not a prominent feature of regulatory decisionmaking” because of the traditional view that cost-benefit analyses should separate efficiency from distributive issues); Geltman et al., *Beyond Baby Steps: An Empirical Study of the Impact of Environmental Justice Executive Order 12898*, 39 FAM. & COMMUNITY HEALTH 143, 148 (2016) (discussing the failure of agencies to meaningfully include Executive Order 12,898 in their analyses in part because of a lack of environmental justice enforcement mechanisms); Nina A. Mendelson, *A Presumption Against Agency Preemption*, 102 NW. U.L. REV. 695, 718–19 (2008) (summarizing the ineffectiveness of President Clinton's federalism executive order by noting that agency evaluations of federalism impacts were rare, low-quality, and ended in preemption decisions without enforcement repercussions for the agencies).

⁴⁶ See John D. Graham & James W. Broughel, *Stealth Regulation: Addressing Agency Evasion of OIRA and the Administrative Procedure Act*, 1 HARV. J. L. & PUB. POL'Y 30, 35 (saying the “ultimate effect of OIRA's emergence has been to give...the President greater authority over the federal regulatory process”). To strengthen the use of cost-benefit analysis under Executive Order 12,866, Robert Hahn and Cass Sunstein suggested further strengthening OIRA—before Sunstein headed the office. See Robert W. Hahn & Cass Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis*, 150 U. PENN. L. REV. 1489, 1516 (2002). For an example of this enforcement mechanism in action, see Letter from Cass Sunstein, Adm'r, OIRA, to Lisa Jackson, Adm'x, EPA (Sept. 2, 2011), https://obamawhitehouse.archives.gov/sites/default/files/ozone_national_ambient_air_quality_standards_letter.pdf.

⁴⁷ See *infra* text accompany notes 93–114.

⁴⁸ See Part II.B.

⁴⁹ See Part III.

The discussion proceeds as follows. Part I explains the academic orthodoxy on regulation and redistribution, generally traced to Kaplow and Shavell’s work. Part II discusses the conceptual and political shortcomings of this view. Part III shows that the existing efforts to deal with distributional matters of this sort have been largely ineffective. Part IV presents a blueprint for a robust Executive Branch approach to dealing effectively with the distributional consequences of regulation.

I THE ORTHODOX VIEW

In 1994, Louis Kaplow and Steven Shavell wrote the first of a series of articles, then followed by a book, arguing the income tax system could redistribute income better than legal rules could.⁵⁰ Since then the assertion has become a tenet of law and economics orthodoxy.⁵¹

Kaplow and Shavell argue that the best legal rules are those that increase economic wealth without regard for distribution.⁵² Determining how to redistribute the wealth and allocate it to each person, they explain, is a job for the income tax system, which provides the most efficient way of redistributing wealth across a society.⁵³ Kaplow and Shavell focus on legal rules in the common law context,⁵⁴ but their argument applies as well to regulations promulgated by administrative agencies.⁵⁵ Although their theory has attracted

⁵⁰ See sources cited *supra* note 1.

⁵¹ See, e.g., ROBERT COOTER & THOMAS ULEN, *LAW & ECONOMICS* 10–11 (5th ed. 2007); A. MITCHELL POLINSKY, *AN INTRODUCTION TO LAW AND ECONOMICS* 158–61 (4th ed. 2011).

⁵² See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 675 (“normative economic analysis of legal rules should be primarily concerned with efficiency rather than the distribution of income”).

⁵³ See *id.* at 667 (developing the argument that “redistribution through legal rules offers no advantage over redistribution through the income tax system and typically is less efficient”). See also KAPLOW & SHAVELL, *supra* note 1, at 34–35 (citing the “inefficiency of redistribution generally...and the additional cost involved in adopting less efficient legal rules” as “sound reasons for much normative economic analysis of law not to take explicit account of the distribution of income”); Kaplow & Shavell, *Fairness*, *supra* note 1, at 994–95 (same).

⁵⁴ See Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 822 (analyzing what tort damages rule to apply to yachting accidents); Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 669 (using damages awarded to plaintiffs in cases involving “an activity that may cause accidents”).

⁵⁵ See KAPLOW & SHAVELL, *supra* note 1, at 396–401; Kaplow & Shavell, *Fairness*, *supra* note 1, at 1318–22 (including “government decisionmakers” and the FDA as parties that should ascribe to welfare economics); Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 667 n.1 (defining legal rules as “rules other than those that define the income tax and welfare system”).

some criticism,⁵⁶ it has become extremely influential and broadly accepted in the academic literature.⁵⁷ This Part analyzes the Kaplow and Shavell approach to distribution.

A. *Common Law Rules*

Kaplow and Shavell’s theory focuses on what type of instrument—legal rules or an income tax-and-transfer system—can best help a society reach a target level of income distribution across citizens.⁵⁸ Although their definition of legal rules includes most legally binding rules set by lawmakers and other government officials,⁵⁹ they focus on how to set appropriate damages in tort and contract law.⁶⁰ An “efficient legal rule,” according to Kaplow and Shavell, is one that “minimizes the total of accident costs and prevention costs.”⁶¹ They explain, “when injurers pay damages equal to harm caused, all costs are internalized, so actors are induced to take the level of care that minimizes the sum of the cost of care and expected harm.”⁶²

This remedy moves the plaintiff no closer to society’s mean income level; it merely restores her to the same position she was in before the tort. Kaplow and Shavell contrast efficient legal rules with those designed to redistribute wealth by increasing damages that low-income plaintiffs receive or decreasing damages that high-income plaintiffs receive.⁶³ The purpose of such rules would be to redistribute wealth from wealthy individuals to poor individuals.

But a regime with efficient legal rules can be just as redistributive, according to Kaplow and Shavell, so long as the income tax is adjusted. The tax system would then do

⁵⁶ See, e.g., Lee Anne Fennell & Richard H. McAdams, *The Distributive Deficit in Law and Economics*, 100 MINN. L. REV. 1051, 1059 (2016) (taking issue with Kaplow and Shavell’s argument that “outside of tax, welfarists should ignore the distributive consequences of legal rules”); Richard S. Markovits, *Why Kaplow and Shavell’s Double Distortion Arguments Are Wrong*, 13 GEO. MASON L. REV. 511, 524 (2005) (summarizing criticisms of Kaplow and Shavell); Chris William Sanchirico, *Exchange: Should Legal Rules Be Used to Redistribute Wealth? Taxes Versus Legal Rules as Instruments for Equity: A More Equitable View*, 29 J. LEGAL STUD. 797, 799–800 (2000) (arguing that double distortion applies only when redistributive legal rules are a function of parties’ incomes).

⁵⁷ See *infra* Part I.C.

⁵⁸ See Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 821; Kaplow & Shavell, *Why the Legal System*, *supra* note 11, at 667. Although their early articles focus on income, the authors’ later article and book specify that they view income (or wealth) as a proxy for welfare, not as an end in itself. See KAPLOW & SHAVELL, *supra* note 1, at 36–37; Kaplow & Shavell, *Fairness*, *supra* note 1, at 997. They also define efficiency as “a concept that captures aggregate effects of policies on people’s well-being,” not merely “some technical or accounting notion.” Thus, like maximizing wealth, maximizing efficiency is a proxy for maximizing welfare. KAPLOW & SHAVELL, *supra* note 1, at 37; Kaplow & Shavell, *Fairness*, *supra* note 1, at 997. Because the authors do not explicitly define “efficiency” in their early articles, Markovits suggests they intend a “monetized” definition, where a rule is more efficient if “the equivalent dollar gains that a transaction-costless switch” from one rule to another would be greater for beneficiaries than the equivalent dollar losses the switch would impose on victims. Markovits, *supra* note 56, at 556–58.

⁵⁹ See *infra* text accompanying notes 66–71.

⁶⁰ See KAPLOW & SHAVELL, *supra* note 1, at 155–56; Kaplow & Shavell, *Fairness*, *supra* note 1, at 1102–03; Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 667 n.1.

⁶¹ Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 822.

⁶² Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 678.

⁶³ See *id.* at 669.

the redistribution by awarding low-income plaintiffs the difference between the damages they received under the efficient rule and the damages they would have received under an inefficient, redistributive legal rule.⁶⁴ A low-income plaintiff could then be compensated through a lower marginal rate, or through a tax credit, which is equivalent to a payment from the government.⁶⁵

Although both systems would award a low-income plaintiff the same amount of money, according to Kaplow and Shavell a regime that redistributes through legal rules would be inferior to a regime redistributing through the income tax because the former interferes more with people's incentives to work the amount they deem optimal.⁶⁶ An unfortunate side effect of any kind of income redistribution is that it distorts incentives to work. If an individual earns \$10 per hour, but must give away 50 cents for every dollar she earns beyond \$100 per day, her optimal labor-leisure tradeoff will be affected after her 100th dollar—the scale will be more heavily weighted toward leisure than if she kept all her earnings. This incentive distortion holds true if the 50 cents must be paid in taxes. But it also holds true if the 50 cents are instead paid as part of damages beyond the cost of harm whenever she commits a tort. In other words, a redistributive legal rule requiring a wealthy party to overcompensate a poor party creates the same leisure-labor distortion as an income tax.

Thus, redistributive income taxes and legal rules alike may decrease the total wealth produced by weakening work incentives, creating a first distortion.⁶⁷ Kaplow and Shavell argue, however, that redistributive legal rules create a second distortion as well: Anticipating adjustments to damages based on income, high-income individuals will overspend on precautions to avoid torts, while low-income individuals will underspend.⁶⁸ This “double distortion”⁶⁹ renders redistributive legal rules inferior to redistributing

⁶⁴ For a graphical depiction, see *id.* at 669–74. The redistributive income tax to accompany the efficient legal rule is calculated by beginning with the original income tax rate and adding the total accident costs under the inefficient regime and subtracting total accident costs under the efficient regime. See *id.* at 678.

⁶⁵ Kaplow and Shavell provide an example in which individuals pay 20 percent of their income to the extent it exceeds \$10,000, and those with income under \$10,000 receive transfer payments equal to 20 percent of the difference between their income and \$10,000. See *id.* at 670.

⁶⁶ See *id.* at 669–74. Sanchirico, *supra* note 56, at 797 (referring to the concept of “double distortion”).

⁶⁷ Kaplow and Shavell may incorrectly equate the way legal rules and taxes distort the incentive to work. People tend to underestimate the chance they will be liable for harm to others. The consequences of an income tax are more predictable: If people make more money, they can expect to pay higher taxes. By contrast, a legal rule would require higher payments from higher earners only in the case of liability. If people underestimate their likelihood of liability, they will underestimate the likelihood of higher payments and therefore be less inclined to work below their optimal amount. See Christine Jolls, *Behavioral Economics Analysis of Redistributive Legal Rules*, 51 VAND. L. REV. 1653, 1662 (1998). Thus, under these circumstances, legal rules should distort work incentives less than an income tax. Kaplow and Shavell respond by noting that although some individuals may be inclined to underestimate their chance of liability, others may overestimate this probability because of risk aversion. They also argue that the popularity of liability insurance further undermines the claim that people view a definite payment as more costly than the uncertain cost of future liability. See KAPLOW & SHAVELL, *supra* note 1, at 34 n.38; Kaplow & Shavell, *Fairness*, *supra* note 1, at 994 n.65.

⁶⁸ See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 669. See also Chris William Sanchirico, *Deconstructing the New Efficiency Rationale*, 86 CORNELL L. REV. 1003, 1014–15 (2001).

⁶⁹ See Sanchirico, *supra* note 56, at 797 (referring to the concept of “double distortion”).

through the tax system.⁷⁰ The income tax is therefore the most efficient tool available for redistribution.⁷¹

Kaplow and Shavell briefly discuss other reasons the tax system is better suited to redistribute wealth than legal rules are. They note that if legal rules inflict greater burdens upon a particular party in an attempt to redistribute—say, by burdening landlords through pro-tenant housing laws—parties can contract around the law, say, through raising the rent.⁷²

They also note that legal rules are haphazard, because they redistribute wealth based on factors other than income—for example whether someone is a landlord or a tenant.⁷³

⁷⁰ Sanchirico notes that two distortions are not always less efficient than one. In fact, one distortion may help correct another. See Sanchirico, *supra* note 68, at 1017. Kaplow and Shavell acknowledge this criticism with an illustration: A legal rule imposes higher damages on yacht owners in tort yachting accidents and as a result, yachting and perhaps leisure generally will seem a bit less attractive to high-income individuals. See Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 825. By decreasing the attractiveness of leisure time, the rule counteracts whatever distortion a redistributive income tax has on work incentives. The second distortion mitigates the first. Consequently, the mere possibility that redistributive legal rules create more distortions than a redistributive income tax does not necessarily prove a redistributive income tax is preferable. Although Kaplow and Shavell acknowledge that redistributive legal rules discouraging leisure and encouraging work might improve an income tax system, they nonetheless claim an excise tax on yachting or similar wealthy leisure activities would be a more efficient way to discourage high-income leisure and redistribute to low-income individuals. See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 681; Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 827.

⁷¹ Some scholars have challenged the notion that taxes are more efficient than legal rules in addressing distributional issues. Zachary Liscow has argued that legal rules are sometimes more efficient at redistribution than the income tax system and, in other cases, are the only means of redistribution. First, Liscow notes it is estimated that one-third of each dollar paid in taxes is lost to waste, because the tax discourages work and investment. Thus, Liscow reasons, even if a redistributive legal rule causes waste, if it causes less than one-third of each dollar, it is more efficient than the tax system. See Zachary Liscow, Note, *Reducing Inequality on the Cheap: When Legal Rule Design Should Incorporate Equity as Well as Efficiency*, 123 YALE L.J. 2478, 2482–83, 2505 (2014). Liscow suggests a legal rule that applies a strict liability standard to polluters could be more efficient at redistribution than the tax system, because it would redistribute from wealthy plant owners to poor residents while causing no distortion in behavior. See *id.* at 2486–87. Second, Liscow notes that the tax system is unhelpful in measuring non-income based harms and may undercompensate victims of harms that affect forms of welfare other than income. See *id.* at 2484, 2505.

In fact, an income tax may be insufficient to address monetary inequities as well. If Kaplow and Shavell intend an income tax to apply only to earned income, then such a tax will miss a considerable amount of wealth for redistribution. A 1975 study found that 60–80 percent of the nation’s wealth is inherited, not earned. See Sanchirico, *supra* note 68, at 1041. On the other hand, if the income tax includes unearned income, such as gifts, then it will create a double distortion itself, by distorting not only the incentive to work, but also gift-giving and “bequesting.” See Markovits, *supra* note 56, at 553. Additionally, a rights-based torts regime may be better suited to directly redistribute wealth than a cost-minimizing torts system. The former would require consideration of the impacts on only two parties, the defendant and the plaintiff, while the latter would require both an analysis of what damages would minimize aggregate costs, to set the tort standard, and then a separate inquiry into the appropriate amount of redistribution through the tax system. See Mark A. Geistfeld, *Efficiency, Fairness, and the Economic Analysis of Tort Law* 34–37 (N.Y.U. Law & Econ. Research Paper Series, Working Paper No. 09-21, 2009).

⁷² See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 674. For discussion of the housing example, see Tomer Blumkin & Yoram Margalioth, *On the Limits of Redistributive Taxation: Establishing a Case for Equity-Informed Legal Rules*, 25 VA. TAX REV. 1, 4 (2005).

⁷³ Rules that redistribute based on factors other than income present a challenge for Kaplow and Shavell because the double distortion criticism applies only to income-based legal rules. For example, in addition to

While these bases for redistribution may often be directly correlated with wealth, legal rules may be over or under-inclusive, for example by redistributing from the occasional poor landlord to the occasional wealthy tenant. By contrast, a redistributive income tax can redistribute wealth from all rich individuals to all poor individuals.⁷⁴

B. Regulatory Policy

While Kaplow and Shavell focus on common law rules, they do not restrict their analysis to this area. Their definition of legal rules is expansive, including any “rules other than those that define the income tax and welfare system,”⁷⁵ and government regulation clearly falls within this definition. Moreover, in their later work, Kaplow and Shavell specifically refer to “government decisionmakers” and the Food and Drug Administration (FDA) as entities that should employ “welfare economics”—a framework that incorporates their earlier writing about redistributing through the tax system.⁷⁶ Other scholars have also interpreted Kaplow and Shavell as arguing that government policy decisions, not just common law rules, should focus on efficiency, rather than redistribution.⁷⁷ Government

varying in income, people may vary in ability to take precaution and avoid tort accidents, like boat collisions. Particularly clumsy individuals are in at least one sense less well off than more dexterous boaters. The government could choose to redistribute welfare by lowering damages for boat collisions below the efficient amount, thereby redistributing wealth—and welfare—from dexterous boaters to clumsy boaters, because clumsy boaters are more frequently defendants in boating accidents, and dexterous boaters are more frequently plaintiffs. According to this argument, the ability to avoid accidents is an immutable trait, not a choice, so the lower damages would not result in clumsy boaters or dexterous boaters taking less care, thereby avoiding any distortion in behavior. *See* Blumkin & Margalioth, *supra* note 72, at 10–11 (summarizing the challenge to Kaplow and Shavell over how to redistribute in the case of ability); Sanchirico, *supra* note 56, at 802, 804 (referring to the immutability of ability and effects of lowering damages below efficient rate, respectively). Kaplow and Shavell respond that deviating from an efficient rule could favor the rich, depending on the direction of the adjustment. For example, if wealthy yachters tend to be clumsy while low-income fishermen tend to be dexterous, a legal rule designed to redistribute based on the ability to avoid accidents would favor wealthy yachters over poor fishermen. Because wealthy yachters would commonly be defendants against dexterous fisher plaintiffs, a legal rule lowering damages would redistribute wealth from the poor to the rich. *See* Kaplow & Shavell, *Clarifying the Role*, *supra* note 1, at 828–29. *But see* Sanchirico, *supra* note 68, at 1034 (explaining that a redistributive legal rule should be designed to redistribute to the less well off, so clumsy yachters should be favored by a legal rule only if the sum of all factors, including ability to take care and income, render them less well off than the poor fishermen).

⁷⁴ *See* Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 674–75. *But see* Daphna Lewisohn-Zamir, *In Defense of Redistribution Through Private Law*, 91 MINN. L. REV. 326, 335–36 (2006) (noting that taxes are also often over or under inclusive); Kyle Logue & Ronen Avraham, *Redistributing Optimally: Of Tax Rules, Legal Rules, and Insurance*, 56 TAX L. REV. 157, 185–86 (2003) (arguing that the redistributive reach of legal rules is not limited to litigation parties, as legal rules affect ex ante incentives of potential injurers and victims).

⁷⁵ *See supra* text accompanying note 14.

⁷⁶ *See* KAPLOW & SHAVELL, *supra* note 1, at 396–401; Kaplow & Shavell, *Fairness*, *supra* note 1, at 1318–22 (explaining that government decisionmakers should make policy based on welfare economics, not perceptions of fairness). When explaining what factors a decision-maker should weigh in welfare economics, they note that a legal rule with unfavorable redistributive effects may be corrected by a tax and transfer system. *See* KAPLOW & SHAVELL, *supra*, at 17; Kaplow & Shavell, *Fairness*, *supra*, at 977.

⁷⁷ *See* Nicholas L. Georgakopoulos, *Solutions to the Intractability of Distributional Concerns*, 33 RUTGERS L.J. 279, 295 n.23 (2002) (responding to Kaplow and Shavell’s distortion concerns with public law examples, like bottle laws and legalizing abortion); Cass R. Sunstein, *The Value of a Statistical Life: Some Clarifications and Puzzles*, 4 J. BENEFIT-COST ANALYSIS 237, 238 (2013) (saying “[i]t is important to see

officials with decisionmaking authority, they say, should promulgate policies and regulations that maximize social welfare.⁷⁸ Here too, the argument goes, the best regulation is the most efficient one—the one with the greatest net benefits. If an efficient policy or regulation’s costs happen to rest disproportionately on an already disadvantaged group, those burdens can be lightened when the disadvantaged members receive proportional rates or credits through the tax system.⁷⁹

Consider an example of a government public works decision: A government official has some funds to improve roads. One road in a poor neighborhood is run-down; repaving the road will avoid 10 accidents per year. A second road in a wealthy neighborhood is also run-down, more cars use it, so the funds will make a greater difference, avoiding 20 accidents per year. Assuming that a car accident costs drivers in either neighborhood equally, Kaplow and Shavell would presumably urge the official to repair the road in the affluent neighborhood, because it is the most efficient use of funds. Rather than improving the welfare of the poor neighborhood by choosing to repave their road, the official can design an income tax that redistributes income so that wealthy individuals in the affluent neighborhood will pay higher taxes, while low-income individuals in the poor neighborhood will receive tax credits compensating them for the loss in wealth they might suffer from the dilapidated road.⁸⁰

Now, consider a regulatory example⁸¹: A city must determine how stringently to regulate pollution from a factory in a low-income neighborhood. Requiring a cutting-edge scrubber results in a cost of \$90 per scrubber and reductions of medical costs of \$100 per scrubber. By contrast, requiring the market-standard scrubber results in a cost of only \$20 per scrubber and reductions of medical costs of \$40 per scrubber. The more efficient

that the best response to unjustified inequality is a redistributive income tax, not regulation—which is a crude and potentially counterproductive redistributive tool” and citing Kaplow and Shavell for the assertion).

⁷⁸ See KAPLOW & SHAVELL, *supra* note 1, at 396–98; Kaplow & Shavell, *Fairness*, *supra* note 1, at 1318–20. Because welfare is a difficult product to measure, the authors note that wealth maximization and efficiency can serve as proxies for maximizing welfare. See KAPLOW & SHAVELL, *supra* note 1, at 37; Kaplow & Shavell, *Fairness*, *supra* note 11, at 997.

⁷⁹ See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 670 (describing a potential tax scheme redistributing from rich to poor).

⁸⁰ Kaplow and Shavell do not analyze the underlying values behind legal entitlements, however. See David Blankfein-Tabachnick & Kevin A. Kordana, *Kaplow and Shavell and the Priority of Income Taxation and Transfer*, 69 HASTINGS L.J. 1, 8 (2018). Blankfein-Tabachnick and Kordana point out that in a regime where property rights are initially created to maximize wealth, changing the initial legal entitlement may be more efficient than layering a redistributive tax on top of the existing system. *Id.* at 9 (discussing how to maximize the welfare of the least well off with regard to a private beach and concluding that recategorizing the beach as public might be more efficient than keeping the beach private and levying a redistributive tax).

⁸¹ This Article focuses on regulation rather than tort liability. Shavell has identified four factors that determine when regulation or tort liability may be better suited to mitigate social harms. See Steven Shavell, *Liability for Harm Versus Regulation of Safety*, 13 J. LEG. STUD. 357, 359 (1984). First, if private parties have more information than regulating entities do, tort liability may be favored, while regulation may be favored if the reverse is true. See *id.* Second, if parties may be unable to pay damages, regulation may be more appropriate than liability. See *id.* at 360–61. Third, if a party is not likely to face suit (perhaps because of the passage of a long period of time before harm manifests), regulation may be preferred. See *id.* at 363. Finally, costs involved with bringing suit versus administering regulation may point toward one means of compensating harm or the other; often this factor points toward liability, since costs are only realized if harm actually occurs. See *id.* at 363–64. This Article relies upon examples where regulation is appropriate.

regulation is the second, because benefits outweigh costs by \$20 instead of \$10. But choosing the second rule over the first means that the wealthy plant operator keeps more money, while low-income neighborhood residents give up significant value in health benefits. Again, Kaplow and Shavell would presumably favor the efficient rule and argue wealth could be redistributed to the poor residents through the income tax system.

C. Influence

A significant group of legal scholars and economists has found Kaplow and Shavell's work persuasive.⁸² As Kyle Logue and Ronen Avraham have said, "[I]t is a safe bet that a majority of legal economists hold the following view: Whatever amount of redistribution is deemed appropriate or desirable, the exclusive policy tool for redistributing to reduce income or wealth inequality should always be the tax-and-transfer system."⁸³ Similarly, Eric Posner has observed that the "general argument that liability rules should not be used to redistribute wealth" has "become very common."⁸⁴

The theory has also earned a significant place in influential textbooks. In the bibliography to *An Introduction to Law and Economics*, A. Mitchell Polinsky recommends reading Kaplow and Shavell's *Fairness Versus Welfare* for a discussion of "whether legal rules should be based on efficiency or equity,"⁸⁵ and expresses support for their perspective asserting that "it is often impossible to redistribute income through the choice of legal rules and...even when it is possible, redistribution through the government's tax and transfer system may be cheaper and is likely to be more precise."⁸⁶ Along the same lines, Robert Cooter and Thomas Ulen's *Law and Economics* explicitly rejects a redistributive approach to private law and seems to take a dim view of redistribution through regulation, noting that regulators seldom show sufficient attention to underlying economics to appropriately target individuals for redistribution.⁸⁷ The authors then single out Kaplow and Shavell's *Fairness Versus Welfare* for the view that only efficiency should matter when making and applying law.⁸⁸

⁸² See Logue & Avraham, *supra* note 74, at 166 (saying "[t]hus with respect to dealing with income inequality, we generally side with those who believe the lion's share of income redistribution should be done through the tax-and-transfer system, although there may be a relatively small, supplementary role for the legal system in redistributing income"). See also Blankfein-Tabachnick & Kordana, *supra* note 80, at 7 (calling Kaplow and Shavell's claim "one of the most prominent claims in private law and tax policy scholarship"); Blumkin & Margalioth, *supra* note 72, at 2 (saying that redistribution through the tax system is "the prevailing norm in the law and economics literature"); Sunstein, *supra* note 77 and accompanying text.

⁸³ Logue & Avraham, *supra* note 74, at 158.

⁸⁴ See Eric A. Posner, *Contract Law in the Welfare State: A Defense of the Unconscionability Doctrine, Usury Laws, and Related Limitations on the Freedom to Contract*, 24 J. LEGAL STUD. 283, 284 n.1 (1995) (citing Kaplow and Shavell's *Why the Legal System* along with other sources as arguing redistribution can be best handled through the tax and transfer system).

⁸⁵ POLINSKY *supra* note 51, at 181.

⁸⁶ *Id.* at 10.

⁸⁷ COOTER & ULEN, *supra* note 51, at 9–11.

⁸⁸ See *id.* at 11.

II CHALLENGING THE ORTHODOXY

Even if the income tax system were theoretically better positioned to redistribute income under certain conditions, it works poorly in the current political environment to compensate for the distributional consequences of environmental, health, and safety regulation, which are by far the most significant categories of regulatory activity.⁸⁹ First, perhaps the most important benefit of environmental, health, and safety regulation is the prevention of premature mortality,⁹⁰ and the income tax is not well suited to deal with distributional consequences that are not income-based. Second, the gridlock that has bedeviled Congress over the last few decades makes it unlikely that the income tax system would be modified in light of the negative distributional consequences of regulatory activity.⁹¹

⁸⁹ Agencies addressing environmental, health, and safety regulation received 82 percent of the total regulatory budget in fiscal year 2017. See SUSAN DUDLEY & MELINDA WARREN, REGULATORY STUDIES CTR., REGULATORS' BUDGET FROM EISENHOWER TO OBAMA 3 (2016), https://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/2017_Regulators_Budget_05-17-2016.pdf. These agencies have accounted for the majority of the federal regulatory budget dating back at least to President Eisenhower. See *supra*, at 1. A significant amount of regulatory activity is tied to the environment, health, and safety. For example, according to the U.S. Government Accountability Office, the Environmental Protection Agency, Occupational Safety and Health Administration, and the Department of Health and Human Services issued 420 of the 1267 final major rules published in the Federal Register between January 1995 and the beginning of August 2017. This number does not include environmental, health, and safety regulations promulgated by other agencies. See *Overview*, GAO, <http://www.gao.gov/legal/congressional-review-act/overview> (last visited Aug. 2, 2017).

⁹⁰ The importance of preventing premature deaths to these regulations is reflected in the way agency officials and scholars talk about the regulations. See, e.g., John D. Graham, *Savings Lives Through Administrative Law and Economics*, 157 U. PA. L. REV. 395, 397 (2008) (noting that health, safety, and environmental regulations are sometimes referred to in shorthand as “lifesaving regulation”); Dan Farber, *Tangling Life-Saving Regulations in Red Tape*, THE HILL (July 5, 2017), <http://thehill.com/blogs/congress-blog/politics/340689-tangling-life-saving-regulations-in-red-tape> (noting that slowing health, safety, and environmental regulations with further procedure could risk lives, as in the Flint, Michigan water crisis). Agencies cost-benefit analyses also reflect the importance of premature deaths avoided. See, e.g., EPA BCA, *supra* note 6.

⁹¹ In addition to gridlock, interest groups also pose a challenge to achieving redistribution, either through legislation or through regulation. For example, small groups with high stakes may be especially likely to band together and lobby legislators or the executive branch while the majority of stakeholders remain disorganized and relatively underrepresented. MANCUR OLSON, THE LOGIC OF COLLECTIVE ACTION: PUBLIC GOODS AND THE THEORY OF GROUPS 56–65 (1965). Interest groups have put significant pressure on proposed legislation and regulation over the years. See KENNETH GOLDSTEIN, INTEREST GROUPS, LOBBYING, AND PARTICIPATION IN AMERICA 2–3 (2009) (detailing how both unions and business coalitions lobbied legislators over the enactment of NAFTA); Andrew Cheon & Johannes Urpelainen, *How Do Competing Interest Groups Influence Environmental Policy? The Case of Renewable Electricity in Industrialized Democracies, 1989–2007*, 61 POL. STUD. 874, 891 (2013) (demonstrating that heavy industry interest groups have been found to have a negative effect on whether governments enact policies to support renewable energy, the general public’s interest in renewables notwithstanding); Martin Gilens & Benjamin I. Page, *Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens*, 12 PERSP. ON POL. 564, 575 (2014) (finding interest groups representing business interests have greater political power than the average American voter). Thus, interest groups are likely to factor into any kind of comprehensive redistributive regime, legislative or regulatory. This Article focuses on gridlock because unlike interest groups, gridlock is a uniquely legislative problem that can be avoided through a regulatory approach.

A. *Compensating Non-Monetary Harms*

An income tax system that redistributes money from high-income individuals to low-income individuals is ill suited to compensate non-monetary harms.⁹² Consider, for example, a community exposed to many years of pollution from a nearby refinery. Community members have an increased risk of developing cancer in the future, growing too sick to work at some point in their lives, and dying an early death. As a result, the community members' expected welfare will decrease relative to healthy individuals.⁹³ A society may wish to redistribute welfare to these people, but an income tax is poorly equipped to do so. To understand the mismatch between the income tax and this particular type of redistributive challenge, it is useful to consider each of the three phases of harm members of this hypothetical community suffer: first, latency, the period in which it is uncertain who will develop cancer; second, morbidity, the period in which some members of the community become severely sick with cancer; and finally, years after death, the period following the premature death of a community member, during which the individual would have been alive were it not for the pollutant-induced cancer.

First, members experience a latency period, during which it is uncertain who will develop cancer, how severe the cancer will be, and when the onset will begin. Imagine that exposed community members have a 1 in 1000 probability of dying from cancer. If the community has 10,000 residents, 10 will ultimately die as a result of the nearby refinery's pollution. Perhaps epidemiologists and toxicologists could identify high-risk individuals, but they could not predict with certainty who would ultimately die from cancer. And the income tax system has no means of identifying even high-risk individuals.⁹⁴ These people cannot identify themselves to the tax system through their income tax returns, because they do not know whether they are at risk of developing cancer, and they certainly do not know whether they will die from the disease.

Theoretically, a tax analyst could calculate the average risk of cancer associated with living next to a polluting refinery, assign a monetary value to that risk, and compensate individuals who have a greater probability of developing cancer through tax credits. But the current income tax does not compensate individuals for probabilistic latent harms, and based on the current structure of the income tax, a design of this sort is implausible. The

⁹² In general, redistributive tax systems, including Kaplow and Shavell's, are premised on the notion that the marginal utility of a dollar is greater for low-income people than high-income people. See Fennell & McAdams, *supra* note 56, at 1059–60. However, for welfare disparities that are not wealth-based, the same difference in utility does not necessarily apply. For example, someone with a greater risk of getting cancer does not necessarily gain more marginal utility from a dollar than someone with a lower risk of getting cancer. Thus, it is not surprising that income-based tax systems fail to respond adequately to some disparities in welfare.

⁹³ See Matthew D. Adler, *Risk, Death and Harm: The Normative Foundations of Risk Regulations*, 87 MINN. L. REV. 1293, 1429–31 (2003). Adler notes that in some cases, risk itself may be a harm if it produces a burden of fear regardless of whether the feared event occurs. For example, if someone exposed to pollution has a higher risk of developing cancer and therefore spends more time fearing cancer than those unexposed, she may suffer a harm—namely fear—even if she never develops cancer. But because risk is not easily observable for the purposes of the tax system, we do not focus on it here.

⁹⁴ See *id.* at 1423–24; Logue & Avraham, *supra* note 74, at 160.

situation requires a decisionmaker to calculate the risk of the average community member and monetize that risk.

Tax and welfare programs do sometimes redistribute wealth in more targeted ways than simply redistributing based on the amount of income individuals earn. For example, the Trade Readjustment Allowance offers weekly income support payments for workers who have lost their jobs due to foreign competition.⁹⁵ Employers who hire employees from specific groups, like qualified veterans, ex-felons, and food stamp recipients, can take advantage of the Work Opportunity Tax Credit.⁹⁶ Individual and corporate investors that invest in financial intermediaries targeting development in low-income communities can receive a New Markets Tax Credit.⁹⁷ Clearly, in some cases, the tax system can be targeted in its redistribution. Nonetheless, the tax system seldom targets probabilistic latent harms, and is generally not well designed to do so.⁹⁸

The tax system is ill-designed for this kind of redistribution because it generally redistributes on an *ex post* basis, considering losses and gains already realized, rather than those that might come to be. Such risk calculations have been the traditional domain of regulatory agencies.⁹⁹ These agencies routinely calculate risk and monetize potential harms through cost-benefit analyses when promulgating regulations.¹⁰⁰ Because the income tax rarely conducts this sort of risk analysis and does not currently have the expertise to do so.

⁹⁵ See Benjamin Collins, *Trade Adjustment Assistance for Workers and the TAA Reauthorization Act of 2015*, CONG. RES. SERV. (2016), <https://fas.org/sgp/crs/misc/R44153.pdf>.

⁹⁶ See *Work Opportunity Tax Credit Employers*, U.S. DEP'T. OF LABOR (updated Jan. 18, 2017), <https://www.doleta.gov/business/incentives/opptax/wotcEmployers.cfm>.

⁹⁷ See *New Markets Tax Credit*, U.S. DEP'T OF TREASURY (accessed July 17, 2017), <https://www.cdfifund.gov/programs-training/Programs/new-markets-tax-credit/Pages/default.aspx>.

⁹⁸ Even if these individuals are identified, there is still no way to compensate them in kind for their loss. Cass Sunstein has noted that monetary compensation for some kinds of loss may be inappropriate or even offensive. See Cass Sunstein, *Incommensurability and Valuation in Law*, 92 MICH. L. REV. 779, 785 (1994). A payment may seem inappropriate to someone facing a five-year loss of life, even if the payment exceeds any earnings she would make over the period.

⁹⁹ See, e.g., *Conducting an Ecological Risk Assessment*, EPA, <https://www.epa.gov/risk/conducting-ecological-risk-assessment> (last visited July 27, 2017) (laying out steps to ecological risk assessment); VI. *Risk Assessments*, OSHA, https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=PREAMBLES&p_id=994 (last visited July 27, 2017) (laying out steps to OSHA risk assessment). Effective redistribution through regulation depends on correctly assigning legal entitlements because of the divergence between two measurements: willingness *to pay* to avoid harm and willingness *to accept a payment* for forfeiting the right to be harm-free. Mark A. Geistfeld, *The Tort Entitlement to Physical Security as the Distributive Basis for Environmental, Health, and Safety Regulations*, 15 THEORETICAL INQUIRIES L. 387, 393–94 (2014). The right to be free from physical harm can be derived from the tort system. See *id.* at 408–10.

¹⁰⁰ See Helen G. Boutros, *Regulatory Review in the Obama Administration: Cost-Benefit Analysis for Everyone*, 62 ADMIN. L. REV. 243, 253–54, 260 (2010) (explaining that risk and benefit are part of cost-benefit analysis and saying cost-benefit analysis is an entrenched part of regulatory review, respectively); Don Bradford Hardin, *Why Cost-Benefit Analysis? A Question (and Some Answers) About the Legal Academy*, 59 ALA. L. REV., 1148–49 (2008) (referring to the “Reagan Revolution,” which ushered in cost-benefit analysis prominence in promulgating regulations).

Even without this kind of predictive expertise, the Internal Revenue Code does sometimes tax probabilistic gains or harms, despite its tendency to tax *ex post*.¹⁰¹ The tax system deals in probabilistic harms when taxing life insurance, for example. Purchasing life insurance is a form of investment similar to purchasing a home.¹⁰² While mortgage payments are tax-deductible in the year payments are made,¹⁰³ insurance premiums are not, creating a functional tax on the front end of insurance policies.¹⁰⁴ Without any deductions, each insurance purchaser pays a premium proportional to her likelihood of death and the amount of her contractual insurance payout.¹⁰⁵ But if the insurance assignee dies, the Internal Revenue Service does not consider the life insurance payout as part of gross income and therefore does not tax the payout.¹⁰⁶ Assuming the premiums are equal to an assignee's eventual payout, the government's lack of tax deductions for premiums *ex ante* is correctly offset by not taxing the payout on the back end.¹⁰⁷

But this *ex ante* tax approach is problematic. Not all insurance holders die at the end of their policy's term and receive a contractual payment. The tax system does not compensate those who paid premiums without tax deductions on the front end but receive no payout.¹⁰⁸ Thus, the government's *ex ante* regime can lead to significant undercompensation of individual taxpayers. The life insurance regime demonstrates that even when the tax system endeavors to take an *ex ante* view, the result can be a rather blunt instrument. Theoretically, the government could collect enough information to offer deductions to those who do not realize the benefits of their life insurance policies, but this is not the Code's current approach.

It is theoretically conceivable that the IRS could increase its expertise in making predictions about probabilistic harms to rival the expertise of agencies like the EPA. Absent that kind of predictive expertise, the IRS could theoretically collect more information from taxpayers, allowing it to correct an imperfect *ex ante* approach by adjusting taxes on the back end once harms or benefits have actually occurred. But building up predictive expertise or information-gathering ability would involve significant changes to the IRS, which seem unlikely. Thus, regulatory agencies are better equipped to address latent probabilistic harms.

¹⁰¹ See Reed Shuldiner, *A General Approach to the Taxation of Financial Instruments*, 71 TEX. L. REV. 243, 264 n.76.

¹⁰² See Kelly J. Bozanic, *An Investment to Die For: From Life Insurance to Death Bonds, the Evolution and Legality of the Life Settlement Industry*, 113 PENN. STATE L. REV. 1, 6 n.33 (2008) (comparing a life insurance policy to a home because of its annual consumption aspect and its investment aspect; Douglas A. Kahn & Lawrence W. Waggoner, *Federal Taxation of the Assignment of Life Insurance*, 1977 DUKE L.J. 941, 944–45 (1977) (describing the investment aspect of whole-life insurance).

¹⁰³ See I.R.C. § 163(h) (2017).

¹⁰⁴ See Shuldiner, *supra* note 101 at 264 n.76.

¹⁰⁵ See Kahn & Waggoner, *supra* note 102, at 943–45.

¹⁰⁶ See I.R.C. § 101(a)(1) (2017); Thomas J. Gallagher, Jr., *A Primer on Section 101—Federal Income Taxation of Life Insurance Proceeds*, 49 TEMPLE L. Q.

¹⁰⁷ See Shuldiner, *supra* note 101 at 264 n.76.

¹⁰⁸ See *id.*

The second harm experienced by the community members living close to a polluting refinery is morbidity. Eventually, often decades after the initial exposure,¹⁰⁹ some members of the community develop cancer. For some, the cancer is severe enough that they enter a morbidity period during which they need significant medical attention and must quit their jobs. When these individuals report their loss of income and medical expenses on their tax returns, the income tax may give them tax credits to help them through unemployment. The patients may also deduct from their tax payments any medical expenses beyond a certain percentage of their incomes.¹¹⁰ But even in this phase, the tax system is not designed to address any non-monetary decreases in welfare. For example, the community members might have pain related to the cancer separate from loss of income or medical expenses. The income tax cannot identify this harm because it would not be reflected in their medical bills or tax returns. The morbidity period, therefore, represents a phase during which the income tax can correct some forms of diminished welfare experienced by the community members, but not others.

When community members enter the third phase of harm and die from cancer, the tax system will cease to help them altogether. Because the community members exposed to pollution are dead, they cannot benefit from redistribution. Nonetheless, if they have surviving families, the families could hypothetically receive the redistributed wealth to compensate for the community members' deaths, as happens in wrongful death suits and civil actions on the part of the deceased.¹¹¹ But the tax system is not designed in a way to identify the cause of someone's death, calculate the number of years of life lost to pollution, and redistribute income to relatives on this basis.¹¹²

¹⁰⁹ See U.S. ENVTL. PROTECTION AGENCY, GUIDELINES FOR CARCINOGEN RISK ASSESSMENT 2-14 (2005), https://www3.epa.gov/airtoxics/cancer_guidelines_final_3-25-05.pdf; Matthew D. Adler, *Fear Assessment: Cost-Benefit Analysis and the Pricing of Fear and Anxiety*, 79 Chi.-Kent L. Rev. 977, 1021 n.129 (2004); Y. Yuan et al., *Kidney Cancer Mortality: Fifty-Year Latency Patterns Related to Arsenic Exposure*, 21 Epidemiology 103 (2010).

¹¹⁰ See I.R.C. § 213(a) (amended 2010). The tax-and-transfer system notably provides significant programs for reimbursing medical expenses through Medicaid and Medicare, but these programs only compensate costs reflected in medical bills, not harms like physical pain or the harm of dying young. See *What Is Medicaid?*, MEDICAREINTERACTIVE.ORG, <https://www.medicareinteractive.org/get-answers/programs-for-people-with-limited-income/medicaid-and-medicare/what-is-medicaid> (last visited Jan. 08, 2018) (describing Medicaid as a program that covers medical care); *What Is Original Medicare?*, MEDICAREINTERACTIVE.ORG, <https://www.medicareinteractive.org/get-answers/how-original-medicare-works/original-medicare-defined/what-is-original-medicare> (last visited Jan. 08, 2018) (describing the federal government's paying directly for medical services received). Regulation offers more promise in compensating harms that are not directly reflected in financial costs.

¹¹¹ See Steven H. Steinglass, *Wrongful Death Actions and Section 1983*, 60 IND. L.J. 559, 575 (1983); Meredith A. Wegener, *Purposeful Uniformity: Wrongful Death Damages for Unmarried, Childless Adults*, 51 S. TEX. L. REV. 339, 346 (2009); John Fabian Witt, *From Loss of Services to Loss of Support: the Wrongful Death Statutes, the Origins of Modern Tort Law, and the Making of the Nineteenth-Century Family*, 25 L. & SOC. INQUIRY 717, 720, (2000).

¹¹² To the extent the dead engage with the tax system at all, it is through the estate tax, but as of 2017, only estates worth more than \$5.49 million needed to file returns. See DEP'T OF TREASURY, INTERNAL REVENUE SERV., ESTATE TAX (last updated Oct. 2016), <https://www.irs.gov/businesses/small-businesses-self-employed/estate-tax>; Julie Garber, *What Type of Taxes Are Due After Someone Dies?*, THE BALANCE (Mar. 6, 2017), <https://www.thebalance.com/what-types-of-taxes-are-due-after-someone-dies-3505057>.

This refinery example deals with carcinogens found in the environment. But carcinogens might also be found in the workplace: for example, in the worksites of construction workers.¹¹³ Again, the tax system is poorly adapted to assessing the potential injury that accompanies a particular occupation, monetizing the risk, and distributing it to the workers accordingly. The tax system can compensate unemployed workers during their morbidity period when they cannot perform their jobs and pay medical bills while they are ill, but after death, the tax system has no mechanism of compensating the deceased or their survivors.

The same pattern arises in a consumer product context involving carcinogens. For example, the FDA might approve a cosmetic product with a potential long-term carcinogenic risk.¹¹⁴ During the latency period, the tax system is poorly equipped to identify everyone who uses a particular cosmetic product and calculate and monetize risk. During the morbidity period, the tax system can compensate victims for loss of work or medical expenses. But after death, the tax system will be unable to identify victims of premature death for compensation.

Even for situations in which the majority of the obvious harm is financial, the tax system may be inadequate. Consider, for example, coal miners who lose their jobs after a mine closes. Their lost income can be detected and compensated through the tax system. But they may suffer other, non-financial welfare loss associated with unemployment, including loss of a personal sense of usefulness or dignity, loss of a sense of purpose, and loss of coworker companionship.¹¹⁵ Arthur C. Brooks, President of the American Enterprise Institute, calls the lack of purpose following unemployment the “dignity deficit.”¹¹⁶ The income tax-and-transfer system does not provide a means of compensating the dignity deficit or any similar loss of welfare from unemployment. A regulatory regime, meanwhile, could take a more holistic view of welfare and take such losses into account.

These examples illustrate a broader theme: The income tax system is likely to flounder in attempts to identify individuals suffering a non-income-based harm, especially if it is a probabilistic latent one. The income tax system’s limitations laid out above apply to environmental, health, and safety regulations. In any of these cases, the tax system is poorly suited to identify individuals during their latency period or after their premature deaths. In short, the tax system is ill equipped to identify victims suffering non-monetary harms and to compensate them accordingly. And, if the tax system cannot do this distributional work well, the focus should turn back to the regulatory process itself.

¹¹³ See Eileen Wang et al., *Mortality Among North Carolina Construction Workers, 1988–1994*, 14 APPLIED OCCUPATIONAL & ENVTL. HYGIENE 45, 45 (1999).

¹¹⁴ See *Cosmetics*, AM. CANCER SOC. (last updated May 28, 2014), <https://www.cancer.org/cancer/cancer-causes/cosmetics.html>.

¹¹⁵ See JON ELSTER, MAKING SENSE OF MARX 521 (1985); ANDREA VELTMAN, MEANINGFUL WORK 2 (2016). Even controlling for other factors, personal unemployment and the general rate of unemployment are both correlated with personal unhappiness. See Rafael Di Tella et al., *Preferences Over Inflation and Unemployment*, 91 AM. ECON. REV. 335, 336 (2001).

¹¹⁶ See Arthur C. Brooks, *The Dignity Deficit: Reclaiming Americans’ Sense of Purpose*, AM. ENTER. INST. (Feb. 13, 2017), <http://www.aei.org/publication/the-dignity-deficit-reclaiming-americans-sense-of-purpose/>.

B. Gridlock in Congress

The Constitution bestows the power to tax upon Congress.¹¹⁷ It is well established that any federal tax reform must pass through Congress to be enacted.¹¹⁸ Even if the optimal income tax were well equipped to address non-monetary harms through redistribution, it is unlikely that modern Congress would be able to put such a tax into effect.

At the end of 2017, Congress passed a bill overhauling the tax system.¹¹⁹ The Republican-championed tax bill passed without any Democratic support,¹²⁰ demonstrating that significant legislation can be realized even in an atmosphere with significant party polarization. Nonetheless, gridlock in today's Congress is relevant to the evaluation of Kaplow and Shavell's prescription to address distribution through the tax system because they do not advocate for a static tax system—one that does not get adjusted in response to the distributional consequences of subsequent regulatory measures.¹²¹ Such a scheme would face considerable challenges. Congress would need to determine the optimal distribution, not only in light of the legal rules existing at a particular time, but also the legal rules likely to be adopted in the future.

Instead of endorsing a static approach of this sort, Kaplow and Shavell have in mind an income tax that is more fluid, adjusting to correct for undesirable distributive effects of legal rules as they arise. In their first article, they explain how to adjust an income tax to redistribute in light of an efficient legal rule. Their equation for the “new income tax” incorporates the total accident costs of the proposed inefficient, redistributive legal rule.¹²² Under their approach, to adjust the income tax accurately, one must first have a specific inefficient legal rule in mind and understand what redistributive effects it would have. Thus, Kaplow and Shavell's income tax is one that responds to legal rules, rather than anticipating the redistributive consequences of any potential future legal rule.

Similarly, in their explanation of welfare economics, Kaplow and Shavell suggest the income tax could—and should—respond to legal rules with distributive consequences that run counter to society's redistributive goals. They say that an analyst should choose a legal rule with undesirable distributive consequences “only if the adverse effect on distribution were modest relative to its other benefits, or if there were some other way (notably, through income taxes and transfer programs) to compensate the poor.”¹²³ Kaplow

¹¹⁷ See U.S. CONST. art. I, § 8, cl. 1.

¹¹⁸ See *supra* note 5.

¹¹⁹ See Naomi Jagoda, *Trump Signs Tax Bill into Law*, THE HILL (Dec. 22, 2017, 11:03 A.M.), <http://thehill.com/homenews/administration/366148-trump-signs-tax-bill-into-law>.

¹²⁰ See Sarah Almukhtar et al., *How Each House Member Voted on the Tax Bill*, N.Y. TIMES, <https://www.nytimes.com/interactive/2017/12/19/us/politics/tax-bill-house-live-vote.html> (last visited Jan. 08, 2018); Jasmine C. Lee, *How Every Senator Voted on the Tax Bill*, N.Y. TIMES, <https://www.nytimes.com/interactive/2017/12/19/us/politics/tax-bill-senate-live-vote.html> (last visited Jan. 08, 2018).

¹²¹ See *infra* notes 122–123 and accompanying text.

¹²² See Kaplow & Shavell, *Why the Legal System*, *supra* note 1, at 678.

¹²³ See KAPLOW & SHAVELL, *supra* note 1, at 17; Kaplow & Shavell, *Fairness*, *supra* note 1, at 979.

and Shavell’s optimal income tax would not be a “one and done” endeavor. Thus, their tax system would have to be sculpted and repeatedly refined by Congress; it would require not just one tax bill of the sort passed at the end of 2017, but a stream of such bills. Continual redistributive tax reforms of this sort are not a realistic possibility because of the current gridlock in Congress—a phenomenon that has attracted considerable scholarly attention.¹²⁴

Congressional gridlock has trended upward since the mid-twentieth century.¹²⁵ Recent Congresses have been some of the most deadlocked in modern history; the 106th Congress (1999-2000) and the 112th Congress (2011-2012) have been called the least productive Congresses between 1947 and 2012, with the 112th Congress failing to pass 71 percent of the most salient legislative items on its agenda.¹²⁶ The five least productive Senates in the past 60 years—in terms of the ratio of bills passed to bills introduced—have all served since 2001, with the three least productive since 2007.¹²⁷

Congressional gridlock is enough of a popular concern to fill newspaper articles and editorials aimed at the lay public. *The Week* ran an opinion piece predicting the 115th Congress (2017-2019) would be the least productive in 164 years, despite the passage of the tax legislation.¹²⁸ Though in the current Congress roughly 40 bills were signed into law by June 2017, *The Washington Post* wrote that 60 percent of the bills were only one page long—more typical of ceremonial bills renaming courthouses than bills introducing comprehensive policy changes.¹²⁹ Using length as a proxy for significance, the article

¹²⁴ See generally SARAH BINDER, CTR. FOR EFFECTIVE PUB. MGMT. BROOKINGS INST., POLARIZED WE GOVERN? (2014) (analyzing which Congresses have been the most gridlocked since the mid-twentieth century); CHRISTOPHER KLYZA & DAVID A. SOUSA, AMERICAN ENVIRONMENTAL POLICY: BEYOND GRIDLOCK (2007) (discussing how environmental policy can progress despite gridlock); THOMAS E. MANN & NORMAN ORNSTEIN, IT’S EVEN WORSE THAN IT LOOKS (2012) (relating the causes and consequences of polarization and gridlock in Congress); Cynthia J. Bowling & Margaret R. Ferguson, *Divided Government, Interest Representation and Policy Differences: Competing Explanations of Gridlock in the Fifty States*, 63 J. POL. 182 (2001) (discussing potential causes of gridlock); Joseph P. Tomain, *Gridlock, Lobbying and Democracy*, 7 WAKE FOREST J. L. & POL’Y 87 (2017) (covering the effects of gridlock and lobbying on government).

¹²⁵ See BINDER *supra* note 124, at 10 (showing an upward trend in gridlock between 1947 and 2012); Freeman & Spence, *supra* note 8, at 6 (saying “congressional gridlock has reached levels unseen in the last fifty years”); Raffaella Wakeman et al., *Vital Statistics on Congress Data on the U.S. Congress--A Joint Effort from Brookings and the American Enterprise Institute*, BROOKINGS tbl. 6-2, <https://www.brookings.edu/multi-chapter-report/vital-statistics-on-congress/> (last updated Jan. 9, 2017) (showing that the five lowest ratios of passed bills to bills introduced in the Senate since 1947 all occurred since 2001).

¹²⁶ See BINDER *supra* note 124, at 10. To identify the most salient issues of a given Congress, Binder included issues that were mentioned five or more times in the *New York Times* editorial pages during the tenure of that Congress.

¹²⁷ See Wakeman et. al, *supra* note 125, at tbl. 6–2.

¹²⁸ See David Faris, *Why the GOP Congress Will Be the Most Unproductive in 164 Years*, THE WEEK (July 18, 2017), <http://theweek.com/articles/711503/why-gop-congress-most-unproductive-164-years> (blaming polarization between parties and within the Republican party for gridlock).

¹²⁹ See Philip Bump, *60 Percent of the Bills Trump Has Signed Into Law Have Been One Page Long*, THE WASH. POST (July 5, 2017), https://www.washingtonpost.com/news/politics/wp/2017/07/05/60-percent-of-the-bills-trump-has-signed-into-law-have-been-one-page-long/?utm_term=.1bbad7e4e7db.

reported this Congress has passed fewer significant bills during its first six months than most Congresses since 1993.¹³⁰

Even congressional leaders bemoan the worsening gridlock. After Senator John McCain returned to the Senate following surgery and a diagnosis of brain cancer in the summer of 2017, he gave a speech to the Senate chastising his colleagues for “not getting anything done”¹³¹ and speaking reminiscently of the Senate’s more productive past, repeatedly urging Congress to “return to regular order.”¹³² *The New York Times* ran an entire article in January 2018 quoting legislators of both Congressional houses expressing frustration with Congress’ lack of productivity.¹³³ To give only a couple of examples: Senator Ben Sasse, Republican of Nebraska, called Congress “weaker than it has been in decades,” and Senator Angus King, independent of Maine, said, “The Senate has literally forgotten how to function.”¹³⁴ During a month when the government briefly shut down because of disagreement over immigration policy,¹³⁵ Congress’ incompetence seemed to be one area of bipartisan agreement.

The current level of congressional gridlock is generally associated with a number of distinct political and social phenomena.¹³⁶ First, between 1955 and 1990, divided government occurred two thirds of the time, up from 14 percent of the time between 1897 and 1954,¹³⁷ and between 1990 and 2016, the same party has controlled the House, Senate,

¹³⁰ See *id.* The average length of bills passed since 1993 is 5.9 pages, so Bump counted the number of bills six pages or longer passed by this Congress during its first six months as compared to past Congresses’ first six months. The article notes that some of Trump’s signed laws were undoing President Obama’s policies through Congressional Review Act bills, which do not require as many words as creating a new, original measure.

¹³¹ See Jennifer Steinhauer, *McCain Returns to Washington to Cast a Vote to Help the President Who Derided Him*, N.Y. TIMES (July 25, 2017), https://www.nytimes.com/2017/07/25/us/politics/mccain-health-care-brain-cancer.html?hp=undefined&action=click&pgtype=Homepage&clickSource=story-heading&module=b-lede-package-region®ion=top-news&WT.nav=top-news&_r=0&auth=login-smartlock.

¹³² See READ: *John McCain’s Speech on the Senate Floor*, U.S. NEWS & WORLD REP. (July 25, 2017), <https://www.usnews.com/news/articles/2017-07-25/read-john-mccains-remarks-on-the-senate-floor-after-cancer-diagnosis>.

¹³³ See Sheryl G. Stolberg & Nicholas Fandos, *As Gridlock Deepens in Congress, Only Gloom Is Bipartisan*, N.Y. TIMES (Jan. 27, 2018), <https://www.nytimes.com/2018/01/27/us/politics/congress-dysfunction-conspiracies-trump.html>.

¹³⁴ See *id.*

¹³⁵ See James Hohmann, *The Daily 202: Government Shutdown Foreshadows a 2018 of Inaction and Gridlock*, THE WASH. POST (Jan. 22, 2018), https://www.washingtonpost.com/news/powerpost/paloma/daily-202/2018/01/22/daily-202-government-shutdown-foreshadows-a-2018-of-inaction-and-gridlock/5a65417230fb0469e88402a8/?utm_term=.fca8e92b10a1. In the wake of the government shutdown, Senator John Neely Kennedy (R-La.) told reporters, “Our country was founded by geniuses, but it’s run by idiots.” See *id.*

¹³⁶ See KLYZA & SOUSA, *supra* note 124, at 20; MANN & ORNSTEIN, *supra* note 124, at 44–68; Bowling & Ferguson, *supra* note 124, at 183–84.

¹³⁷ See BINDER, *supra* note 124, at 4.

and Presidency for only three full congressional terms.¹³⁸ Recent studies suggest that divided government does in fact increase gridlock under certain conditions.¹³⁹

Second, Congressional members are more polarized than they were in the mid-twentieth century: the average Republican's and Democrat's political ideologies are further apart, and there is less overlap between the two parties.¹⁴⁰ When there are fewer moderates in Congress, gridlock tends to increase because it is less likely parties will reach a deal that each party prefers to no deal at all.¹⁴¹

Third, Congressional districts are becoming less competitive,¹⁴² in part because of gerrymandering,¹⁴³ thereby increasing polarization because congressional representatives become more concerned about primary challengers than challengers from the opposing

¹³⁸ See Art Swift, *In U.S., Preference for Divided Government Lowest in 15 Years*, GALLUP (Sept. 28, 2016), <http://www.gallup.com/poll/195857/preference-divided-government-lowest-years.aspx>.

¹³⁹ See Sarah A. Binder, *The Dynamics of Legislative Gridlock, 1947–96*, 93 AM. POL. SCI. REV. 519, 530 (1999); Fang-Yi Chiou & Lawrence S. Rothenberg, *When Pivotal Politics Meet Partisan Politics*, 47 AM. J. POL. SCI. 503, 518 (2003); John J. Coleman, *Unified Government, Divided Government, and Party Responsiveness*, 93 AM. POL. SCI. REV. 821, 825–26, 832 (1999).

¹⁴⁰ One commonly referenced measure uses voting records to position each Congress member on a scale between extreme liberalism at -1 and extreme conservatism at 1, thus allowing for a maximum distance between political stances of 2. See Keith T. Poole & Howard Rosenthal, *A Spatial Model for Legislative Roll Call Analysis*, 29 AM. J. POL. SCI. 357, 366 (1985). Researchers found the distance between the mean political positions of the two parties in both chambers of Congress was lower than 0.6 in 1974. See Michael Barber & Nolan McCarty, *The Causes and Consequences of Polarization*, in SOLUTIONS TO POLARIZATION IN AMERICA 19 (Nathaniel Persily ed., 2015) (graphic). By contrast, in 2011 the distance between the parties' ideological means was roughly 0.8 in the Senate and greater than 1.0 in the House.¹⁴⁰ See Barber & McCarty, *supra*, at 19 (graphic); Christopher Hare et al., *Polarization in Congress Has Risen Sharply. Where Is It Going Next?*, WASH. POST (Feb. 13, 2014), https://www.washingtonpost.com/news/monkey-cage/wp/2014/02/13/polarization-in-congress-has-risen-sharply-where-is-it-going-next/?utm_term=.5eff2f1e4346 (graphic).

¹⁴¹ See Brian F. Schaffner, *Party Polarization*, in THE OXFORD HANDBOOK OF THE AMERICAN CONGRESS 527, 539 (George C. Edwards et al. eds., 2011) (summarizing influential studies that have found a connection between polarization and gridlock); Barbara Sinclair, *Is Congress Now the Broken Branch?* 2014 UTAH L. REV. 703, 716–718 (2014) (noting that greater difference between party preferences makes compromise less likely, and that this made passing a budget difficult for House Speaker John Boehner). *But see* Richard H. Pildes, *Romanticizing Democracy, Political Fragmentation, and the Decline of American Government*, 124 YALE L.J. 804, 809–10 (2014) (arguing that contemporary political fragmentation, or the inability of party leaders to cajole their members into banding together to cut deals, may hinder political action more than party polarization).

¹⁴² Gary C. Jacobson, *Competition in U.S. Congressional Elections*, THE MARKETPLACE OF DEMOCRACY 27 (Michael P. McDonald & John Samples eds., 2007); JEFFREY M. STONECASH ET AL.; DIVERGING PARTIES: SOCIAL CHANGE, REALIGNMENT, AND PARTY POLARIZATION 19 (2003). ELAINE C. KAMARCK, BROOKINGS INST., INCREASING TURNOUT IN CONGRESSIONAL PRIMARIES 4 (2014), <https://www.brookings.edu/wp-content/uploads/2016/06/KamarckIncreasing-Turnout-in-Congressional-Primaries72614.pdf>. In fact, a trend in decreasing competitiveness for House seats since the late 1800s was noticed in the 1960s and 1970s, though early research focused on the growing advantages of House incumbents. See Thomas E. Mann, *Polarizing the House of Representatives: How Much Does Gerrymandering Matter?*, in 1 RED AND BLUE NATION? CHARACTERISTICS AND CAUSES OF AMERICA'S POLARIZED POLITICS 263, 268–69 (Pietro S. Nivola & David W. Brady eds., 2007).

¹⁴³ See MANN & ORNSTEIN, *supra* note 124, at 46; Daryl J. Levinson & Richard H. Pildes, *Separation of Parties, Not Powers*, 119 HARV. L. REV. 2311, 2335 (2006).

party and therefore move toward ideological poles.¹⁴⁴ When members of Congress. Bipartisan solutions then become less likely,¹⁴⁵ leading to gridlock of neither party has full control of the government.

Fourth, people have significantly more options for where to get their news than they did forty years ago, when more than 70 percent of Americans watched three television networks with a middle-of-the-road “point-counter-point” perspective.¹⁴⁶ Today, a bounty of cable news channels and online news sources cater to the political leanings of their audiences, encouraging polarization among voters.¹⁴⁷ Research suggests when media are more partisan, gridlock increases. In a politicized media landscape, the minority party can propose self-serving policy or block socially beneficial policy, counting on cover from partisan news outlets.¹⁴⁸

Fifth, As a result of recent court decisions removing most restraints on political spending, there has been a sharp influx of outside cash into politics.¹⁴⁹ This phenomenon raises the stakes for politicians concerned about displeasing donors or other well-financed spending groups. For certain salient issues, if a politician pleases a political spending group, she stands to gain virtually unlimited support in political dollars; if she challenges a group, she runs the risk of political attacks financed by a bottomless purse.¹⁵⁰ This lack of flexibility on the part of politicians may block compromise, leading to gridlock,¹⁵¹ unless a single party has unified government control with a strong majority whose donors favor similar policies.

An analysis of the contribution of each of these factors to gridlock is beyond the scope of this Article, largely because the phenomenon, rather than its causes, is what matters for the determination that the income tax system is not a plausible vehicle for

¹⁴⁴ See Jamie L. Carson et al., *Redistricting and Party Polarization in the U.S. House of Representatives*, 35 AM. POL. RES. 878, 894 (2007); Schaffner, *supra* note 141, at 534.

¹⁴⁵ See Mann, *supra* note 142, at 267; Schaffner, *supra* note 141, at 535; Thomas Stratmann, *Congressional Voting Over Legislative Careers: Shifting Positions and Changing Constraints*, 94 AM. POL. SCI. REV. 665, 672 (2000).

¹⁴⁶ See MANN & ORNSTEIN, *supra* note 124, at 58; Shanto Iyengar & Kyu S. Hahn, *Red Media, Blue Media: Evidence of Ideological Selectivity in Media Use*, 59 J. COMM. 19, 20 (2009).

¹⁴⁷ See MANN & ORNSTEIN, *supra* note 124, at 58; BARBARA SINCLAIR, *PARTY WARS: POLARIZATION AND THE POLITICS OF NATIONAL POLICY MAKING* 63–64 (2006). Polarization from media choice is most pronounced in those who are politically engaged. See Nicholas T. Davis & Johanna L. Dunaway, *Party Polarization, Media Choice, and Mass Partisan-Ideological Sorting*, 80 PUB. OPINION Q. 272, 292 (2016).

¹⁴⁸ See Daniel F. Stone, *Media and Gridlock*, 101 J. PUB. ECON. 94, 101 (2013).

¹⁴⁹ See DANIEL I. WEINER, BRENNAN CENTER FOR JUSTICE, *Citizens United Five Years Later* 4 (2015), http://www.brennancenter.org/sites/default/files/analysis/Citizens_United_%20Five_Years_Later.pdf

¹⁵⁰ See MANN & ORNSTEIN, *supra* note 124, at 78–79 (discussing how politicians fear negative ad campaigns or other retribution from super PACs); Ruben J. Garcia, *Politics at Work After Citizens United*, 49 LOY. L.A. L. REV. 1, 10 (2016) (naming *Citizens United* and campaign finance as a cause of gridlock in Washington in the case of legislature that would help a large number of low-income citizens); Ray La Raja, *The Supreme Court Might Strike Down Overall Contribution Limits. And That’s Okay*, WASH. POST (Oct., 9 2013), https://www.washingtonpost.com/news/monkey-cage/wp/2013/10/09/the-supreme-court-might-strike-down-overall-contribution-limits-and-thats-okay/?utm_term=.89acd0460ffd (blaming Washington’s stalemate in part on politicians feeling beholden to super PACs).

¹⁵¹ See MANN & ORNSTEIN, *supra* note 124, at 80; Gerard N. Magliocca, *Don’t Be So Impatient*, 88(5) NOTRE DAME L. REV. 2157, 2160 n.16 (2013).

effecting the type of redistribution that Kaplow and Shavell have in mind. In contrast, as discussed in Part IV, targeting the issue through the regulatory process is now far more likely to be successful.

III

INEFFECTIVE APPROACHES TO ADDRESSING DISTRIBUTIONAL CONCERNS

As noted above, even though environmental justice advocates and coal miners seem like strange bedfellows at first glance, both groups have tried to derail programs to control greenhouse gases through flexible regulatory tools because of concerns about the disproportionate negative impacts that would accrue to their respective communities.¹⁵² Over the last half century, the concerns of these two groups have been addressed in disparate ways: the former, through environmental justice measures and the latter, through programs designed to bring economic assistance to communities that lose a large proportion of their jobs as a result of regulatory measures. Neither approach has been successful.

Section A explores three important efforts designed to prevent disproportionate environmental harms. Title VI of the Civil Rights Act provides remedies for minority communities that have been disproportionately harmed by government action.¹⁵³ Executive Order 12,898, the Clinton Administration's most significant environmental justice measure, requires that administrative agencies consider and avoid harms to especially vulnerable communities prior to issuing new regulations.¹⁵⁴ Executive Order 13,563, promulgated by President Obama, seeks to increase the attention to distributional concerns in the regulatory impact analyses accompanying federal regulations.¹⁵⁵ Unfortunately, these efforts to ameliorate adverse distributional consequences of government action have been largely unsuccessful.

Section B outlines existing efforts to compensate communities that lose a significant proportion of their jobs as a result of environmental regulations. The focus here has been on the Clean Air Act's impact on coal mining jobs. Neither legislative efforts undertaken in connection with the Clean Air Amendments of 1990 nor administrative programs developed during the Obama Administration have made a lasting difference.

A. *Environmental Justice Measures*

The environmental justice movement has primarily focused its attention on the siting and permitting of environmentally hazardous facilities, maintaining that such facilities disproportionately affect minority and poor communities.¹⁵⁶ It has also directed

¹⁵² See *supra* text accompanying notes 21–36.

¹⁵³ 42 U.S.C. § 2000d-1 (2012).

¹⁵⁴ Exec. Order No. 12,898, 59 Fed. Reg. 32 (Feb. 16, 1994).

¹⁵⁵ Exec. Order No. 13,563, 76 Fed. Reg. 3821 (Jan. 21, 2011).

¹⁵⁶ See ROBERT BULLARD, *supra* note 21; Robert Bullard, *Anatomy of Environmental Racism and the Environmental Justice Movement*, in CONFRONTING ENVIRONMENTAL RACISM, VOICES FROM THE GRASSROOTS 15 (Robert Bullard ed., 1993); COMMISSION FOR RACIAL JUSTICE, TOXIC WASTES AND RACE IN THE UNITED STATES, UNITED CHURCH OF CHRIST (1987) [hereinafter COMMISSION FOR RACIAL JUSTICE].

its attacks against the regulatory measures and enforcement practices that inadequately protect disadvantaged communities.¹⁵⁷ Over the last 25 years, environmental justice concerns have resulted in the adoption of a number of measures designed to address the resulting unfairness, but the results have been limited.

1. Title VI

Title VI of the Civil Rights Act provides some statutory safeguards against racial discrimination with respect to projects that receive federal financial assistance. In particular, Section 602 directs federal agencies to issue regulations prohibiting recipients of their funding from engaging in discrimination.¹⁵⁸ In 1973, the EPA, which has made the most significant efforts to implement this provision,¹⁵⁹ issued regulations that go beyond the statute's prohibition on intentional discrimination to also disallow actions that have a discriminatory impact.¹⁶⁰ The EPA bars federal funding recipients from, among other things, making siting decisions or administering their programs in ways that have a discriminatory effect.¹⁶¹ In 2001, the Supreme Court decided that individuals have no private right of action to enforce such disparate impact regulations under Title VI.¹⁶² Therefore, the sole practical avenue for environmental justice plaintiffs seeking relief under Title VI is to file an administrative complaint with the EPA.¹⁶³

Title VI complaints filed with the EPA typically allege discriminatory impacts from permitting, siting and zoning decisions concerning sources of pollution such as refineries, landfills, and waste processing facilities.¹⁶⁴ The funding recipients accused of discrimination commonly include state and local agencies responsible for environmental

¹⁵⁷ See COMMISSION FOR RACIAL JUSTICE, *supra* note 156.

¹⁵⁸ 42 U.S.C. § 2000d-1 (2012).

¹⁵⁹ Although environmental justice complaints are often filed with agencies other than EPA — including the Departments of the Interior, Transportation, and Housing and Urban Development — a 2003 report noted that “EPA receives the bulk of Title VI complaints that raise environmental justice concerns and has taken the lead in providing guidance to environmental stakeholders.” U.S. COMM’N ON CIVIL RIGHTS, NOT IN MY BACKYARD: EXEC. ORDER 12,989 AND TITLE VI AS TOOLS FOR ACHIEVING ENVIRONMENTAL JUSTICE 75 (2003).

¹⁶⁰ See 40 C.F.R. § 7.35 (2015); 40 C.F.R. § 7.30 (2015).

¹⁶¹ 40 C.F.R. § 7.35 (2015).

¹⁶² See *Alexander v. Sandoval*, 532 U.S. 275 (2001) (holding that there is no implied private right of action to enforce disparate impact regulations promulgated under Title VI Section 602); *Guardians Ass’n v. Civil Serv. Comm’n*, 463 U.S. 582 (1983) (holding that a plaintiff in a Section 601 lawsuit must prove that the funding recipient intended to discriminate).

¹⁶³ See Note, *After Sandoval: Judicial Challenges and Administrative Possibilities in Title VI Enforcement*, 116 HARV. L. REV. 1774, 1779 (2003) (“After *Sandoval*, a claimant alleging a Title VI disparate impact violation must either seek administrative remedies under section 602, or attempt to bring a § 1983 action in court.”) In a later decision, the Supreme Court effectively foreclosed private enforcement of disparate impact regulations using § 1983. See *Gonzaga Univ. v. Doe*, 536 U.S. 273, 282–86 (2002).

¹⁶⁴ Yue Qiu & Talia Buford, *Environmental Justice, Denied: Decades of Inaction*, CTR. FOR PUB. INTEGRITY (Aug. 3, 2015), <https://www.publicintegrity.org/2015/08/03/17726/decades-inaction> (Data from EPA, compiled by Center for Public Integrity). Other common allegations include that a local zoning or land use plan evinces a broader pattern of discrimination, that the local agency failed to consider the concerns of minority communities, and that minority communities were denied an equal opportunity to participate in local land use decisions.

protection, air quality, public health, and regulation of toxic substances.¹⁶⁵ If the EPA finds that a funding recipient has violated the regulations, it may deny or terminate the funding.¹⁶⁶

For environmental justice advocates, the EPA's Title VI regulations held the promise of directing federal attention to problems to which local governments are unresponsive, providing incentives for EPA funding recipients nationwide to be more attentive to civil rights issues, and directing more of the EPA's scientific resources to the study of local environmental harms and concerns.¹⁶⁷

However, Title VI complaints to EPA have led to very little success. Even though the EPA promulgated its Title VI regulations in 1973, it did not begin enforcing them against recipients until the mid-1990s out of concern that terminating funding to state and local agencies would undermine their ability to support the EPA in reducing pollution.¹⁶⁸

Between 1993 and 2014, the EPA received 265 Title VI complaints. The agency rejected 61 percent of these complaints without an investigation, and rejected a further 20 percent after an investigation. Fewer than 5 percent of cases were resolved, primarily through agreements and settlements.¹⁶⁹ Even when complaints were resolved, it was almost never through a formal finding against the recipient of EPA funds: as of June 2016, EPA had made only one preliminary finding of discrimination, and had never made a final finding of noncompliance that would trigger the suspension of funds to a recipient.¹⁷⁰

EPA has also struggled to process Title VI complaints in a timely fashion, often failing to comply with the timelines set out in the agency's regulations.¹⁷¹ For example,

¹⁶⁵ *Id.* See also James H. Colopy, *The Road Less Traveled: Pursuing Environmental Justice Through Title VI of The Civil Rights Act of 1964*, 13 STAN. ENVTL. L.J. 125, 154 (1994) ("A typical recipient is a state environmental agency, such as the Louisiana Department of Environmental Quality, that receives federal funding to enforce state environmental laws and to fund specific programs within the state.").

¹⁶⁶ See 40 C.F.R. § 7.130 (2015).

¹⁶⁷ Tony LoPresti, *Realizing the Promise of Environmental Civil Rights: The Renewed Effort to Enforce Title VI of the Civil Rights Act of 1964*, 65 ADMIN. L. REV. 757, 770–74 (2013).

¹⁶⁸ Bradford Mank, *Title VI and the Warren County Protests*, 1 GOLDEN GATE U. ENVTL. L.J. 73, 78 (2007).

¹⁶⁹ The remaining complaints were referred to another agency or pending resolution. Qiu & Buford, *supra* note 164. See also Ctr. for Pub. Integrity, *How We Acquired and Analyzed Data for "Environmental Justice, Denied,"* CTR. FOR PUB. INTEGRITY (Aug. 3, 2015), <https://www.publicintegrity.org/2015/08/03/17724/how-we-acquired-and-analyzed-data-environmental-justice-denied>.

¹⁷⁰ U.S. COMM'N ON CIVIL RIGHTS, ENVIRONMENTAL JUSTICE: EXAMINING THE ENVIRONMENTAL PROTECTION AGENCY'S COMPLIANCE AND ENFORCEMENT OF TITLE VI AND EXECUTIVE ORDER 12,898 4 (2016). EPA has, however, resolved several complaints through post-investigation settlements and informal agreements reached before the conclusion of the investigation, including at least twelve such resolutions between 1996 and 2013. See Qiu & Buford, *supra* note 164. More recently, in early 2017, EPA sent several critical letters to funding recipients subject to Title VI complaints without making preliminary findings against those recipients. See, e.g. Letter from Lilian S. Dorka, Dir., EPA External Civil Rights Compliance Office, to William G. Ross, Acting Sec'y, N.C. Dep't of Env'tl. Quality (Jan. 12, 2017); Letter from Lilian S. Dorka, Dir., EPA External Civil Rights Compliance Office, to Heidi Grether, Dir., Mich. Dep't of Env'tl. Quality (Jan. 19, 2017).

¹⁷¹ See 40 C.F.R. § 7.115 (2015); 40 C.F.R. § 7.120 (2015).

EPA regulations indicate that the agency will decide whether to accept a complaint for investigation within twenty days of receiving it,¹⁷² but according to one analysis, between 1996 and 2013 the EPA took an average of 350 days to decide whether to accept a complaint.¹⁷³

Environmental justice advocates have criticized the EPA's enforcement of its Title VI regulations as ineffectual.¹⁷⁴ Government¹⁷⁵ and government-commissioned¹⁷⁶ reports have been similarly critical. In 2016, the U.S. Commission on Civil Rights criticized the EPA's "inability to timely process or resolve Title VI complaints" and its "timid (if not entirely lacking) enforcement."¹⁷⁷ Despite the agency's repeated efforts to empower and improve its Title VI enforcement program, including the recent adoption of structural changes to the program under the Obama Administration,¹⁷⁸ the program has continued to disappoint environmental justice advocates. Some have gone as far as to state that, "no legal tool has inspired such high hopes – and such deep disappointment – as Title VI of the Civil Rights Act of 1964."¹⁷⁹

There are a number of barriers to effective implementation of Title VI protections, including a limited role for complainants in the administrative complaint process and limited affirmative obligations for funding recipients to review or disclose environmental justice issues. For the purpose of this discussion, however, the most relevant shortcomings are the limited jurisdiction Title VI provides and the blunt remedies available to the EPA.

¹⁷² 40 C.F.R. § 7.115(c) (2015).

¹⁷³ Kristen Lombardi et al., *Environmental Justice Denied: Environmental Racism Persists, and the EPA Is One Reason Why*, CTR. FOR PUB. INTEGRITY (Aug. 3, 2015), <https://www.publicintegrity.org/2015/08/03/17668/environmental-racism-persists-and-epa-one-reason-why>. Similarly, a 2011 report found that EPA had complied with its twenty-day target for acknowledging Title VI complaints in only 6 percent of cases. DELOITTE CONSULTING LLP, EVALUATION OF THE EPA OFFICE OF CIVIL RIGHTS 19 (2011) available at https://archive.epa.gov/epahome/ocr-statement/web/pdf/epa-ocr_20110321_finalreport.pdf [hereinafter DELOITTE REPORT]. In 2009, the Ninth Circuit Court of Appeals found that EPA's failure to process a Title VI complaint within the regulatory deadlines was "agency action unlawfully withheld" under the Administrative Procedure Act. *Rosemere Neighborhood Ass'n v. EPA*, 581 F.3d 1169 (9th Cir 2009). EPA eventually settled the case by agreeing, among other things, to timely respond to future complaints from the plaintiffs. Settlement Agreement between the Rosemere Neighborhood Ass'n, EPA and Adm'r Lisa Jackson (Mar. 18, 2010), available at <http://www.rosemerena.org/home/wp-content/uploads/2010/03/Signed-Settlement-Agmt-Rosemere-v-EPA.pdf>.

¹⁷⁴ See Lombardi, et al., *supra* note 173 (describing several advocates' disappointment with EPA's Title VI program and quoting a Baton Rouge environmental justice activist as saying, "All of these complaints to EPA have gotten us nothing — zero.").

¹⁷⁵ See U.S. COMM'N ON CIVIL RIGHTS *supra* note 170.

¹⁷⁶ See DELOITTE REPORT, *supra* note 173, at 1 (finding that EPA's civil rights office had "not adequately adjudicated Title VI complaints").

¹⁷⁷ U.S. COMM'N ON CIVIL RIGHTS, *supra* note 170, at 2–3.

¹⁷⁸ During the Obama administration, the EPA took steps to raise the profile of civil rights issues within the agency and accelerate the processing of Title VI complaints, eventually restructuring its civil rights office and relocating it within the Office of General Council. See EPA CIVIL RIGHTS EXEC. COMM., DEVELOPING A MODEL CIVIL RIGHTS PROGRAM FOR THE ENVIRONMENTAL PROTECTION AGENCY (2012); Memorandum from Gina McCarthy, Adm'r, on Relocations within EPA to Further Elevate Agency Focus on Fed. Civil Rights Responsibilities and Intergovernmental Relations (Dec. 7, 2016).

¹⁷⁹ See LoPresti, *supra* note 167, at 757.

The EPA's Title VI regulations cover only a subset of potential environmental justice complaints. Namely, because the regulations prohibit discrimination based on race, color, national origin, and in some cases sex, they offer no direct remedy to potential complainants alleging discrimination based on other classifications, such as wealth or income.¹⁸⁰

Moreover, the EPA is authorized to enforce these regulations only against recipients of its financial assistance. Therefore, Title VI generally offers no relief for environmental justice complainants concerned about discrimination by entities that do not receive EPA funds.¹⁸¹ One analysis found that of the 256 civil rights complaints filed with the agency between 1996 and 2013, the EPA dismissed 95 because the entity in question did not receive EPA funding.¹⁸²

In practice, even entities that receive permits from EPA funding recipients may lie outside the reach of EPA's Title VI enforcement. Agency guidance provides that its investigation of Title VI complaints "primarily concerns the actions of recipients rather than permittees."¹⁸³ This restriction is significant, because much of EPA's regulatory authority is exercised through the permitting process.¹⁸⁴

Even when the EPA has jurisdiction over an entity, the remedies available are ill suited to advance the goals of environmental justice. The main remedy available under Title VI and EPA's implementing regulations is the termination of financial assistance to the funding recipient, or to the specific program or activity in question.¹⁸⁵ This remedy is often inadequate to resolve complainants' concerns.

¹⁸⁰ See 40 C.F.R. § 7.35 (2015); 40 C.F.R. § 7.30 (2015); Scott Michael Edson, *Title VI or Bust? A Practical Evaluation of Title VI of the 1964 Civil Rights Act as an Environmental Justice Remedy*, 16 FORDHAM EVTL. L. REV. 141, 172–73 (2004). See also Letter from Rafael DeLeon, Dir., U.S. EPA, Office of Civil Rights, to Steven Brittle, President, Don't Waste Arizona, Inc. (July 30, 2009) (dismissing an allegation that Maricopa County's issuance of a permit for a facility that would emit hydrogen fluoride in low-income communities constituted intentional discrimination, because "EPA's nondiscrimination regulations do not cover discrimination on the basis of low-income status.")

¹⁸¹ See David A. Dana & Deborah Tuerkheimer, *After Flint: Environmental Justice as Equal Protection*, 111 NW. U. L. REV. ONLINE 93, 101 (2017).

¹⁸² Lombardi, et al. *supra* note 173. Since 1996, complaints rejected by EPA for lack of a funding nexus have concerned, for example, federally administered agencies and programs (e.g., the Army National Guard and the Los Alamos National Laboratory), city development agencies, state correctional facilities, local housing authorities, hospitals, city governments, and school boards. See Qiu & Buford, *supra* note 164.

¹⁸³ Draft Title VI Guidance for EPA Assistance Recipients Administering Environmental Permitting Programs (Draft Recipient Guidance) and Draft Revised Guidance for Investigating Title VI Administrative Complaints Challenging Permits (Draft Revised Investigation Guidance), 65 Fed. Reg. 39,650, 39,651 (June 27, 2000) (hereinafter Draft Revised Investigation Guidance).

¹⁸⁴ See generally Richard J. Lazarus & Stephanie Tai, *Integrating Environmental Justice into EPA Permitting Authority*, 26 ECOLOGY L. Q. 617 (1999) (discussing the importance of permitting authority as part of EPA's regulatory capacity).

¹⁸⁵ 40 C.F.R. § 7.130 (2015). In addition to cutting off funding, EPA is also authorized to "use any other means authorized by law to get compliance, including a referral of the matter to the Department of Justice." 40 C.F.R. § 7.130(a) (2015).

Most importantly, it is a poorly tailored remedy for addressing cumulative risks and harms. As the EPA has noted in guidance documents, it is rare for “the permit that triggered the complaint [to be] the sole reason a discriminatory effect exists,” so withdrawing funds for the particular permit in question “will not necessarily be an appropriate solution” for complainants’ concerns.¹⁸⁶

Also, where a complaint alleges environmental harms that have already occurred or challenges a permit for a facility that has already been constructed, the funding termination remedy may not provide much relief to complainants.¹⁸⁷ Neither the statute nor the regulations appear to allow for retroactive relief in the form of money damages.¹⁸⁸ Moreover, the EPA is authorized to take remedial action only after a lengthy process, including an investigation and opportunities for the recipient to rebut the EPA’s findings and request a hearing.¹⁸⁹ Therefore, the agency’s final decision to terminate funds may come too late to affect the particular action challenged in the complaint.¹⁹⁰

The funds termination remedy also carries significant downsides for the EPA. The agency relies on state and local funding recipients, such as state environmental agencies, to help implement most major environmental laws,¹⁹¹ and aggressive use of Title VI remedies can imperil this relationship.¹⁹² Since 1996, the EPA has investigated Title VI complaints against state agencies responsible for issuing permits under the Clean Air Act, setting water quality standards under the Clean Water Act, and assisting in the cleanup of contaminated sites under the EPA’s Superfund program.¹⁹³ Some complaints specifically allege discrimination in a local agency’s implementation of a federal program, for example during issuance of a permit for emissions of a hazardous air pollutant under the Clean Air

¹⁸⁶ Draft Revised Investigation Guidance at 39,653.

¹⁸⁷ See 40 C.F.R. § 7.130 (2015); 42 U.S.C. §2000d-1 (2012). At least one commentator has suggested that EPA’s regulatory authority to use “other means authorized by law” to ensure compliance by recipients can be used flexibly to impose remedies other than funding termination. LoPresti, *supra* note 167, at 787–89.

¹⁸⁸ See 40 C.F.R. § 7.130 (2015); 42 U.S.C. §2000d-1 (2012).

¹⁸⁹ See 40 C.F.R. §§ 7.115–7.120 (2015).

¹⁹⁰ Complainants have proposed that EPA overcome this timing issue by using its authority to “use any other means authorized by law to get compliance” to impose creative and more aggressive remedies. See 40 C.F.R. § 7.130(a) (2015). One complainant, for example, proposed that EPA condition future financial assistance to the recipient on the revocation of the already-issued permit at the heart of the complaint. See Letter from Maria M. Laverde, S. N.M. Legal Services, to Michael Mattheisen, EPA Office of Civil Rights (July 23, 2002) (requesting that EPA “immediately suspend all financial and other assistance” to the New Mexico Env’t Dep’t unless and until the Dep’t revoke a landfill permit).

¹⁹¹ Hubert H. Humphrey & LeRoy C. Paddock, *The Federal and State Roles in Environmental Enforcement: A Proposal for A More Effective and More Efficient Relationship*, 14 HARV. ENVTL. L. REV. 7, 13 (1990).

¹⁹² *Id.* at 39 (“Federal intervention introduces uncertainty into state enforcement programs, results in duplicative enforcement efforts, drains the limited enforcement resources available to both the state and federal governments, often disrupts the working relationship between states and EPA, and conflicts with the historical role of states in dealing with local environmental enforcement problems”).

¹⁹³ Data from the Env’t. Protection Agency, compiled by the Ctr. For Pub. Integrity (Aug. 3, 2015), available at <https://www.publicintegrity.org/2015/08/03/17726/decades-inaction>. These entities include regional air pollution control agencies, local solid waste authorities, city governments, and the main environmental agencies in states including Illinois, Louisiana, Indiana, South Dakota, California, New York, and Oklahoma, among other states.

Act, or in the permitting hearings for a hazardous waste storage facility under the Resource Conservation and Recovery Act.¹⁹⁴ While the EPA could hypothetically enforce by terminating funding in such instances, doing so may very well undermine implementation of major environmental laws by state and local governments.

Moreover, robust use of the funding termination remedy risks dragging the EPA into broader political tensions with local governments and other stakeholders. For example, when the agency investigated a complaint concerning a proposed steel plant in Michigan in 1998, groups including the U.S. Conference of Mayors and the U.S. Chamber of Commerce criticized the EPA for allegedly impairing economic development, intruding into state and local decisionmaking, and functioning as a “national zoning board.”¹⁹⁵

For these reasons, the EPA may be reluctant to terminate funds to recipients.¹⁹⁶ For the first twenty years after the EPA adopted its Title VI regulations in 1973, the agency did not enforce these regulations, in part out of concern for hurting its relationships with local agencies and hampering their role in reducing pollution.¹⁹⁷ The EPA began to enforce the regulations during the Clinton Administration by investigating complaints against local permitting schemes and siting decisions.¹⁹⁸ Nevertheless, to date, the EPA has never terminated funds to any recipient or program for a Title VI violation.¹⁹⁹

Turning specifically to this Article’s focus on marketable permit systems, experience with Title VI protections suggests that they are ill suited to address the problem of discriminatory outcomes of permit trading. One commentator notes that because EPA regulations require the alleged discrimination to have occurred within 180 days of the petition being filed, there is difficulty in assessing the disparate impact of such trading permits over time.²⁰⁰ In this connection, a 2012 complaint filed with the EPA alleged that California Air Resources Board, as a recipient of federal financial assistance from EPA, was in violation of EPA’s Title VI implementing regulations by approving the California

¹⁹⁴ *Id.* See also Letter from Rafael DeLeon to Steven Brittle, *supra* note 180; Letter from Luke Cole, Gen. Counsel, Ctr. On Race, Poverty and the Env’t, to Carol Browner, Adm’r., EPA (Aug. 7, 2000) (alleging discrimination by the Ariz. Dep’t of Env’tl. Quality during the permit hearing process for a hazardous waste storage and treatment facility).

¹⁹⁵ LoPresti, *supra* note 167, at 809.

¹⁹⁶ LoPresti, *supra* note 167, at 784. LoPresti, citing anonymous interviews, notes that EPA’s civil rights officials “do not view this remedy as a realistic option,” which helps explain the agency’s “over-reliance on informal resolution and voluntary compliance.”

¹⁹⁷ Mank, *supra* note 168, at 78. See also Michael Fisher, *Environmental Racism Claims Brought Under Title VI of The Civil Rights Act*, 25 ENVTL. L. 285, 314 (1995) (“From EPA’s perspective, an irreconcilable conflict existed between its task and the demands of Title VI, because the agency could discipline discriminatory recipients of funding only by terminating their grants and deferring the existing pollution problem.”); Colopy, *supra* note 165, at 183 (noting that as of 1983, “EPA had taken no measures to enforce Title VI, and agency staff preferred maintaining good relations with funding recipients over enforcing antidiscrimination laws”).

¹⁹⁸ Fisher, *supra* note 197, at 315.

¹⁹⁹ U.S. COMM’N ON CIVIL RIGHTS, *supra* note 170, at 4.

²⁰⁰ *Id.* at 106 (Chinn notes that, “What could be deemed a disparate impact within the 180 day investigatory window, might not be disparate after another 180 days of trading”).

Cap and Trade program.²⁰¹ Petitioners requested that EPA condition federal funding on the use of “less discriminatory alternatives . . . such as direct regulations.”²⁰² The agency ultimately dismissed the claims on the grounds that they were not yet ripe.²⁰³ And the EPA’s reluctance to terminate the funding of state agencies applies with equal force in this context.

As it currently stands, the EPA lacks the authority and tools to adequately address environmental justice claims. The EPA’s limited authority to enforce Title VI regulations against funding recipients leaves them ill equipped to address environmental justice claims against permittees. Furthermore, the EPA is not inclined to enforce against funding recipients, because doing so puts their partnerships with valuable stakeholders, like states and local governments, at risk.

2. *Executive Orders on Environmental Justice and Distribution*

Responding to criticism from environmental justice activists and organizations regarding the inequitable distribution of environmental hazards, in 1994 President Clinton signed Executive Order 12,898.²⁰⁴ The order instructs federal agencies to identify and address disproportionately high and adverse human health or environmental impacts on minority and low-income communities in the process of rulemaking and permitting as an ex ante supplement to ex post Title VI protections.²⁰⁵ To this end, the order requires the establishment of an interagency working group tasked with developing an environmental justice strategy across federal agencies, collecting and analyzing relevant data for rulemaking, and soliciting comments from minority and low-income communities in the rulemaking process.²⁰⁶ The implementation of the order relies primarily on presidential

²⁰¹ *Complaint under Title VI of the Civil Rights Act of 1964*, available at <http://ggucuel.org/wp-content/uploads/6.8.12-CSE-v.-CARB-Title-VI-complaint2.pdf>.

²⁰² *Id.* at 29.

²⁰³ Rafael Deleón, *Rejection of Title VI Administrative Complaint*, available at http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2012/20120712_docket-09R-12-R9_letter.pdf

²⁰⁴ See David Konisky *Federal Environmental Justice Policy*, in *FAILED PROMISES: EVALUATING THE FEDERAL GOVERNMENT’S RESPONSE TO ENVIRONMENTAL JUSTICE* 29 (David M. Konisky ed., 2015) (“In many respects EO 12898 represented the culmination of a sustained effort by a dedicated group of civil rights leaders, community organizers, and scholar-activists to push the federal government to respond to what they believed was overwhelming and indisputable evidence that minority and low-income groups faced disproportionate environmental risks.”).

²⁰⁵ Exec. Order No. 12,898, 59 Fed. Reg. 32 (Feb. 16, 1994). See also, President Bill Clinton, *Memorandum for the Heads of all Departments and Agencies: Executive Order on Federal Actions to Address Environmental Justice in Populations and Low-Income Populations* (Feb. 11, 1994) (pointing to existing statutory provisions, such as Title VI and National Environmental Policy Act of 1969, and asking agencies to take measures during administrative decisionmaking to ensure they are in accordance with existing statutory provisions and there are no undue burdens imposed on minority and low-income populations).

²⁰⁶ 59 Fed. Reg. 32 (Feb. 16, 1994).

control and oversight of executive agencies.²⁰⁷ The political commitment to the goals of the Executive Order has varied across the different presidencies.²⁰⁸

Commentators criticized the Order's initial implementation during the Clinton presidency because distributional effects of environmental regulations were insufficiently incorporated into the EPA permitting practices.²⁰⁹ The Environmental Appeals Board (EAB), which reviews the EPA's administrative enforcement decisions and appeals from permit decisions,²¹⁰ stated that EPA permitting officials should "exercise [their] discretion to implement the Executive Order to the greatest extent practicable."²¹¹ However, this pronouncement was undercut by the degree of deference that EAB continued to give to permit officials' decisions.²¹² Analysis of EPA practice during the Clinton Administration shows that relief was denied by the EAB in all ten cases in which the Executive Order was invoked.²¹³

Denial of environmental justice claims by the EAB during the Clinton administration took two forms. In some cases, the EAB denied environmental justice claims by pointing to the requirements of the relevant statutory provision and indicating there was no discretion for the EPA to address such concerns.²¹⁴ As long as the applicant met the statute's permitting requirements, the EAB could not push the agency to exercise discretion to deny the claim. In other cases, the EAB denied claims that challenged the strength of the EPA's empirical support for concluding there would be no disproportionate

²⁰⁷ The executive order requires an initial report on implementation strategy from the interagency working group to the President by way of the Deputy Assistant to the President for Environmental Policy, but also requires commitment and oversight by agency heads stating, "The head of each Federal agency shall be responsible for ensuring compliance with this order. Each Federal agency shall conduct internal reviews and take such other steps as may be necessary to monitor compliance with this order." *Id.*

²⁰⁸ Although multiple agencies are required to consider the distribution of environmental hazards pursuant to the executive order, EPA regulations provide the most consistent basis to evaluate the implementation of the order over time. *See* Exec. Order No. 12,898, 59 Fed. Reg. 32 (Feb. 16, 1994) (designating EPA as head of the Interagency Working Group and listing all other federal agencies required to comply with the Executive Order).

²⁰⁹ *See* Denis Binder et al., *Survey of Federal Agency Response to President Clinton's Executive Order No. 12898 on Environmental Justice*, 31 ENVTL. L. REV. 11,133, 11,141 (2001) (finding that the Environmental Appeals Board rejected environmental justice claims in all ten permitting disputes in which the issue was raised); Eileen Gauna, *Federal Environmental Justice in Permitting*, in *FAILED PROMISES: EVALUATING THE FEDERAL GOVERNMENT'S RESPONSE TO ENVIRONMENTAL JUSTICE* 63 (David M. Konisky ed., 2015) (arguing that EPA has been perhaps overly cautious in finding legal authority to include environmental justice concerns in permitting); Lazarus & Tai, *supra* note 184 (arguing that EPA can take a more aggressive approach by including environmental justice in permitting decisions).

²¹⁰ U.S. ENVTL. PROT. AGENCY, *THE ENVIRONMENTAL APPEALS BOARD PRACTICE MANUAL* (2013), available at [https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/8f612ee7fc725edd852570760071cb8e/381acd4d3ab4ca358525803c00499ab0/\\$FILE/Practice%20Manual%20August%202013.pdf](https://yosemite.epa.gov/oa/EAB_Web_Docket.nsf/8f612ee7fc725edd852570760071cb8e/381acd4d3ab4ca358525803c00499ab0/$FILE/Practice%20Manual%20August%202013.pdf).

²¹¹ *Chem. Waste Mgmt. of Indiana, Inc. Permittee*, 6 E.A.D. 66 (EAB June 29, 1995).

²¹² Gauna, *supra* note 209.

²¹³ Binder et al., *supra* note 209.

²¹⁴ *See In re Envotech, L.P.*, 6 E.A.D. 260 (E.P.A. 1996) (costs relevant to the statute and safety of drinking water are the only costs that may be considered).

burdens placed on protected communities, failing to push the agency to collect better data.²¹⁵

Problems with the Executive Order's implementation continued through the Bush presidency. The EPA's Inspector General issued a report in 2004 criticizing the agency's ineffective and inconsistent implementation of the Executive Order, attributable in part to the Bush Administration and in part to more general failures by the EPA across the Bush and Clinton Administrations.²¹⁶ The report pointed to a lack of environmental justice definitions, criteria, and standards to guide agency decisionmaking as undermining the objectives of the executive order.²¹⁷ The Inspector General indicated that there was a failure to identify relevant environmental justice communities or define disproportionality.²¹⁸

As evidence of the failure to identify relevant environmental justice communities, the report directed attention to then-EPA Administrator Christine Todd Whitman's memorandum that defined environmental justice as "fair treatment of people of all races, cultures, and incomes with respect to the development, implementation, and enforcement of environmental laws and policies."²¹⁹ The memorandum's definition of environmental justice shifted focus away from low-income and minority communities, which were the Executive Order's focus.²²⁰ Even when regional offices identified negative impacts on low-income and minority, no standards were provided to consistently measure disproportionality in the distribution of environmental hazards. The lack of standards left regional offices without useful guidance on how to take these concerns more seriously, and as a result they undertook implementation of the Executive Order in different ways.²²¹

²¹⁵ Petitioners challenged the decision not to produce a quantitative risk assessment in arriving at the conclusion that the location would not disproportionately impose burdens on Native American populations in northern Oklahoma. The EAB held that, "neither the Executive Order nor EPA's strategy [to implement the Executive Order] specifically requires that quantitative risk assessment, as opposed to other means, be used to identify the potential for disproportionate impacts on minority populations ... [T]he failure to perform such calculations is not a 'violation' or even a deviation from federal environmental justice policy." *See In re Ash Grove Cement Co.*, 7 E.A.D. 387 (E.P.A 1997); *see also* Gauna, *supra* note 209, at 64 ("[E]arly permitting cases illustrate that EPA permitting officials must conduct, and place into the record, an environmental justice analysis of some sort. If this is done, the permitting official can then rely on that analysis to conclude either that the permit in question does not implicate an environmental justice community, or that because of compliance with a health-based standard, there is no adverse impact").

²¹⁶ OFFICE OF INSPECTOR GENERAL, REPORT NO. 2004-P-00007, EVALUATION REPORT: EPA NEEDS TO CONSISTENTLY IMPLEMENT THE INTENT OF THE EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE (2004).

²¹⁷ *Id.* at i.

²¹⁸ *Id.* at 7–9.

²¹⁹ *Id.* at 35.

²²⁰ *See* President Bill Clinton, *Memorandum for the Heads of all Departments and Agencies: Executive Order on Federal Actions to Address Environmental Justice in Populations and Low-Income Populations* (Feb. 11, 1994) (stating that the "order is designed to focus Federal attention on the environmental and human health conditions in minority communities and low-income communities with the goal of achieving environmental justice").

²²¹ For example, Region 1 defined relevant minority communities as a community whose minority fraction ranks in the upper 85th percentile statewide, while Region 5 identified these groups as twice the statewide average for minority population. With respect to income, Region 1 placed the threshold at communities who rank in the 85th percentile in terms of the percentage of the population having an income below twice the Federal Poverty Level, while Region 5 placed the threshold at twice the state average for

Although the White House Council on Environmental Quality prepared guidelines during the Clinton Administration,²²² the EPA did not, in turn, prepare guidance for its regional offices on how to make these assessments.²²³ The Inspector General report indicated that without clear national requirements and a baseline for regional offices to refer to, some regions insufficiently addressed disproportionate impact on low-income and minority communities.²²⁴ The report also leveled criticism at the lack of personnel committed to environmental justice and inadequate oversight as further frustrating the underlying lack of commitment to vulnerable low-income and minority communities.²²⁵ Ultimately, the EPA rejected most of the Inspector General's recommendations.²²⁶ The EPA under President Bush failed to provide meaningful criteria by which environmental justice could be defined, measured, and implemented, and progress integrating environmental justice in EPA regulations came to a halt.²²⁷

During the Obama Administration, the pendulum began to swing back in the direction of progress toward more fully addressing environmental justice concerns. The EPA adopted Plan EJ 2014 to more seriously weave the Executive Order and environmental justice into the fabric of EPA decisionmaking.²²⁸ In particular, the Plan

percentage of the population with income below twice the Federal Poverty Level. *See* OFFICE OF INSPECTOR GENERAL, *supra* note 216 at 8–9, 23.

²²² COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL JUSTICE: GUIDANCE UNDER THE NATIONAL ENVIRONMENTAL POLICY ACT (1997), *available at* <https://www.epa.gov/sites/production/files/2015-04/documents/ej-guidance-nepa.pdf>.

²²³ *See id.* at 1 (Although the Council on Environmental Quality provided guidelines, they stipulate that further procedures may be implemented).

²²⁴ OFFICE OF INSPECTOR GENERAL, *supra* note 216, 15 (“From a Regional standpoint, more focus needs to be placed on those Regions that are ‘less aggressive’ about their focus on EJ. In other words, on those Regions who believe that enforcement is for everybody, rather than recognizing special circumstances exists and need to be addressed in certain types of communities... [S]ome Regions do not even account for disproportional impact.”).

²²⁵ Because staffing at the regional level depends on the Assistant Administrator or Regional Administrator, there were significant disparities in employment of personnel committed to environmental justice. The report indicates that Regions 2, 3, 5, 7, and 10 each had fewer than five environmental justice full-time employees, while Region 1 had twelve and Region 9 had over 50. *Id.* at 14–15.

²²⁶ OFFICE OF INSPECTOR GENERAL, *supra* note 216, at 46 (rejecting the Inspector General's recommendation to provide regional offices with a standard definition for an environmental justice area, arguing that the use of a quantifiable threshold for minority population in identifying environmental justice communities is too simplistic to properly further environmental justice goals); *see also id.* at 49 (concurring with the Inspector General's recommendation that a comprehensive study be conducted to ensure that adequate resources are available to fully implement the agency's environmental justice program, but also indicating that the Office of Environmental Justice cannot dictate how regions and program offices spend their money).

²²⁷ *See also* OFFICE OF INSPECTOR GENERAL, REPORT NO. 2006-P-00034, EPA NEEDS TO CONDUCT ENVIRONMENTAL JUSTICE REVIEWS OF ITS PROGRAMS, POLICIES, AND ACTIVITIES (2006) (criticizing EPA two years later for insufficiently directing program and regional offices to conduct environmental justice reviews); GOVERNMENT ACCOUNTABILITY OFFICE, EPA SHOULD DEVOTE MORE ATTENTION TO ENVIRONMENTAL JUSTICE WHEN DEVELOPING CLEAN AIR RULES (2005) (finding that EPA had devoted little attention to environmental justice in drafting three significant clean air rules between 2000 and 2004).

²²⁸ U.S. ENVTL. PROT. AGENCY, PLAN EJ 2014 (2011), *available at* <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100DFCQ.PDF?Dockey=P100DFCQ.pdf>.

sought to better incorporate environmental justice concerns into EPA permitting decisions²²⁹ and to more seriously include them in rulemaking.²³⁰

Plan EJ 2014 gave environmental justice a bigger role in permitting decisions, and led to some effort to more seriously hold EPA regional offices accountable for faithful application of the Executive Order's requirements.²³¹ During the Obama Administration, the EAB rejected two permits issued by the regional EPA office for Alaska because of inadequate compliance with the requirements of the Executive Order.²³²

With respect to rulemaking, guidance issued as part of Plan EJ 2014 sheds light on how agencies should try to consider environmental justice and distributional concerns.²³³ The guidance stated that new rules require an analysis of disproportionate and adverse impacts on minority, low income, and indigenous populations.²³⁴ This analysis includes identifying new disparate impacts, exacerbation of existing disparate impacts, and identifying opportunities to address existing disparate impacts.²³⁵ Moreover, the guidance requires that EPA provide meaningful opportunity for minority, low-income, and indigenous populations to participate in rulemaking.

There were at least a few cases in which Plan EJ 2014 led the EPA to explicitly consider the distributional effects of some regulations. Two examples include a newly published definition of solid waste and regulations on particulate matter.²³⁶ In 2009, the Sierra Club submitted an administrative complaint requesting that the EPA revoke 2008 Definition of Solid Waste Rule arguing in part that the EPA failed to properly support its

²²⁹ U.S. ENVTL. PROT. AGENCY, CONSIDERING ENVIRONMENTAL JUSTICE IN PERMITTING: IMPLEMENTATION PLAN (2011), *available at* <https://nepis.epa.gov/Exe/ZyPDF.cgi/P100ETRR.PDF?Dockey=P100ETRR.pdf>.

²³⁰ U.S. ENVTL. PROT. AGENCY, PLAN EJ 2014: INCORPORATING ENVIRONMENTAL JUSTICE IN RULEMAKING (2015), *available at* <https://www.epa.gov/sites/production/files/2015-06/documents/considering-ej-in-rulemaking-guide-final.pdf>.

²³¹ *See generally* Gauna, *supra* note 209 (discussing Plan EJ 2014's permitting programs).

²³² *See In Re: Shell Gulf of Mexico, Inc., Shell Offshore, Inc.*, 15 E.A.D. 103 (E.P.A. 2010) (Permitting decision was remanded and the Board stated that, "with respect to the environmental justice analysis, the Board concludes that the Region clearly erred when it relied solely on demonstrated compliance with the then-existing annual NO₂ NAAQS as sufficient to find that the Alaska Native population would not experience disproportionately high and adverse human health or environmental effects from the permitted activity"); *see also*, Gauna *supra* note 209, 65 ("The case also held out the possibility that the Board could be persuaded to undertake more searching review of the adequacy of the permitting agency's environmental justice analysis"). *But see id.* at 65 ("The victory for environmental justice challengers was short-lived. On appeal after remand the Board endorsed the Region's supplemental twenty-page environmental justice analysis.").

²³³ *Id.*

²³⁴ *Id.* at 10.

²³⁵ *Id.* at 10–12.

²³⁶ *See* Definition of Solid Waste, 40 C.F.R. § 260 (2015); Environmental Protection Agency, *Potential Adverse Impacts Under the Definition of Solid Waste Exclusions (Including Potential Disproportionate Adverse Impacts to Minority and Low-Income Populations)* (2014); Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements, 40 C.F.R. § 50 (2016); Environmental Protection Agency, *Regulatory Impact Analysis for the Final Revisions to the National Ambient Air Quality Standards for Particulate Matter* (2012). (the new rule on ambient air quality standards eliminated spatial averaging, which allowed for concentrated hazards to be offset by averaging over a wider zone).

conclusion that the rule would not impose disproportionate impacts to minority or low-income communities.²³⁷ In response to the complaint, the EPA produced an in-depth analysis of the disproportionate effects of the 2008 rule.²³⁸ After the EPA's analysis finding some disproportionate costs imposed on minority and low-income communities, the agency revised the rule to mitigate disproportionate effects.²³⁹

Most significantly, the EPA restricted the use of spatial averaging for particulate matter, a practice that had been criticized since its initial implementation.²⁴⁰ Spatial averaging allows areas to meet compliance with ambient air quality standards by aggregating and averaging findings from multiple monitoring sites within a region.²⁴¹ EPA requirements could be met under this scheme even when some communities within a region were subject to greater exposure than allowed by the ambient air quality standards.²⁴² Thus, restriction of spatial averaging removed an important contributing factor to inequitable distribution of environmental hazards.

Despite these positive developments, environmental justice concerns appear not to be fully integrated into the EPA's decisionmaking. Some observers criticized Plan EJ 2014 as inadequate, arguing that the steps taken towards promoting environmental justice goals are either too small or have been inadequately institutionalized.²⁴³ Indeed, of the nearly

²³⁷ Sierra Club, *Petition for Reconsideration of "Revisions to the Definition of Solid Waste,"* 73 Fed. Reg. 64,668 (Oct. 30, 2008,) and *Request for Stay*, <https://www.regulations.gov/document?D=EPA-HQ-RCRA-2009-0315-0002>.

²³⁸ U.S. ENVTL. PROT. AGENCY, POTENTIAL ADVERSE IMPACTS UNDER THE DEFINITION OF SOLID WASTE (INCLUDING POTENTIAL DISPROPORTIONATE ADVERSE IMPACTS TO MINORITY AND LOW-INCOME POPULATIONS) (2014).

²³⁹ *Id.*

²⁴⁰ 40 C.F.R. § 50 (2016) (specifically restricting spatial averaging for PM_{2.5}).

²⁴¹ See generally Philip E. Karmel & Thomas N. FitzGibbon, *PM_{2.5}: Federal and California Regulation of Fine Particulate Air Pollution*, 2002 CAL. ENVTL. L. RPTR. 302 (2002) ("The decision to use spatial averaging, in effect, relaxes the stringency of the PM_{2.5} standard because it allows monitoring sites whose average concentrations exceed the annual standard to be offset by nearby monitoring sites whose average concentrations are sufficiently below the annual standard as to bring the average of the sites within the standard").

²⁴² See American Lung Association, Comment Letter on EPA's Policy Assessment for the Review of the Particulate Matter National Ambient Air Quality Standards (Aug. 16, 2010), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2007-0492-0222> ("Spatial averaging could potentially allow areas with hotspots of particulate matter concentrations to avoid nonattainment designations and cleanup requirements").

²⁴³ See, e.g., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-12-77, ENVIRONMENTAL JUSTICE: EPA NEEDS TO TAKE ADDITIONAL ACTIONS TO HELP ENSURE EFFECTIVE IMPLEMENTATION (2010) (finding that EPA had not sufficiently defined key terms for environmental justice, articulated states' roles in ongoing planning and environmental justice integration efforts, nor had EPA developed performance measures for eight of nine implementation plans to track agency progress); see also David Konisky *Federal Environmental Justice Policy*, in *FAILED PROMISES: EVALUATING THE FEDERAL GOVERNMENT'S RESPONSE TO ENVIRONMENTAL JUSTICE* 233 (David M. Konisky ed., 2015) (suggesting that Plan EJ 2014 might not endure); Geltman et al., *supra* note 45, at 149 (evaluating the effectiveness of Plan EJ 2014 and concluding it is a step forward but ultimately insufficient to adequately advance environmental justice concerns).

4000 rules the EPA promulgated during the Obama Administration,²⁴⁴ the agency referred to only seven as ones taking environmental justice concerns into account.²⁴⁵

Additionally, President Obama issued Executive Order 13,563 to include values like “equity, human dignity, fairness and distributive impacts”²⁴⁶ alongside cost benefit analysis in regulatory review.²⁴⁷ The approach of Executive Order 13,563 to the qualitative description of costs and benefits built on that of Executive Order 12,866,²⁴⁸ but with slight variations. Executive Order 12,866 had allowed agencies to consider “qualitative measures of costs and benefits that are difficult to quantify” and directed agencies that “in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.”²⁴⁹ Executive Order 13,563 reinforced this approach, but added two new concepts for consideration: human dignity and fairness. It stated that “[w]here appropriate and permitted by law,” agencies “may consider (and discuss qualitatively) values that are difficult or impossible to quantify, including equity, human dignity, fairness, and distributive impacts.”²⁵⁰

For the most part, agencies did not change their behavior in response to this Executive Order.²⁵¹ Agencies still attempted to monetize the costs and benefits of regulations, and agencies rarely promulgated regulations where the monetized costs outweighed the regulation’s monetized benefits. The Regulatory Impact Analyses

²⁴⁴ *A Review of EPA’s Regulatory Activity During the Obama Administration: Energy and Industrial Sectors: Hearing Before the S. Subcomm. on Energy and Power*, 114th Cong. (2016).

²⁴⁵ See PLAN EJ 2014, *supra* note 228 (EPA points to seven rules which have included evaluation of environmental justice concerns). See also Geltman et al., *supra* note 45, at 147 (finding that in 36 of 37 randomly selected EPA regulatory actions following Plan EJ 2014, the agency determined “there would be no negative impact or there would be a positive change in environmental conditions”).

²⁴⁶ Exec. Order No. 13,563, § 1(c), 76 Fed. Reg. 3821, 3821 (Jan. 21, 2011).

²⁴⁷ The Order reinforced the core principles of Executive Order 12,866. Both Executive Orders required agencies to consider the costs and benefits of a regulation, and directed agencies to only propose or adopt regulation that are cost-justified and maximize net benefits. If the costs and benefits were not susceptible to quantification, agencies were to describe the costs and benefits qualitatively. See Exec. Order No. 13,563 § 1(b), 76 Fed. Reg. 3821 para. 3 (Jan. 21, 2011) (noting that “[t]his order is supplemental to and reaffirms the principles, structures, and definitions governing contemporary regulatory review that were established in Executive Order 12866 of September 30, 1993.”). See also Cass Sunstein, Administrator, Office of Information and Regulatory Affairs, *Memorandum for The Heads of Executive Departments and Agencies, and of Independent Regulatory Agencies* (Feb. 2, 2011) (“Executive Order 13563 is designed to affirm and to supplement Executive Order 12866; it adds to and amplifies the provisions of Executive Order 12,866, rather than displacing or qualifying them.”).

²⁴⁸ See *supra* text accompanying notes 40–46.

²⁴⁹ Exec. Order No. 12,866 § 1(a), 58 Fed. Reg. 190 para. 4 (Sept. 30, 1993).

²⁵⁰ Exec. Order No. 13,563 § 1(b), 76 Fed. Reg. 3821 para. 3 (Jan. 21, 2011).

²⁵¹ Cass Sunstein explained that the references to equity and distributive impacts meant that agencies could consider whether the costs or benefits of a rule would accrue to people who are “struggling really particularly hard.” His explanations of “dignity” almost always rely on two examples: The Water Closet Clearance Rule and the Prison Rape Prevention Rule. These examples are far from evidence of seriously changing agency behavior. See generally Cass Sunstein, *The Office of Information and Regulatory Affairs: Myths and Realities*, 126 HARV. L. REV. 1838, 1866–67 (2013) (highlighting the Prison Rape Reduction Rule and the Water Closet Clearance Rule as examples of when agencies have taken human dignity into account).

conducted by agencies after EO 13,563 was issued demonstrate that for the most part, agencies' approach to regulatory review remained the same as prior to the Order.²⁵² On occasion, some agencies—particularly the Department of Justice—included a qualitative assessment of the impact of a regulation on values like dignity, equity, fairness, and distributive concerns.²⁵³ They tended to do so only when the monetized costs of a regulation outweighed the regulation's benefits. But most agencies did not take the values into account at all, or at most gave them a cursory treatment.

The Trump presidency ushered in a new wave of concerns from environmental justice advocates.²⁵⁴ Early signs do not bode well for the prospects of a more serious commitment to environmental justice in the near future. President Trump's first budget proposes to eliminate the Office of Environmental Justice in its entirety.²⁵⁵ While Congress has not been receptive to the deep cuts to EPA programs proposed in President Trump's budget, it nonetheless appears willing to reduce the EPA's appropriations.²⁵⁶ With respect to internal management of agency programs, the EPA under Scott Pruitt seems poised to shift focus away from minority and low-income communities once again, as was the case during the Bush administration.²⁵⁷ Additionally, there are indications that suggest EPA under the Trump administration is less active in environmental enforcement.²⁵⁸ Although it is too early to evaluate President Trump's environmental justice record, there is little reason for optimism for environmental justice advocates.

B. Coal Miner Compensation

²⁵² See Lisa Heinzerling, *Inside EPA: A Former Insider's Reflections on the Relationship Between the Obama EPA and the Obama White House*, 31 PACE ENVTL. L. REV. 325, 340 (2014) ("President Obama's new executive order on regulatory review, in short, was neither very new nor very specific. Any hope that President Obama would use the new executive order as an occasion to fundamentally reshape the relationship between the White House and the agencies, or to loosen the grip of cost-benefit analysis on regulatory policy, was dashed").

²⁵³ See e.g. DEPARTMENT OF JUSTICE, FINAL REGULATORY IMPACT ANALYSIS OF THE FINAL REVISED REGULATIONS IMPLEMENTING TITLES II AND III OF THE ADA, INCLUDING REVISED ADA STANDARDS FOR ACCESSIBLE DESIGN 138 (2010) available at https://www.ada.gov/regs2010/RIA_2010regs/DOJ%20ADA%20Final%20RIA.pdf (providing qualitative analysis of human dignity concerns in light of quantifiable costs outweighing quantifiable benefits).

²⁵⁴ See Talia Buford, *Has the Moment for Environmental Justice Been Lost?*, ProPublica (July 24, 2017), https://www.propublica.org/article/has-the-moment-for-environmental-justice-been-lost?wpisrc=nl_energy202&wpmm=1; Yessenia Funes, *What a Trump Presidency Means for Environmental Justice Leaders*, Colorlines (Nov. 23, 2016), <http://www.colorlines.com/articles/trump-presidency-through-words-environmental-justice-leaders>.

²⁵⁵ See OFFICE OF MGMT. & BUDGET, EXEC OFFICE OF THE PRESIDENT, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2018 (2017). See also *Trump Wants to Kill the EPA's Environmental Justice Program*, NATURAL RESOURCES DEFENSE COUNCIL (June 1, 2017), <https://www.nrdc.org/trump-watch/trump-wants-kill-epas-environmental-justice-program>.

²⁵⁶ See Devin Henry, *Committee Approves \$31.4B Interior, EPA Spending Bill*, The Hill (July 18, 2017), <http://thehill.com/policy/energy-environment/342654-committee-approves-314b-interior-epa-spending-bill>.

²⁵⁷ See Buford, *supra* note 254 (discussing the Trump Administration's general disposition toward environmental justice concerns).

²⁵⁸ For example, the number of prosecutions indicates a decline from both the Obama Administration and George W. Bush Administrations. See *id.*

This Section looks at attempts by both the legislative and executive branches to identify and compensate Eastern coal miners burdened as a result of environmental regulations affecting coal-fired power plants. Both a legislative program adopted in the 1990s and an administrative program implemented during the Obama Administration ultimately provided only limited relief and were each in effect for only a few years.

1. Clean Air Act Amendments of 1990

In 1970, Congress enacted the modern version of the Clean Air Act,²⁵⁹ which requires the EPA to promulgate national emissions limitations for new stationary sources.²⁶⁰ Under the 1970 amendments, the EPA must set emission standards for categories of new stationary sources that “may contribute significantly to air pollution which causes or contributes to the endangerment of public health or welfare.”²⁶¹ These emission standards must reflect “the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such emission reduction) the Administrator determines has been adequately demonstrated.”²⁶²

Accordingly, in 1971 the EPA promulgated new source performance standards for coal-fired power plants.²⁶³ In determining these standards, the Administrator chose scrubbing technology as the “best system of emission reduction... adequately demonstrated.”²⁶⁴ The Administrator examined the scrubbers in use at the time—there were only three in the United States in 1971—and determined that it was adequately demonstrated that scrubbers had the capacity to eliminate about 70 percent of the sulfur oxides released when coal was burned.²⁶⁵ Multiplying this 70 percent reduction rate by the average sulfur content of coal found in Eastern regions, the Administrator set the emissions ceiling at 1.2 pounds of sulfur dioxide per MBTU (million British thermal units).²⁶⁶

This limitation on sulfur emissions from coal burning had differential effects on coal producers across the United States. The sulfur content of America’s coal reserves varies significantly by region – reserves in areas west of the Mississippi contain mostly low sulfur coal, while Eastern reserves from Appalachia and the Midwest contain mostly high sulfur coal.²⁶⁷ Thus, the 1.2 lb standard could be met by installing expensive scrubbers and burning Eastern coal, or it could be met simply by burning lower sulfur Western coal with no emission controls.²⁶⁸ Many power plants in the East that used local coal found it

²⁵⁹ Clean Air Amendments of 1970, Pub. L. No. 91-604, 84 Stat. 1676 (1970).

²⁶⁰ See 42 U.S.C. § 7411 (2012); David W. Hercher, *New Source Performance Standards for Coal-Fired Electric Power Plants*, 8 *ECOLOGY L.Q.* 748 (1980).

²⁶¹ 42 U.S.C. § 111(b)(1)(A) (2012).

²⁶² *Id.* § 111(a)(1)

²⁶³ Standards of Performance for New Stationary Sources, 36 Fed. Reg. 24,876 (1972); 40 C.F.R. § 60 (1972).

²⁶⁴ Bruce A. Ackerman & William T. Hassler, *Beyond the New Deal: Coal and the Clean Air Act*, 89 *YALE L.J.* 1466, 1481 (1980).

²⁶⁵ *Id.* at 1481–82.

²⁶⁶ 37 Fed. Reg. 5768-69 (1972); Ackerman & Hassler, *supra* note 264, at 1485.

²⁶⁷ *Id.* at 1484, n. 66–67.

²⁶⁸ *Id.* at 1485.

cheaper to meet these standards by importing low-sulfur from the West and thereby forgoing the need to install scrubbers.²⁶⁹

This state of affairs was opposed by both environmentalists and Eastern coal producers.²⁷⁰ Environmentalists, seeking stricter pollution controls, sought universal scrubbing to cut sulfur emissions even further.²⁷¹ Eastern coal interests also wanted universal scrubbing, though for a different reason: to impose additional costs on Western coal, thereby counteracting the competitive advantage that it had received as a result of the 1971 regulation.²⁷²

Responding to these different constituencies,²⁷³ the Clean Air Act amendments of 1977²⁷⁴ added a provision requiring a percentage reduction in emissions, regardless of the coal's sulfur content.²⁷⁵ These changes reduced the market advantage that the 1971 regulation had conferred on lower-sulfur Western coal at the expense of higher-sulfur Eastern coal, because coal plants had to take on measures to treat emissions even when burning lower-sulfur coal.

But in the 1990 amendments, Congress reversed course, repealing this provision and eliminating the advantage that had been conferred on Eastern coal by the 1977 amendments. The EPA estimated that, as a result, there would be a decline of 35% in total high-sulfur coal employment.²⁷⁶

To counteract the negative consequences of these job losses, Senator Robert Byrd (D-W.Va.) sought to include in the Clean Air Act amendments of 1990 a compensation scheme to support miners who lost their jobs as a result of restrictions on the sulfur emissions of coal-fired power plants.²⁷⁷ Under his original proposal, displaced miners would receive, for six years, between 50 percent and 100 percent of the their final year's

²⁶⁹ Hercher, *supra* note 260, at 749.

²⁷⁰ Ackerman & Hassler, *supra* note 264, at 1499–1500; Hercher, *supra* note 260, at 750.

²⁷¹ Ackerman & Hassler, *supra* note 264, at 1500.

²⁷² *Id.* at 1497.

²⁷³ A House Report stated that “[p]articularly troublesome are EPA’s current SO₂ control standards and particulate control standards for coal-fired boilers... [I]nstead of prescribing standards which effectively required use of the best practical control technology for new coal-fired power plants, the Administrator set levels which could be met either by use of untreated low-sulfur coal or scrubbers. These standards (e.g. 1.2 lbs. of SO₂/ million B.t.u.’s) – by not requiring the use of best practicable control technology – directly conflict with the aforementioned purposes... [because] [t]he standards give a competitive advantage to those States with cheaper low-sulfur coal and create a disadvantage for Midwestern and Eastern States where predominantly higher sulfur coals are available... [and, *inter alia*] operate as a disincentive to the improvement of technology of new sources, since untreated fuels could be burned instead of using such new, more effective technology.” See ENVTL. POL. DIV., CONG. RESEARCH SERV., SERIAL NO. 95-16, A LEGISLATIVE HISTORY OF THE CLEAN AIR ACT AMENDMENTS OF 1977, 323 (1978).

²⁷⁴ Clean Air Act Amendments of 1977, Pub. L. 95-95, 91 Stat. 685.

²⁷⁵ 42 U.S.C. § 7411, Pub. L. 95-95, 91 Stat. 699-700.

²⁷⁶ See 136 CONG. REC. 3897 (1990) (statement of Sen. Robert Byrd); see also U.S. EPA, CLEAN AIR ACT OPTIONS PAPER: ACID RAIN (draft, May 3, 1989).

²⁷⁷ 136 CONG. REC. 3948 (1990) (statement of Sen. Byrd).

salary.²⁷⁸ The proposal also included financial incentives for unemployed miners to enter certified job training and education programs.²⁷⁹ The total cost of this program would have been between \$875 million and \$1.35 billion.²⁸⁰

Concerns by various senators about the high cost of the program led Senator Byrd to amend his initial proposal by reducing the total number of years of assistance to four years, or the number of years during which the individual was employed as a coal miner, whichever was less.²⁸¹ Benefit amounts were also cut to between 50 percent and 80 percent of the miners' final year's salary.²⁸²

Nonetheless, several senators continued to question the wisdom of the compensation scheme, which would cost hundreds of millions of dollars to assist 5000 people who lost their jobs in the coal industry.²⁸³ For example, one senator argued that setting a precedent under which the government compensated people who lose their livelihoods due to federal legislation could “kill a lot of actions by Government in the future that affect people's lives.”²⁸⁴ Other objections focused on the unfairness of asking taxpayers to contribute to large payouts for the miners,²⁸⁵ and on the potential inclusion in the compensation scheme of miners who lost their jobs due to automation and other industry shifts, and not as a result of environmental regulation.²⁸⁶ A last ditch attempt by Senator Byrd to further reduce the unemployment benefits—this time to three years at 70 percent of the miner's previous salary in the first year of unemployment, 60 percent in the second year, and 50 percent in the third year—was still opposed by senators who continued to view the unemployment benefits as unreasonably high and unfairly targeted to only one subset of individuals who might lose their jobs as a result of regulatory actions.²⁸⁷

Part of the Senate opposition was also based on the concern that President Bush would carry out his threat to veto the entire Clean Air Act amendment package if it

²⁷⁸ These miners would receive benefits equal to 100% of their salary for the first two years of unemployment, 75% of their salary for the next two years, and 50% of their salary for the final two years. Miners who entered job training programs would be eligible for additional benefits equal to 25% of their annual salary for the third to sixth years of unemployment. 136 CONG. REC. 3948 (1990) (statement of Sen. Byrd).

²⁷⁹ “Additionally, these provisions provide an incentive designed to encourage these workers to enter into fulltime retraining and education programs that will be certified by the Secretary of Labor. These programs will enable affected coal mine workers to learn other skills so that they may find new employment after losing their jobs.” 136 CONG. REC. 3900 (statement of Sen. Byrd).

²⁸⁰ *Id.*

²⁸¹ *See id.* at 3955–56 (statement of Sen. Domenici); *id.* at 3956 (statement of Sen. Dole).

²⁸² Under this first modification, miners would receive 80% of their salary for the first year of unemployment, 70% the second year, 60% the third year, and 50% the fourth year. *Id.* at 3948–49.

²⁸³ *See id.* at 3950 (statement of Sen. Dole); *see also id.* at 395 (statement of Sen. Gramm).

²⁸⁴ *Id.* at 3954 (statement of Sen. Gramm).

²⁸⁵ *Id.* at 3952–53 (statement of Sen. Nickles).

²⁸⁶ Senator Chafee noted that “[i]n 1950 there were 483,000 coal miners. In 1980, there were 230,000 coal miners... now there are 141,000 coal miners,” *Id.* at 3952 (statement of Sen. Chafee). *See also id.* at 3956–57 (statement of Sen. Dole) (indicating that eligibility for assistance should, if anything, mirror Trade Adjustment Assistance which only is provided after exhausting unemployment insurance); *Id.* at 3955–56 (statement of Sen. Domenici).

²⁸⁷ 136 CONG. REC. 5838–39 (statement of Senator Chafee).

contained the costly Byrd amendment.²⁸⁸ Despite Senator Byrd's insistence that there were precedents for a compensation proposal of this sort,²⁸⁹ and broad support that it enjoyed among interest groups,²⁹⁰ fears that the amendment would become a "bill killer" turned out to be fatal: the Senate narrowly voted down the Byrd amendment, 50–49.²⁹¹

Members of the House of Representatives also expressed concerns about the miners who might lose their jobs as a result of the Clean Air Act Amendments.²⁹² In response to these concerns, Representative Robert Wise (D-W.Va.) proposed the Clean Air Employment Transition Assistance Program, to provide compensation to workers across all industries who lost their jobs as a result of the Clean Air Act's new regulatory regime following the 1990 amendments.²⁹³ Under this proposal, these workers would receive an additional six months of unemployment benefits for a total of one year, up to two years of supported job training, and a relocation allowance.²⁹⁴ The additional benefits would be equal to the amount collected by the worker during the first six months through unemployment compensation,²⁹⁵ and payments for training would be the greater of the unemployment benefit amounts or the weekly allowance for such training that the worker would be entitled to under any federal training law.²⁹⁶ In order to be eligible for these additional benefits, an employee had to have worked in the affected industry at least 26 weeks in the 52-week period before the unemployment began, collecting at least \$30 or more per week in wages.²⁹⁷ The Wise amendment was limited to a duration of five years

²⁸⁸ Senator Dole stated during the debate: "But again I would repeat I am not—I have been here long enough—trying to scare anybody or intimidate anybody to repeat what I was told by a high source with the administration: that this bill is dead if this amendment is adopted. If you want to gamble and say that is just late-night talk, I asked what should we do if the amendment is adopted. He said do not do anything. It is over." *Id.* at 3950. See Philip Shabecoff, *Senate Rejects Plan on Aid to Miners*, N.Y. TIMES (March 30, 1990), <http://www.nytimes.com/1990/03/30/us/senate-rejects-plan-on-aid-to-miners.html>.

²⁸⁹ See *id.* at 5839 (statement of Senator Byrd) (discussing the compensation schemes of the Regional Rail Reorganization Act of 1973 and the Redwood National Park Expansion Act of 1978).

²⁹⁰ The Byrd amendment had the support of the AFL-CIO. See 136 CONG. REC. 5833; The bill also enjoyed the support of the National Clean Air Coalition, which noted that "[t]he utility industry used the threat of minor job losses to weaken air pollution controls in Midwestern states under the 1970 law, resulting in the pollution control failure that make the current amendments necessary. Amendments that address mining job losses will remove this rhetorical weapon from the hands of the polluters." *Id.* at 5844–45.

²⁹¹ See *id.* at 5860; Shabecoff, *supra* note 288 (explaining that Senators Biden and D'Amato, who were planning on voting for the amendment, ended up voting against it after the White House chief of staff told them that President Bush would veto the entire legislation if the amendment was included).

²⁹² 136 CONG. REC. 4760 (1990) (statement of Rep. Poshard); 136 CONG. REC. 6653 (1990) (statement of Rep. Lukens).

²⁹³ 29 U.S.C. § 1662e, Pub. L. No. 101-549, 104 Stat. 2709.

²⁹⁴ See *id.*; 136 CONG. REC. 11,373, 11,936-41 (1990) (statements of Rep. Wise).

²⁹⁵ 29 U.S.C. § 1662e(f)(1) (requiring that "such payments shall be provided to an eligible individual only if such individual... does not qualify or has ceased to qualify for unemployment compensation; has been enrolled in training by the end of the 13th week of the individual's initial unemployment compensation benefit period, or if later, the end of the 8th week after an individual is informed that a short-term layoff will in fact exceed 6 months; and is participating in in training or education programs under this section").

²⁹⁶ 136 CONG. REC. 11,938 (1990).

²⁹⁷ *Id.* at 11,937.

and had a maximum total cost of \$250 million,²⁹⁸ as compared to the cost of between \$875 Million and \$1.35 Billion for the first version of the Byrd amendment.²⁹⁹

Representative Wise addressed many of the concerns that Senators raised regarding the Byrd Amendment, which had failed two months earlier.³⁰⁰ In particular, Wise stressed that the assistance was neither industry-specific nor region-specific, and that it did not entail the creation of a new program, but rather the extension of existing programs.³⁰¹ He also noted that it tracked very closely the Trade Adjustment Assistance program under the Trade Act of 1974, which helped workers who lost their jobs as a result of trade liberalization.³⁰²

Despite these changes, opponents called the Wise amendment “the Byrd amendment in sheep’s clothing,”³⁰³ and complained about the precedent-setting nature of an amendment that could lead to the inclusion of labor-protection provisions in all subsequent environmental legislation.³⁰⁴ And some Representatives also expressed the concern that the cost of the program, though lower than that of the Byrd amendment, would still lead to a presidential veto.³⁰⁵ Nonetheless, support for the Wise Amendment was strong enough that it passed in the House, 274 to 146,³⁰⁶ and was included in the final Clean Air Act legislation, which the President signed despite the prior veto threat.³⁰⁷

The Clean Air Employment and Training Act operated between 1992 and 1993 and allocated almost \$25 million to assist workers facing unemployment, but the program was discontinued after 1993 because Congress failed to appropriate additional money to fund it.³⁰⁸ Subsequently, the Department of Labor continued to provide assistance through a discretionary fund in the Job Training Partnership Act.³⁰⁹ Between 1992 and 1996, coal mining companies, states, and the United Mine Workers Union received over \$82 million from the federal government for vocational training, needs related payments, and job counseling.³¹⁰ The program, however, ended after the Job Partnership Training Act was repealed in 1998. Between the Clean Air Employment and Training Act and the

²⁹⁸ *Id.* at 11,373.

²⁹⁹ *Id.* at 3948.

³⁰⁰ Shabecoff, *supra* note 288.

³⁰¹ 136 CONG. REC. at 11,373 (1990).

³⁰² *Id.*; *see also* J.F. HORNBECK, CONG. RESEARCH SERV., R41922, TRADE ADJUSTMENT ASSISTANCE (TAA) AND ITS ROLE IN U.S. TRADE POLICY (2013) (discussing the role of Trade Adjustment Assistance as a central program in the effort to liberalize trade by compensating those losing out from competition).

³⁰³ *Id.* at 11,946 (statement of Rep. Frenzel).

³⁰⁴ *Id.* at 11,942 (statement of Rep. Lent).

³⁰⁵ *Id.* at 11,947 (statement of Rep. Foley).

³⁰⁶ 29 U.S.C. § 1662e, Pub. L. No. 101-549, 104 Stat. 2709; 136 CONG. REC. at 11,958.

³⁰⁷ 29 U.S.C. § 1662e.

³⁰⁸ U.S. ENVTL. PROT. AGENCY, IMPACTS OF THE ACID RAIN PROGRAM ON COAL INDUSTRY EMPLOYMENT, CLEAN AIR MARKETS DIVISION 15–16 (2001) (analyzing the use of the Clean Air Employment and Training Act and the Department of Labor discretionary fund); *see also* UNITED STATES GENERAL ACCOUNTING OFFICE, MULTIPLE EMPLOYMENT TRAINING PROGRAMS: CONFLICTING REQUIREMENTS UNDERScore NEED FOR CHANGE at 16–17 (1994).

³⁰⁹ *Id.*

³¹⁰ *Id.*

discretionary funds available to the Secretary of Labor, over 6000 coal miners received assistance, the majority of whom were located in Eastern and Midwestern states.³¹¹

2. POWER Initiative and POWER+ Plan

During the Obama presidency, coal production and jobs in the coal industry continued to decline.³¹² The shift of energy production away from coal is primarily attributable to decreases in the cost of natural gas energy.³¹³ However, additional environmental regulations, including the Transport Rule, Mercury Air Toxics Standards, and the Clean Power Plan, had an effect as well.³¹⁴ Recognizing that changes in the pattern of energy production would continue to further displace coal industry workers, the Obama Administration sought to compensate the coal-producing communities.³¹⁵ To pursue this goal, it implemented the Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative on March 27, 2015, just months prior to the announcement of the Clean Power Plan.³¹⁶ The POWER Initiative was an innovative program targeting grants and funding to Appalachian state and local governments in an effort to invest in the economies of communities that previously relied heavily on the coal industry.³¹⁷

The POWER Initiative provided funds³¹⁸ through the Economic Development Administration, the Department of Labor, the Appalachian Regional Commission, the Department of Commerce, the Environmental Protection Agency, and the Department of Agriculture to help Appalachian coal workers who lost their jobs.³¹⁹ The Economic Development Administration took the lead role and coordinated across other federal agencies to ensure that the funding was properly targeted and non-duplicative.³²⁰ The program gave planning and implementation grants to communities without “robust [or]

³¹¹ U.S. ENVTL. PROT. AGENCY, *supra* note 308 at 15–16 (“Worker in eastern and midwestern states received the majority of funding”).

³¹² See generally RICHARD L. REVESZ & JACK LIENKE, *STRUGGLING FOR AIR: POWER PLANTS AND THE “WAR ON COAL”* 141 (2016) (discussing the Transport Rule, Mercury Air Toxics Standards, and the Clean Power Plan as Obama era regulations that pushed energy providers away from coal).

³¹³ Jason P. Brown & Andres Kodaka, *U.S. Electricity Prices in the Wake of Growing Natural Gas Production*, FEDERAL RESERVE BANK OF KANSAS CITY (2014), https://www.kansascityfed.org/publicat/mse/MSE_0214.pdf.

³¹⁴ REVESZ & LIENKE, *supra* note 312, at 146.

³¹⁵ *Investing in Coal Communities, Workers, and Technology: The POWER+ Plan, Fact Sheet*, OFFICE OF MGMT. & BUDGET, 2–3 (2015), [hereinafter *Investing in Coal*], https://obamawhitehouse.archives.gov/sites/default/files/omb/budget/fy2016/assets/fact_sheets/investing-in-coal-communities-workers-and-technology-the-power-plan.pdf.

³¹⁶ *Id.* (announced Mar. 27, 2015); OFFICE OF THE PRESS SECRETARY, *REMARKS BY THE PRESIDENT IN ANNOUNCING THE CLEAN POWER PLAN* (2015) (announced Aug. 3, 2015).

³¹⁷ See *Investing in Coal*, *supra* note 315.

³¹⁸ *Id.* at 2 (“These funds will help communities to: diversify their economies; create good jobs in existing or new industries; attract new sources of job-creating investment; and provide reemployment services and job training to dislocated workers in order to connect them to high-quality, in-demand jobs”).

³¹⁹ *Id.*

³²⁰ See *The Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative*, U.S. Economic Development Administration (accessed Aug. 13, 2017), <https://www.eda.gov/archives/2016/power/>.

recent comprehensive and integrated economic development strategic plans in place”³²¹ that could demonstrate that they would suffer significant job losses as a result of changes in the coal economy.³²² POWER Initiative grants targeted funding for economic development programs including the creation of a drone-operator workforce, enhancement of infrastructure relating to the outdoor recreation industry, and transformation of a freight station into a high-tech incubator.³²³

The initial round of funding under the POWER Initiative, undertaken in 2015, proposed to award up to \$38 million in grants during the program’s first year, of which \$28 million of was actually awarded.³²⁴ For 2016, the POWER Initiative sought to significantly increase the appropriations to be able to provide more assistance, targeting an expenditure of \$75 million.³²⁵

While the POWER Initiative is funded through Fiscal Year 2017,³²⁶ the future of the program does not seem promising. President Trump’s proposed budget for fiscal year 2018 seeks to shut down two of the primary federal agencies charged with administering the program, the Economic Development Administration and the Appalachian Regional Commission.³²⁷ President Trump’s budget is silent on the program and his proposals contain none of the same language regarding targeted investments to Appalachia that was included in President Obama’s budgets.³²⁸

The POWER Initiative was accompanied by a POWER+ Plan proposal, which sought the appropriation of additional funds for economic development projects in communities that experienced the loss of coal jobs. President Obama’s proposed 2016 budget included a request that \$1 billion over five years from the unappropriated balance of the Abandoned Mine Reclamation Fund be used to provide money for the, “health, safety, environment, and economic development” of such communities.³²⁹ Expenditures would have been distributed through a newly created “Abandoned Mine Land Economic Revitalization (AMLER) Program,”³³⁰ which would have directed unappropriated funds to further economic revitalization and job growth.³³¹ The POWER+ Plan proposal also sought to provide additional funding to the United Mine Workers of America Health and

³²¹ *Investing in Coal*, *supra* note 315.

³²² *Id.*

³²³ OFFICE OF THE PRESS SECRETARY, ADMINISTRATION ANNOUNCES ADDITIONAL ECONOMIC AND WORKFORCE DEVELOPMENT RESOURCES FOR COAL COMMUNITIES THROUGH POWER INITIATIVE, FACT SHEET (2016), *available at* <https://obamawhitehouse.archives.gov/the-press-office/2016/10/26/fact-sheet-administration-announces-additional-economic-and-workforce>.

³²⁴ *Id.*

³²⁵ *Investing in Coal*, *supra* note 315.

³²⁶ *Legislative Update: President Trump Signs FY 2017 Omnibus Appropriations Legislation*, Appalachian Regional Commission, https://www.arc.gov/news/article.asp?ARTICLE_ID=594 (accessed July 28, 2017).

³²⁷ OFFICE OF MGMT. & BUDGET, EXEC OFFICE OF THE PRESIDENT, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2018 (2017).

³²⁸ OFFICE OF MGMT. & BUDGET, EXEC OFFICE OF THE PRESIDENT, BUDGET OF THE UNITED STATES GOVERNMENT, FISCAL YEAR 2016, 21 (2015).

³²⁹ *Id.* at 113.

³³⁰ *Investing in Coal*, *supra* note 315.

³³¹ *Id.*

Retirement funds, to benefit workers whose health benefits were reduced as a result of coal industry bankruptcies, and to transfer funds from the Pension Benefit Guaranty Corporation for the purpose of protecting the nearly insolvent 1974 United Mine Workers of America pension plan.³³² The proposal received a tepid reception among congressional Republicans, who were in the midst of an election year in which displacement of former coal jobs had become an important part of the political narrative.³³³ Reaching bipartisan agreement on compensation for displaced coal jobs would undermine their opposition to the Clean Power Plan.³³⁴

Nonetheless, measures similar to those in the POWER+ Plan were proposed by congressional Republicans representing Eastern coal communities. Consistent with the Obama Administration's proposal to appropriate funds from the Abandoned Mine Reclamation Fund, Representative Harold Rodgers (R-KY), chair of the House Appropriations Committee,³³⁵ proposed the Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act.³³⁶ The bill had Democratic co-sponsors,³³⁷ and it received the support from some environmental organizations, including the Sierra Club.³³⁸

The bill ultimately failed to gain traction after a concerted effort by Wyoming Governor Matt Mead to defeat it.³³⁹ In a letter to Wyoming's congressional delegation, Governor Mead characterized the appropriation change in the bill as increasing costs on the coal industry in Wyoming and nationally.³⁴⁰ Wyoming's opposition stemmed largely from its status as the largest recipient under the Abandoned Mine Land Fund, which could lose funding as a result of the proposed change in allocation.³⁴¹ Indeed, at present, funding is collected through a tax on coal,³⁴² which means that Wyoming as the largest coal

³³² *Id.*

³³³ James Higdon, *The Obama Idea to Save Coal Country*, POLITICO (Mar. 8, 2017), <http://www.politico.com/magazine/story/2017/03/the-obama-administration-idea-to-save-coal-country-214885>.

³³⁴ See Coral Davenport, *McConnell Urges States to Help Thwart Obama's 'War on Coal'*, N.Y. TIMES (Mar. 19, 2015), <https://www.nytimes.com/2015/03/20/us/politics/mitch-mcconnell-urges-states-to-help-thwart-obamas-war-on-coal.html> (discussing strategic efforts to undermine support for the Clean Power Plan).

³³⁵ See *Biography*, U.S. Congressman Hal Rodgers (accessed July 29, 2017), <https://halrogers.house.gov/biography> (indicating Harold Rodgers was Chairman of the House Appropriations Committee from 2011 to 2016).

³³⁶ H.R. 4456, 114th Cong. (2016).

³³⁷ RECLAIM Act of 2016, H.R. 4456, 114th Cong., [hereinafter RECLAIM 2016], <https://www.congress.gov/bill/114th-congress/house-bill/4456> (accessed July 29, 2017) (original cosponsors include Matt Cartwright (D-PA), Evan Jenkins (R-W.Va), Morgan Griffith (R-VA), and Donald Beyer, Jr. (D-VA)).

³³⁸ Editorial Board, *How Do We Ditch Dirty Coal Power without Sending Miners to the Unemployment Line?*, L.A. TIMES (Mar. 4, 2016), <http://www.latimes.com/opinion/editorials/la-ed-adv-coal-mines-jobs-20160303-story.html>.

³³⁹ Higdon, *supra* note 333.

³⁴⁰ Letter from Matthew H. Mead, Governor of Wyoming, to Wyoming Congressional Delegation (Mar. 1, 2016) (on file with author).

³⁴¹ Dylan Brown, *\$1B Cleanup and Aid Bill Attempts to Bridge East-West Divide*, E&E NEWS (Sept. 29, 2016).

³⁴² 30 U.S.C. § 1231.

producing state in the country is both the biggest contributor and beneficiary.³⁴³ Current expenditures under the program primarily go to the states in which the revenues were generated.³⁴⁴ Proposed changes in funding would allow for withdrawal from the unappropriated balance of the fund to states for economic redevelopment projects.³⁴⁵ In the short term, Wyoming would not lose funding, since the reallocated funds had been unappropriated for years.³⁴⁶ Regardless, because Wyoming's coal mine operators contribute disproportionately to the current fund, changes in the funding model would constitute a subsidy to states with declining coal production, primarily West Virginia and Kentucky.³⁴⁷ For that reason, states like Wyoming might fear that tweaking the funding model may result in more money leaving the state than coming back in the long term.

The RECLAIM Act was reintroduced in 2017,³⁴⁸ but the bill has similarly failed to gain traction. During a hearing in the appropriations committee Alan Lowenthal (D-CA) indicated skepticism regarding the lack of strings attached to the funding,³⁴⁹ which Wyoming has been criticized for using to support programs unrelated to coal or the coal economy.³⁵⁰ The bill has not moved past the committee phase.³⁵¹ A companion bill of the same name was introduced in the Senate by Joe Manchin (D-WV), but the Senate bill has not moved beyond a referral to the Senate Committee on Energy and Natural Resources.³⁵²

In summary, while the Obama Administration's POWER Initiative distributed some already appropriated funds to compensate coal communities experiencing job losses, it does not appear that the program will survive the change of administrations in a

³⁴³ *Annual Report 2012*, OFFICE OF SURFACE MINING RECLAMATION AND ENFORCEMENT (last accessed July 14, 2017), <https://www.osmre.gov/resources/reports/2012.pdf>.

³⁴⁴ *Abandoned Mine Land Reclamation Program*, THE UNITED STATES EXTRACTIVE INDUSTRIES TRANSPARENCY INITIATIVE (accessed July 29, 2017), <https://useiti.doi.gov/how-it-works/aml-reclamation-program/> (50% of funding goes to the states that originate the funding, 30% to states that have historically mined but do not currently produce revenues, and 20% through additional federal expenditures).

³⁴⁵ *Investing in Coal*, *supra* note 315.

³⁴⁶ *See generally Abandoned Mine Land Reclamation Program*, *supra* note 344 (showing the growth of the Abandoned Mine Land fund's unappropriated balance since 1989 now amounting to over \$2 billion).

³⁴⁷ *See Coal Data Browser*, U.S. ENERGY ADMINISTRATION, <https://www.eia.gov/beta/coal/data/browser/> (showing West Virginia's aggregate coal mine production declined nearly 42% between 2001 and 2015 and a decline of nearly 55% in Kentucky during the same period; conversely, Wyoming's production is marginally higher over the same period, albeit down 19% from a high in 2008).

³⁴⁸ *See* H.R. 1731, 115th Cong. (2017).

³⁴⁹ *Revitalizing the Economy of Coal Communities by Leveraging Local Activities and Investing More (RECLAIM) Act of 2017: Hearing on H.R. 1731 Before Subcomm. on Energy and Mineral Resources of the H. Comm. on Natural Resources*, 115th Cong. 1 (2017) (statement of Rep. Alan Lowenthal).

³⁵⁰ Office of Inspector General, *Office of Surface Mining Reclamation and Enforcement's Oversight of the Abandoned Mine Lands Program*, U.S. DEPARTMENT OF INTERIOR (Mar. 30, 2017), https://www.doioig.gov/sites/doioig.gov/files/FinalEvaluationReport%20OSMRE%20AML_033017_Public.pdf.

³⁵¹ RECLAIM Act of 2017, H.R. 1731, 115th Cong., [hereinafter RECLAIM 2017], *available at* <https://www.congress.gov/bill/115th-congress/house-bill/1731> (accessed July 29, 2017).

³⁵² S. 738, 115th Cong. (2017).

meaningful way. And legislative efforts to appropriate additional funds for these purposes appear to be foundered, despite bipartisan support in Congress.³⁵³

IV EMPOWERING THE EXECUTIVE BRANCH

This Part argues for a greater role for the Executive Branch in compensating populations disproportionately burdened by regulation. What is needed is a new institutional structure to proactively monitor economically significant environmental regulations for unusually large negative distributional effects on particular groups and to coordinate appropriate executive responses.

Although the authority to enact laws and approve spending resides in Congress, the president wields substantial tools for unilateral policymaking through the federal bureaucracy. Indeed, the trend over the last few decades has been one of increasing unilateral action by the president.³⁵⁴ Much of the literature on the president's institutional capacity emphasizes control over the regulatory activities of federal agencies.³⁵⁵

This Article moves the literature in a different direction in two different ways. First, contrary to the Kaplow and Shavell orthodoxy, it argues that in certain instances, regulatory action should pay greater attention to distributional concerns, and suggests an institutional design better able to achieve this objective than have our prior efforts. And, second, and more aggressively, it recommends the use of the president's power to direct federal resources to populations harmed by regulatory action; the focus here is on the executive power to redistribute, rather than on the power to regulate. Section A evaluates how the institutional capabilities of the Executive Branch can best be deployed to assist communities negatively affected by regulation. Section B proposes monitoring by the Office of Information and Regulatory Affairs (OIRA) of the distributional consequences of economically significant rules and the creation of a standing interagency working group that could be mobilized to assist communities seriously burdened by regulatory actions.

A. *Institutional Capabilities of the President*

Recent scholarship on the presidency has recognized an increasingly broad ambit of unilateral presidential power, including the power to exert strong influence and control over the administrative bureaucracy.³⁵⁶ This Section analyzes the types of presidential authority over agency action, which can be categorized as the powers to “centralize,”

³⁵³ RECLAIM 2017, *supra* note 351 (of the 25 cosponsors, 22 are from states within the Appalachian region).

³⁵⁴ See Terry M. Moe & William G. Howell, *The Presidential Power of Unilateral Action*, 15 J.L. ECON. & ORG. 132, 156–61 (1999).

³⁵⁵ See Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245, 2246–53 (2001). For an original, seminal example, see Terry M. Moe & Scott A. Wilson, *Presidents and the Politics of Structure*, 57 LAW & CONTEMP. PROBS 1, 15–24 (1994).

³⁵⁶ See WILLIAM G. HOWELL, POWER WITHOUT PERSUASION 3–8 (2003); Elena Kagan, *supra* note 355, 2246.

“politicize,” and “pool” agency resources.³⁵⁷ It explores the limitations of OIRA’s centralizing function, arguing that it has a primarily reactive mission and lacks the institutionalized capacity for proactive policymaking.³⁵⁸ It then explores the budgetary and statutory constraints on presidential authority and the ways in which presidents have historically overcome them.

1. *Centralization, Politicization, and Pooling Powers*

The powers available to the president for controlling agency behavior are often discussed in terms of “politicization”³⁵⁹ and “centralization;”³⁶⁰ to these categories, recent scholarship by Daphna Renan adds the concept of “pooling,”³⁶¹ that is, “mixing and matching resources disbursed across the bureaucracy” in order to implement policies not contemplated by any particular congressional act.³⁶²

Politicization consists of staffing “loyal, ideologically compatible people in pivotal positions in the bureaus, the departments, and, of course, the [Office of Management and Budget] and other presidential agencies whose job it is to exercise control ... the idea is to ensure that important bureaucratic decisions are made, or at least overseen and monitored, by presidential agents.”³⁶³ Thus, by exercising the appointment and removal powers, the president can assemble an administrative bureaucracy that shares his goals and is receptive to direction from the White House.

Centralization consists of establishing structures within the executive branch in order to “shift the locus of effective decisionmaking authority to the center.”³⁶⁴ The principal example of centralization is OIRA review of agency rulemaking. Conducted within the Office of Management and Budget (OMB), OIRA review is the most powerful and well-established institution for executive control over administrative action.³⁶⁵ Since the Reagan Administration, OIRA has been charged with reviewing economically significant agency actions—defined as those actions likely to result in an annual effect on the economy of \$100 million or more—to ensure they take cost-benefit analysis into

³⁵⁷ Moe & Wilson, *supra* note 355, 18 (1994); Daphna Renan, *Pooling Powers*, 115 COLUM. L. REV. 211, 213 (2015).

³⁵⁸ See RICHARD L. REVESZ & MICHAEL A. LIVERMORE, *supra* note 31, 153-57 (2008).

³⁵⁹ Renan, *supra* note 357, 243-44 (2015).

³⁶⁰ *Id.*

³⁶¹ *Id.* at 213.

³⁶² *Id.*

³⁶³ Moe & Wilson, *supra* note 355, 18 (1994).

³⁶⁴ *Id.*

³⁶⁵ See William West, *Presidential Leadership and Administrative Coordination: Examining the Theory of a Unified Executive*, 36 PRES. STUD. Q. 433, 449 (2006) (“[OIRA review] is the most direct and centralized mechanism [presidents] possess for influencing the exercise of delegated authority.” see Letter from Cass Sunstein, Adm’r, OIRA, to Lisa Jackson, Adm’x, EPA (Sept. 2, 2011), https://obamawhitehouse.archives.gov/sites/default/files/ozone_national_ambient_air_quality_standards_letter.pdf).

account.³⁶⁶ Executive review has long been “justified on the grounds that it would coordinate and harmonize the activities of the disparate federal agencies.”³⁶⁷

Despite the stated goal of coordination, OIRA has traditionally behaved as a reactive body, and, moreover, it is not properly resourced to perform a coordinative or proactive policy-creation function,³⁶⁸ and has not routinely identified areas of potential cooperation or spurred agencies to promulgate regulations on its own initiative.³⁶⁹ OIRA regulatory review was created by the Reagan administration with an eye to curbing federal regulatory activity.³⁷⁰ Although subsequent administrations, including Clinton’s³⁷¹ and Obama’s,³⁷² issued their own Executive Orders to update the instructions for regulatory review, OIRA has continued to function as a clearinghouse for reviewing regulations to make sure that the “benefits of the intended regulation justify its costs.”³⁷³ Thus, despite being the primary mechanism for centralized executive review of administrative law, OIRA’s current structure is ill suited to perform a proactive policymaking function, and in particular, to be a proactive vehicle for addressing the adverse distributional consequences of regulation.

³⁶⁶ Exec. Order No. 12,291, 3 Fed. Reg. 127 (1982); Exec. Order No. 12,866, 58 Fed. Reg. 190 (Sept. 30, 1993).

³⁶⁷ See REVESZ & LIVERMORE *supra* note 31, 175. The original Reagan executive order included minimizing duplication as among the purposes of regulatory review. “The second Reagan executive order, which set out the annual regulatory planning process, also created a ‘coordinated process,’ to ‘increase the accountability of agency heads’ and to ‘enhance public and Congressional understanding of the administration’s regulatory objectives.’” *Id.* (quoting Exec. Order No. 12,291 46 Fed. Reg. 13,193 (Feb. 17, 1981)) Clinton likewise promulgated a coordinative mandate for OIRA in his executive order, which “seeks to ‘enhance planning and coordination’ of new and existing regulation.” *Id.* (quoting Exec. Order No. 12,866, 58 Fed. Reg. 190 (Sept. 30, 1993)).

³⁶⁸ “OIRA resources have traditionally been stretched thin just in reviewing the cost-benefit analyses prepared by agencies for important rules.” REVESZ & LIVERMORE *supra* note 31, at 176. Indeed, OIRA’s reactive function has historically tended to scrutinize new regulations rather than decisions to deregulate. Furthermore, though there have been some efforts to spur regulation from within OIRA, these have mostly been informal and ad hoc. See REVESZ & LIVERMORE, *supra* note 31, at 153–57; see also Jason Marisam, *The President’s Agency Selection Powers*, 65 ADMIN. L. REV., 821, 851–53.

³⁶⁹ See REVESZ & LIVERMORE, *supra* note 31, at 153 (“OIRA mostly seeks to ensure that the agency regulation is not too stringent, and does not impose higher economic costs than are justified. OIRA does not generally look into whether regulation is too lax, and whether cost-benefit analysis would call for a stronger regulatory response. OIRA, then, tends to act as a one-way ratchet turning regulation down but not up.”); *Id.* at 176 (“[regulatory review has] largely left the task of identifying potential areas of cooperation and conflict to the agencies themselves, with no centralized review of the overall regulatory effort taking place”) (footnote omitted); See also Marisam, *supra* note 368, at 853 (“OIRA analysts are mostly experts at reviewing regulations. They have little or no experience creating policy proposals that generate benefits”) (citation omitted); West, *supra* note 365, at 445 (“Interviews with OIRA officials indicate that little if any effort is made in the review process to think about the implementation of different programs in a comprehensive and comparative way”) (citation omitted).

³⁷⁰ See Bagley & Revesz, *supra* note 42, at 1263–80; Marisam, *supra* note 358, at 851–53; West, *supra* note 365.

³⁷¹ Exec. Order No. 12,866, 58 Fed. Reg. 190 (Sept. 30, 1993).

³⁷² Exec. Order No. 13,563, 76 Fed. Reg. 3821 (Jan. 21, 2011).

³⁷³ Exec. Order No. 12,866, 58 Fed. Reg. 190 (Sept. 30, 1993). The first executive order mandating OIRA review, issued under Reagan, mandated that benefits “outweigh” the costs. Exec. Order No. 12,291, 3 Fed. Reg. 127 (1982). West, *supra* note 365, at 442 (“Although Bill Clinton replaced E.O. 12291 with his own E.O. 12866, the process and organizational structure of review were changed relatively little during his administration”).

OIRA, however, is not the only mode of centralization within the Executive Branch. Centralization takes place whenever presidents develop policies or personnel meant to oversee and direct agency behavior.³⁷⁴ Efforts of this sort are facilitated in part by the establishment of units within the Executive Office of the President, which the president can finance with appropriated discretionary funds. The continuing existence of such units is subject to congressional approval through the appropriations process.³⁷⁵ Congress, however, has historically granted broad authority to the president to organize the Executive Office of the President as he sees fit. And presidents have been relatively unconstrained in deploying this authority.³⁷⁶

Recent presidents have increasingly exercised the powers of politicization and centralization. In an influential article, now Justice Elena Kagan documented a concerted effort by the Clinton Administration to coordinate policy across the administrative state.³⁷⁷ In particular, President Clinton issued a strikingly higher number of directives (through executive order) to agencies regarding rulemaking and policy than had his predecessors.³⁷⁸ In general, President Clinton sought both to exercise greater control over the bureaucracy, and to represent agency actions as part of his Administration's policy agenda, claiming credit for these actions.³⁷⁹

³⁷⁴ See generally Eloise Pasachoff, *the President's Budget as a Source of Agency Policy*, 125 YALE L.J. 2182, 2188–89 (arguing that while OIRA review has been the subject of much of the literature on presidential power over agency action, the OMB's heavy involvement in "the preparation of the President's budget, the execution of the budget that Congress eventually passes ... and the implementation of presidential management initiatives embedded in the budget" represents a substantial source of executive control over agency policy and spending).

³⁷⁵ HAROLD C. RELYEA, CONG. RESEARCH SERV., 98–606 Gov, *The Executive Office of the President: An Historical Overview* 10 (2008).

³⁷⁶ Moe & Wilson, *supra* note 355, at 23 (*citing* JOHN HART, *THE PRESIDENTIAL BRANCH* (1987)).

³⁷⁷ "[Clinton] developed a set of practices that enhanced his ability to influence or even dictate the content of administrative initiatives. He exercised this power with respect to a wide variety of agency action – rulemakings, more informal means of policymaking, and even certain enforcement activities . . . [T]o a considerable extent, Clinton built on the legacy Reagan had left him to devise a new and newly efficacious way of setting the policy of direction of agencies – of converting administrative activity into an extension of his own policy and political agenda. In so doing, Clinton also showed that presidential supervision of administration could operate, contrary to much opinion, to trigger, not just react to, agency action and to drive this action in a regulatory, not deregulatory, direction." Elena Kagan, *supra* note 355, 2282 (2001) (citation omitted); see Robert V. Percival, *Who's in Charge? Does the President Have Directive Authority Over Agency Regulatory Decisions?*, 79 FORDHAM L. REV., 6, 2487, 2511–28 (2011).

³⁷⁸ "President Reagan issued only nine directives to agencies, and President George H.W. Bush issued only four during his term – three of these instructed agencies to delay or halt the issuance of regulations. In his eight years in office President Clinton issued 107 presidential directives, including many directing agencies to take action to address particular problems." Percival, *supra* note 377, at 2511 (citation omitted). Kagan notes that prior presidents might have exercised power over agency heads in other—for example, by leveraging agency heads' loyalty to the president, reliance on the president for budgetary, legislative and appointments matters. Kagan, Elena Kagan, *supra* note 355, at 2298. Nonetheless, Kagan concludes, "[A] line remains, and by so often asserting legal authority to direct regulatory decisions, President Clinton crossed from one side of it to another. Clinton's use of directives at the least signified a change in the form of presidential involvement in administrative decisionmaking. The unofficial became official, the subtle blatant, and the veiled transparent..." *Id.*

³⁷⁹ Kagan argues that Clinton modified OIRA review to make it more pro-regulatory, and asserted ownership over agency actions (sometimes before they were completed), presenting them as the product of

Just as President Clinton ushered in the practice of issuing directives to agency heads, President Obama innovated in a different area of presidential control: the appointment of policy “czars” —advisors, not subject to Senate confirmation, tasked with “ensur[ing] that policymakers across the executive branch work toward the President’s . . . agenda”.³⁸⁰ While Obama was not the first president to deploy White House staff to exert influence over agency decisionmaking,³⁸¹ one commentator notes that his czar system was distinctive in at least three ways: Obama’s czars were expert in policy, rather than politics,³⁸² they were often more highly qualified than their cabinet counterparts,³⁸³ and their portfolios “roughly parallel[ed] the portfolios of cabinet agencies.”³⁸⁴ Appointing such czars was a mechanism “to magnify his control over agency action in domestic policy.”³⁸⁵

Finally, by “pooling” agency powers, the president can combine agency resources to augment administrative power in pursuit of a particular policy agenda, “creat[ing] a toolkit different in kind from the tools available to [any particular] agency acting alone.”³⁸⁶ Thus, one agency’s legal authority can be combined with the institutional knowledge or expertise of another agency to effectuate a given policy agenda.³⁸⁷ Examples of pooling powers include the joint rulemaking conducted by the EPA and the National Highway Traffic Safety Administration (NHTSA) to regulate automotive fuel economy standards.³⁸⁸ While NHTSA was statutorily authorized to promulgate such standards, the EPA had, over years, developed expertise in automotive engineering “at a time when Congress had prohibited NHTSA from accruing such information, knowledge, and skill.”³⁸⁹ NHTSA

presidential administration and thereby exerting pressure on agencies to execute against his public messaging. Kagan, Elena Kagan, *supra* note 355, at 2299–2302

³⁸⁰ Exec. Order No. 13,507, 74 Fed. Reg. 17,071 (Apr. 8, 2009); Aaron J. Saiger, *Obama’s ‘Czars’ for Domestic Policy and the Law of the White House Staff*, 79 *FORDHAM L. REV.* 2577 (2011); Cary Coglianese, *Presidential Control of Administrative Agencies: A Debate over Law or Politics?*, 12 *U. PA. J. CONSTITUTIONAL LAW* 637, 639 (2010).

³⁸¹ See Moe & Wilson, *supra* note 355, at 18–19.

³⁸² Saiger, *supra* note 380 at 2586–87, 2589–90

³⁸³ *Id.* at 2577–78. Saiger offers the examples highly qualified czars Carol Browner, who “had served as EPA Administrator in the Clinton Administration and was more senior, more experienced, and better known” than her Obama’s choice for EPA administrator; and Lawrence Summers, who would work opposite “his protégé” Timothy Geithner, Obama’s Secretary of the Treasury. *Id.*

³⁸⁴ *Id.* at 2586–89.

³⁸⁵ *Id.* at 2583. Saiger notes that Obama’s czar appointments were met with congressional resistance, leading to the elimination and defunding of several czar positions. *Id.* at 2578–79; *citing* Department of Defense and Full-Year Continuing Appropriations Act, H.R. 1437, 112th Cong. § 2262 (2011) (enacted) (defunding czar’s offices for health, climate, the automobile industry, and urban affairs).

³⁸⁶ Renan, *supra* note 357, at 255.

³⁸⁷ *Id.* at 247 (“With pooling . . . the President’s canvas is the entire administrative state. The opportunities to choose among regulatory tools are no longer grounded in, or constrained by, a particular statutory scheme”).

³⁸⁸ *Id.* at 227–228. For a thorough discussion of the legal, administrative, and public policy implications of the EPA-NHTSA joint rulemaking, See Jody Freeman, *The Obama Administration’s National Auto Policy: Lessons from the “Car Deal,”* 35 *HARV. ENVTL. L. REV.* 343 (2011)

³⁸⁹ Renan explains “for years, Congress had imposed a moratorium on appropriations relating to NHTSA’s fuel economy standards. As a result, NHTSA experienced a substantial expertise drain in this area, including loss of professional staff and stagnating research. Through the joint-rulemaking process, NHTSA

relied on the EPA’s expertise and its own statutory regulatory authority, and the joint effort “generated NHTSA’s first increase in fuel economy standards for cars in nearly thirty years.”³⁹⁰

For another example of pooling powers, consider also the Interagency Working Group on the Social Cost of Carbon (IWG), which was established “[t]o facilitate accounting for the costs of climate impacts, and the benefits of reducing carbon pollution.”³⁹¹ IWG was comprised of representatives from numerous federal agencies including the Council of Economic Advisers, Council on Environmental Quality, Department of Agriculture, Department of Commerce, Department of Energy, Department of Transportation, Environmental Protection Agency, National Economic Council, Office of Management and Budget, Office of Science and Technology Policy, and Department of the Treasury.³⁹² In 2009, the IWG developed a figure for the social cost of carbon, which it made available for public comment before adopting it in 2010,³⁹³ and revising it in 2013.³⁹⁴ By July 2015, the figure had been used in 34 proposed rulemakings³⁹⁵ performed by five agencies.³⁹⁶

2. *Spending Power*

The president is constrained in exercising unilateral power to the extent that he lacks the funding or statutory authority to do so. However, these constraints are qualified insofar as the president plays a leading role in the budget process, and the executive agencies operate within a structure of broad statutory authority.

The power of Congress to—or not to—appropriate funds for executive initiatives is a major constraint on unilateral presidential power, as evidenced by the battle over the

was able to rely on expertise, including research and technical skill, which the EPA had continued to accrue during those intervening years.” *Id.* at 227 (citations omitted))

³⁹⁰ *Id.* at 228. While the EPA-NHTSA joint rulemaking provides an example of combining one agency’s legal authority with another’s expertise, Renan identifies at least two other methods of pooling: The first consists of using one agency’s legal capacity as a lever to enhance the regulatory capacity of another agency – for example by requiring companies seeking an Federal Communications Commission (FCC) license to land fiber-optic cable to agree to a “network security agreement” developed by a number of national security agencies. *Id.* at 221–223. A different approach is to blend legal tools, for example by combining the Occupational Safety and Health Administration’s (OSHA’s) workplace safety authority with EPA’s environmental law tools and criminal laws enforced by DOJ to pursue harsher penalties for workplace safety violations than are normally available to OSHA alone. *Id.* at 229–30 (“The Department of Justice (DOJ) and the EPA provide trainings for OSHA officers instructing them on how environmental crime laws might be brought to bear on the workplace, and OSHA identifies high-priority candidates to those agencies for prosecution.”) (citation omitted).

³⁹¹ Richard L. Revesz, *Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*, 34 YALE J. REG. 545, 581 (2017).

³⁹² INTERAGENCY WORKING GROUP ON SOCIAL COST OF CARBON, U.S. GOV’T, RESPONSE TO COMMENTS: SOCIAL COST OF CARBON FOR REGULATORY IMPACT ANALYSIS UNDER EXECUTIVE ORDER 12,866 1 (2015), <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf>.

³⁹³ *Id.* at 2.

³⁹⁴ *Id.*

³⁹⁵ *Id.* at 4

³⁹⁶ *See* Revesz *supra* note 391, at 33 (citations omitted).

POWER+ plan described above in Part III.³⁹⁷ Nevertheless, the president possesses substantial leeway and leverage with which to maneuver to secure the funding he needs, and distribute it as he wishes.³⁹⁸ First, the president plays a central role in congressional passage of an annual budget. Since the Budget and Accounting Act of 1921 was enacted, the president has been responsible for preparing a budget, which is submitted to Congress each year in February.³⁹⁹ The budget is comprehensive, and vetted by the OMB to ensure that agency funding requests comport with a central executive policy platform.⁴⁰⁰ Congress relies heavily on the president's submitted budget, and the president typically supports his proposal with an active media campaign, appeals to Representatives and Senators, and, ultimately, the threat of veto if Congress departs significantly from the president's proposal.⁴⁰¹ Moreover, as the size of the federal government has increased, so has the length and complexity of the budget, making it less practical for Congress to carefully monitor the spending of the thousands of agencies funded.⁴⁰² Thus, as appropriations are increasingly targeted to less specific agency functions, the president's discretion over the use of those funds increases.⁴⁰³

Second, the president can coordinate already appropriated funds in the present fiscal year to serve a novel policy agenda not contemplated during the appropriation itself.⁴⁰⁴ Such was the case with the grants issued in fiscal year 2015 under the POWER Initiative, as is further explored below.⁴⁰⁵ To this end, for example, funding can be drawn from contingency accounts—that is, funding available only under certain circumstances, like a national emergency. Such accounts are often not bound by strict legislative criteria.⁴⁰⁶ As to these funds, “presidents often use them not to direct emergency relief programs, but instead supports projects, foreign and domestic, that Congress itself

³⁹⁷ See *supra* Part III.B.2.

³⁹⁸ See generally JOHN HUDAK, *PRESIDENTIAL PORK: WHITE HOUSE INFLUENCE OVER THE DISTRIBUTION OF FEDERAL GRANTS* (2014) (arguing that presidents have substantial power to secure and direct the issuance of discretionary grants, which, they author finds, they often use to support their most important political constituents.) “[P]residents manipulate the distribution of federal funds to advance their electoral interest.” *Id.* at 3.

³⁹⁹ Christopher R. Berry et al., *The President and the Distribution of Federal Spending*, 104 *AMERICAN POL. SCI. REV.* 783, 785 (2010).

⁴⁰⁰ *Id.*

⁴⁰¹ *Id.* at 785–86. Berry et al. note that when deliberating about a budget, Congress “must contend with an actively engaged president,” who advocates forcefully, in public and private, for congressional deference. “During the actual appropriations process, the president deploys a small army of experts to testify on behalf of his budget priorities. Concurrently, the president himself weighs in with direct solicitations to key members of Congress, public appeals, and ultimately the threat of a veto, all in an effort to control the content of the final budget.” *Id.* (citations omitted); See ALLEN SCHICK, *THE FEDERAL BUDGET: POLITICS, POLICY, PROCESS*, 84–118 (2008).

⁴⁰² HOWELL, *supra* note 356, at 123–24.

⁴⁰³ *Id.* at 124.

⁴⁰⁴ See William Howell, *Unilateral Powers: A Brief Overview*, 35 *PRES. STUD. Q.* 428 (2005). Howell describes creative ways the president can ensure his projects are funded: “given the size of the overall budget and the availability of discretionary funds, presidents occasionally find ways to secure funding for agencies and programs that even a majority of members of Congress oppose.” For a detailed description of reprogramming and transferring funds after the appropriations process, see LOUIS FISHER, *PRESIDENTIAL SPENDING POWER* 75–78, 99–107 (2015).

⁴⁰⁵ See *infra* Part IV.B.2.

⁴⁰⁶ FISHER, *supra* note 404, at 66–71.

opposes.”⁴⁰⁷ Presidents can also “request moneys for popular initiatives and then, once secured, siphon off portions to more controversial programs and agencies that were unilaterally created.”⁴⁰⁸

Relatedly, the political barriers to funding a new program are greater than appropriating funds for one already initiated by the president.⁴⁰⁹ For example, when John F. Kennedy founded the Peace Corps—despite lacking congressional approval—using a contingency account, Congress only considered the question of continued funding for the program once it had almost 400 Washington employees and 600 volunteers at work in eight countries.⁴¹⁰ As one commentator notes, “Congress, then, was placed in the uncomfortable position of having to either continue funding projects it opposed, or eliminate personnel who had already been hired and facilities that had already been purchased. Not surprisingly, Congress stepped up and appropriated all the funds Kennedy requested.”⁴¹¹ Thus, Members of Congress may feel that once a program has already taken effect, it is politically more hazardous to defund it than to re-appropriate the funds; by the same token, it is *less* politically fraught to appropriate funds for an existing program than to start a new one through legislation. Finally, although the president’s regulatory and spending powers are limited to those actions that Congress has authorized, agencies—and, therefore, the president—are empowered with a breadth of discretion by legislation already on the books.⁴¹²

Especially important for the purposes of this Article is the discretion the president has to control the distribution of federal discretionary grants, which are public funds made available to organizations based on statutory criteria.⁴¹³ The distribution of discretionary

⁴⁰⁷ HOWELL *supra* note 356, at 124–125.

As Howell notes, rather than tie up these funds with strict legislative criteria, Congress tolerates occasional presidential overreach: “Electorally, it usually does not make sense for members of Congress to cut [contingency accounts] altogether. All it takes is one major disaster – an American serviceman killed or an embassy bombed – for members to lose their seats. Rather than punishing those who abuse contingency accounts, members usually publicly criticize presidents for individual transgressions, all the while keeping the coffers full.” HOWELL *supra* note 356, at 125

⁴⁰⁸ *Id.*

⁴⁰⁹ HOWELL *supra* note 356, at 427 (“[The appropriations process is] considerably more streamlined, and hence easier to navigate, than the legislative process. It has to be, for Congress must pass a continually expanding federal budget every year, something not possible were the support of supermajorities required. . . . There are a range of programs and agencies that lack the support of supermajorities that are required to create them, but that have the support of the majorities needed to fund them”

⁴¹⁰ *Id.* at 428.

⁴¹¹ *Id.*

⁴¹² “[T]he president is greatly *empowered* through statutory law whether Congress intends it or not.” Moe & Wilson, *supra* note 355, at 23. As Moe notes, the president enjoys both the explicit powers delegated to the executive by statute, as well as by the implicit powers generated by statutory ambiguities. “When new statutes are passed, almost whenever they are, they increase the president’s total responsibilities and give him a formal basis for extending his authoritative reach into new realms. At the same time, they add to the total discretion available for presidential control, as well as to the resources contained within the executive.” *Id.*) For a thorough look at Congressional grants of statutory discretion to the president, see DAVID EPSTEIN & SHARYN O’HALLORAN, *DELEGATING POWERS* (1999).

⁴¹³ HUDAK *supra* note 398, at 12 (“first, grant programs are designed and developed. Second, the programs are made public and prospective applicants are invited to seek funds. Third, applications for funds are evaluated and accepted or rejected. Fourth, grant programs allocate funds to eligible applicants.”)

grants, which can total well over \$100 billion per year,⁴¹⁴ is subject to significant control by the president.⁴¹⁵ Arguing that presidents wield discretionary grants to stay in office, one commentator finds that between 1996 and 2008, swing states received about 7.5 percent more grants than other states—an annual difference of tens of millions of dollars per state.⁴¹⁶

3. *Coordinated Executive Policy*

Armed with the powers of politicization, centralization, and pooling, and discretionary spending, modern presidents have demonstrated the capacity to initiate and execute sweeping policy agendas by coordinating administrative activity. For example, in the early 2000s, President Bush mobilized the administrative bureaucracy to redirect over \$1 billion in aid to religious organizations.⁴¹⁷ Some funds were redirected through existing programs, while others constituted new discretionary grants awarded to religious organizations.⁴¹⁸

In addition, President Bush created new bureaucratic structures tasked with increasing the flow of federal grants to religious organizations.⁴¹⁹ The initiative was coordinated by the White House Office of Faith-Based and Community Initiatives, and executed in part by faith-based “centers” that were instituted in the Departments of Education, Labor, Justice, and Health and Human Services.⁴²⁰ As a part of the effort, these centers offered training for religious and community organizations on how to apply for federal grants. The centers published a catalogue of federal aid grants, which “as of 2004 totaled more than \$50 billion, for which religious organizations could apply.”⁴²¹ Finally, through rule changes, the centers increased access of faith-based organizations to “daycare, job-training, nutrition, anti-poverty, housing, anti-drug, and educational programs.”⁴²²

⁴¹⁴ *Id.* at 7. *See id.* at 48 (“[between 1996 and 2008,] the bureaucracy doled out more than \$962,000,000,000 in grants, allocated through 3,692,084 grant disbursements.”).

⁴¹⁵ Hudak notes that the level of discretion afforded to the executive varies by program. For example, “in the Omnibus Appropriations Act of 2009, Congress authorizes and appropriates to the Department of Justice ‘\$178,000,000 for discretionary grants to improve the functioning of the criminal justice system, to prevent or combat juvenile delinquency, and to assist victims of crime,’” delegating broad discretion to DOJ. *Id.* at 12 (quoting Omnibus Appropriations Act of 2009, P.L. 111-8, 123 Stat. 524, March 11, 2009, p. 580.) In contrast, other grants provide highly detailed standards as to distribution. *Id.* at 13. Ultimately, however, “Even if Congress preferred to make every federal distributive decision throughout the nation, lack of time, expertise, and staff requires that the federal bureaucracy take on much of that responsibility.” (*Id.* at 11).

⁴¹⁶ *Id.* at 50–52. Hudak’s data further shows that grant allocations increase by about 10 percent in the two years before a presidential election, further evidencing presidential control: “[i]f the grant distribution process were dominated by Congress, one would expect [not to see a change] because of the frequency of congressional elections.” *Id.* at 50.

⁴¹⁷ Berry et al. *supra* note 399, at 786.

⁴¹⁸ *Id.*; see Anne Farris, Richard Nathan, and David Wright, *The Expanding Administrative Presidency: George W. Bush and the Faith-Based Initiative*, Rockefeller Institute of Government, Albany, NY Report (2004)

⁴¹⁹ *Id.*

⁴²⁰ *Id.*

⁴²¹ *Id.*

⁴²² *Id.*

Bush’s faith-based community initiative was motivated by the dual desires to address social welfare issues by empowering local community organizations, and to strengthen collaboration between faith-based organizations and the federal government.⁴²³ By advancing the faith-based initiative with existing agency resources, rather than seeking legislative action, Bush “bypass[ed] congressional opposition from a variety of Democrats, as well as Republicans who opposed taking on issues of poverty in ways that ‘sounded like a Democratic idea.’”⁴²⁴ His initiative serves as a powerful example of the presidential capability, through agency direction and coordination, to unilaterally change policy and redirect federal funds.

B. Addressing Distributional Inequities

This Section sets forth a blueprint for how the Executive Branch can leverage its considerable institutional powers to address significant negative distributional consequences arising from regulatory activity. First, the president should institutionalize the practice, within OIRA, of identifying serious negative distributional consequences caused by economically significant rules.⁴²⁵ Second, an interagency working group structure, composed of representatives from across different administrative agencies, should be created and remain “on call” to respond to such findings. Third, upon a finding by OIRA of a sufficiently significant negative distributional consequence resulting from a prospective rule, the interagency working group should mobilize to coordinate an appropriate response.

There are two types of strategies this body might pursue in response to distributional inequities caused by regulation: The first approach is mitigation, and it is exemplified by the POWER Initiative. Under this approach, a rule that satisfies cost-benefit analysis, but which nevertheless causes severe harm to some subset population, should be accompanied by a mitigation strategy—the cost of which should not exceed the margin of benefit of the rule itself—to support that population. The second approach is rule-change. If the rule *itself* might be deemed bad policy because of the distributional inequity it entails, and if a mitigation strategy will not be adequate to compensate the harmed group, the rule should be sent back to the agency for redrafting.

The two examples that frame this Article’s discussion illustrate the relative desirability of the two different strategies. With respect to marketable trading programs for greenhouse gases, the possible negative distributional consequences do not come from the concentration of greenhouse gases in poor or minority areas. Greenhouse gases are global pollutants and their adverse health effects are the same regardless of where they are

⁴²³ Michael Leo Owens & May Yuen, *The Distributive Politics of “Compassion in Action”: Federal Funding, Faith-Based Organizations, and Electoral Advantage*, 65 POL. RES. Q. 422, 423–24 (2012).

⁴²⁴ *Id.* at 424 (citation omitted)

⁴²⁵ Although OIRA already *has* the authority to consider, where appropriate, “equity, human dignity, fairness, and distributive impacts,” Exec. Order No. 13,563(1)(c), 76 Fed. Reg. 3821 (Jan. 21, 2011), these considerations have not been rigorously applied, *see supra* text accompanying notes 246–253.

emitted.⁴²⁶ But, while the emission of greenhouse gases does not have local consequences, their emissions are often correlated with the emissions of local pollutants, including particulates, which have significant negative impacts on public health.⁴²⁷ Trading schemes do not necessarily create hot spots for these pollutants; in fact, depending on the costs of pollution reduction, they might disperse pollution instead of concentrating it.⁴²⁸ But if they do, and if those hot spots are of special concern because they are placed in disadvantaged areas, then the appropriate response could be to strengthen the regulation of the local pollutants, or the enforcement of already existing regulations. This response would be more direct and likely to be successful than a compensation scheme, for reasons discussed above in Part II.A.

In contrast, consider the situation of coal miners who allege that their harm comes from environmental regulation. Even if their claims are empirically grounded, responding to them by failing to promulgate environmental regulations that have large net benefits, as is the case for the Clean Power Plan,⁴²⁹ would not be a defensible social policy. Instead, here, the preferred distributional approach, would involve mitigating the adverse consequences resulting from the loss of jobs.

For either the mitigation or the rule-change approaches, the first step is determining an appropriate trigger. Then, if the trigger is satisfied, the question turn to how best to address it by deploying Executive Branch resources.

1. *Trigger*

In order to execute ameliorative policies aimed at populations burdened by environmental regulations, there must first be a mechanism for identifying rules that are likely to cause distributional inequities. As OIRA is currently tasked with centralized review of agency rulemaking, it is well situated to consider the distributional impacts of proposed rules, and to determine when mitigation of inequities is required.

As discussed more thoroughly above,⁴³⁰ since the Clinton Administration, it has been the stated policy of the Executive Branch, and of the EPA, that regulations should

⁴²⁶ See David E. Adelman, *The Collective Origins of Toxic Air Pollution: Implications for Greenhouse Gas Trading and Toxic Hotspots*, 88 IND. L.J. 273, 275 (2013) (explaining that greenhouse gases are global pollutants and do not create hotspots).

⁴²⁷ See Daniel A. Farber, *Pollution Markets and Social Equity: Analyzing the Fairness of Cap and Trade*, 39 ECOLOGY L.Q. 1, 6, 26 (2012) (noting that power plants and motor vehicles produce a mix of pollutants in addition to fossil fuels and that less well-mixed, non-global pollutants could be concentrated in hot spots as the result of trading schemes for global pollutants).

⁴²⁸ See *id.* at 30 (stating “there is no intrinsic or abstract tendency of cap-and-trade systems to produce hot spots or differentially direct emissions reductions toward cleaner plants rather than the dirtier plants that are more likely to impact disadvantaged communities”).

⁴²⁹ See Environmental Protection Agency, *Regulatory Impact Analysis for the Clean Power Plan Final Rule*, EPA-452/R-15-003, at ES-22, ES-23 (Aug. 2015), https://www3.epa.gov/ttnecas1/docs/ria/utilities_ria_final-clean-power-plan-existing-units_2015-08.pdf.

⁴³⁰ See *supra* text accompanying notes 40–46.

consider distributive impacts and equity in general,⁴³¹ and harms to disadvantaged populations in particular.⁴³² In practice, however, the EPA has not implemented a robust, standardized method of conducting distributional analysis.⁴³³ Rather, the EPA continues to conduct cost-benefit analysis with the objective of identifying the most *efficient* rule – that is, the rule whose aggregate benefits outweigh its aggregate costs, without regard to the distribution of those costs and benefits.

There is an extensive literature, advancing a number of competing perspectives, on methods of analyzing distributional effects of federal regulations in relation to cost-benefit analysis.⁴³⁴ One recommendation is to incorporate distributional values into cost-benefit analysis itself so that the cost-benefit ratio produced reflects values like equity.⁴³⁵ For example, analysts might assign different weights to the costs and benefits experienced by different groups according to those groups' relative social privilege; thus, costs borne by

⁴³¹ Exec. Order No. 12,866, § (1)(a), 58 Fed. Reg. 190, 190 (Sept. 30, 1993) (“in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including ... distributive impacts; and equity).”)

⁴³² See Exec. Order No. 12,898, 59 Fed. Reg. 32 (Feb. 16, 1994); President Bill Clinton, *Memorandum for the Heads of all Departments and Agencies: Executive Order on Federal Actions to Address Environmental Justice in Populations and Low-Income Populations* (Feb. 11, 1994); Exec. Order No. 13,563, 76 Fed. Reg. 3821 (Jan. 21, 2011).

⁴³³ OFFICE OF INSPECTOR GENERAL, REPORT NO. 2004-P-00007, EVALUATION REPORT: EPA NEEDS TO CONSISTENTLY IMPLEMENT THE INTENT OF THE EXECUTIVE ORDER ON ENVIRONMENTAL JUSTICE (2004). “Executive Order 12,866, the chief legal instrument governing agency policy analysis, states that agency regulations should maximize net benefits and then proceeds to explain that benefits include ‘distributive impacts’ and ‘equity.’ But the net-benefits-maximization test of traditional cost-benefit analysis is insensitive to distributional considerations. Executive Order 12,866 provides no guidance about the meaning of ‘distributive impacts’ and ‘equity,’ nor about how these considerations should be incorporated into cost-benefit analysis. The [OMB] guidance document regarding compliance with Executive Order 12,866 is lengthy and, on many issues, quite specific. When it comes to distributive analysis, however, the OMB guidance is brief and vague.” Matthew D. Adler, *Risk Equity: A New Proposal*, 32 HARV. ENVTL. L. REV. 1, 2 (2008) (citations omitted).

It is worth noting that to the extent that environmental justice concerns *are* emphasized in the executive orders and guidelines, they focus on the negative impacts on certain socially disadvantaged groups – specifically, poor people and racial minorities. *Id.* at 6–7. Such emphasis, though motivated by the necessary imperative of protecting such groups, is under-inclusive, as it ignores the possibility of grossly disproportionate distribution of costs among individuals who are not members of socially disadvantaged groups.

Adler elaborates: “For example, a deregulatory policy that raises air pollutant levels might increase death and morbidity among individuals with respiratory diseases, including some individuals who are neither racial minorities nor have low incomes. ... [this] looks like [a] potential inequality[y], simply by virtue of the impact of the policies *within the subpopulation of non-impooverished white individuals*, and quite apart from their effect on poor individuals or racial minorities. ... “This is not to say that a policy’s impact on poor individuals or racial minorities is not an equity concern. Of course it is. It is rather to say that there is an *additional* equity concern in these examples, which Executive Order 12,898 ... does not capture.” *Id.* at 7–8.

⁴³⁴ For an overview of the topic, see Eric A. Posner, *Rethinking Cost-Benefit Analysis*, 109 YALE L.J. 165 (1999).

⁴³⁵ There may be a compelling reasons why weighting approaches would be ill-advised that this Article does not address. See e.g., Banzhaf, *Regulatory Impact Analyses of Environmental Justice Effects*, 27 FLA ST. UNIV. COLLEGE OF LAW J. OF LAND USE & ENV’T. L. 1, 26 (arguing that such an approach “arrogates too much power to the benefit-cost practitioner,” and diminishes the capacity for policymakers to use discretion).

disadvantaged groups would be weighted more heavily.⁴³⁶ Without evaluating the merits of such an approach, this Article follows a different path. It does not recommend wholesale changes to the way in which cost-benefit analysis is conducted because the current methodologies are now deeply ingrained into the fabric of U.S. administrative law.⁴³⁷ Moreover, weighting approaches can lead only to changes in the rule that would otherwise have negative distributional consequences and do not contemplate the possibility that a rule supported through traditional cost-benefit analysis would be adopted but then mitigated through separate measures. And, relatedly, weighted approaches do not contemplate the possibility that agencies other than the one promulgating the regulation would be the ones mitigating these adverse consequences.

Instead, agencies should report distributional inequities to OIRA *alongside* conventional cost-benefit analysis results. Such a report could take the form of a table showing the effects on different groups.⁴³⁸ Indeed, one commentator notes that “[m]any of EPA’s RIAs are already detailed enough, and make use of scientific and economic models sufficiently rich enough, that extending them to incorporate such distributional issues would require only modest additional effort.”⁴³⁹ As the centralized reviewing body, OIRA should determine what level of inequity is sufficient to warrant mobilizing an executive response. Determining the precise threshold of inequity beyond which an executive response should mobilize is outside the scope of this Article. However, such a response is appropriate only for an unusually large inequity. It is inevitable, and arguably tolerable, that some groups will be burdened more than others in the normal course of regulation. Indeed, the argument for tolerating routine inequities is that over time, the costs and

⁴³⁶ See Banzhaf, *supra* note 435, at 25–26. For an overview of building distributional weights into cost-benefit analysis, and a discussion of different approaches to implementing the proper social welfare function, see Matthew D. Adler, *Cost-Benefit Analysis and Distributional Weights: An Overview* (Nicholas Institute for Environmental Policy Solutions, Working Paper No. EE 13-04, 2013). For examples of specific proposals, see also A. Myrick Freeman III, *Income Distribution and Planning for Public Investment*, 57 AM. ECON. REV. 494, 495–96, 500–07 (1967) (arguing that a social welfare function that assigns value to equitable distribution of income-change should be built into traditional cost-benefit analysis); Adler *supra* note 433, at 2–5 (arguing that distributions health, longevity, and income should be considered and built into a social welfare function used in cost-benefit analysis).

⁴³⁷ See *supra* Part III.A.2. for a discussion of past failures of OIRA to incorporate distributive effects in cost-benefit analyses.

⁴³⁸ See Banzhaf, *supra* note 435, at 33–34; Ronald J. Shadbegian, Wayne Gray, & Cynthia Moragn, *Benefits and Costs from Sulfur Dioxide Trading: A Distributional Analysis*, in ACID IN THE ENVIRONMENT: LESSONS LEARNED AND FUTURE PROSPECTS 241, 241–43; 250–55 (Gerald R. Visgilio & Diana M. Whitelaw eds., 2006) (analyzing the distributional benefits of sulfur dioxide regulations included in the 1990 Clean Air Act Amendments. An alternative to reporting distributional effects in a table is to report them using one or more indices quantifying equitability. See, e.g., Jonathan I. Levy, Andrew W. Wilson, & Leonard M. Zwack, *Quantifying the Efficiency and Equity of Power Plant Control Strategies in the United States*, 115 ENVTL. HEALTH PERSP. 743, 743; 745–47 (2007) (using the Atkinson index to measure distribution of health benefits from air pollution regulations).

⁴³⁹ Banzhaf, *supra* note 435, at 15. Banzhaf considers the example of EPA’s RIA for its arsenic rule and its disinfectants and disinfection byproducts rule; in such cases, EPA “identified a distribution of costs [of improving water purity] across individual water treatment systems,” which entailed determining the distribution of the systems that would be most affected by improved regulation. *Id.* Banzhaf concludes, “with these data and with this conceptual architecture, EPA essentially has already approached a distributional analysis...It simply did not follow through to break them out and report them the same way.” *Id.*

benefits of regulations on particular groups will even out to some extent.⁴⁴⁰ This Article’s recommendation is reserved for instances of *unusually* large inequities, where one group’s livelihood or health is especially at risk, as in the paradigmatic environmental justice case of further environmental burdens on poor or minority communities that are already disproportionately burdened,⁴⁴¹ or where a community loses a significant portion of its employer base, perhaps as a consequence of repeated regulatory action over a long period of time, as might be the for coal miners in certain parts of Appalachia.⁴⁴² Through a guidance document, OIRA could provide more specific standards on this issue.

As indicated earlier in this Section, the appropriate response to a finding of unacceptable distributional consequences could be either a rule change or mitigation measures. The choice would depend on how to address these negative consequences while compromising the desirability of the underlying regulation as little as possible. OIRA, with its expertise in assessing the consequences of regulation, could be in charge of this determination. Where a rule change is the preferred approach, two situations present themselves. First, the agency that is attempting to promulgate the rule that gives rise to undesirable distributional consequences might be able to address these consequences by amending the rule. Second, the appropriate regulatory action could be within the statutory jurisdiction of a different agency. Both in this latter situation and where mitigation is the preferred response, coordinated Executive Branch action is necessary.

2. *The POWER Initiative and IWG as a Models for Action and Structure*

President Obama’s POWER Initiative serves as a model for the type of coordinated executive action undertaken to mitigate harms suffered by populations negatively affected by regulation. As previously discussed, the POWER+ Plan and the related RECLAIM Act, which would have entailed substantial statutory and budgetary authorization, stalled in Congress.⁴⁴³ In contrast, President Obama’s POWER Initiative relied primarily on existing statutory authority and funds, and required more modest appropriations in fiscal years 2016 and 2017.⁴⁴⁴ The POWER Initiative has successfully made more than \$100 million in funds available to communities affected by changes in the coal industry in 2015 and 2016, and continues in 2017.⁴⁴⁵ Notably, it is an interagency effort, led by the Economic Development Administration, an agency within the Department of Commerce, but relying on the authority, resources, and institutional expertise of ten federal agencies.⁴⁴⁶ As a

⁴⁴⁰ See Posner, *supra* note 434, at 189 (citation omitted). A thorough exploration of this question is beyond the scope of this Article.

⁴⁴¹ See *supra* text accompanying note 164.

⁴⁴² See *supra* text accompanying note 276.

⁴⁴³ See *supra* text accompanying notes 339–347.

⁴⁴⁴ See *supra* text accompanying notes 315–325.

⁴⁴⁵ *Fact Sheet: The Partnerships for Opportunity and Workforce and Economic Revitalization (POWER) Initiative*, THE WHITE HOUSE (Mar. 27, 2015), <https://obamawhitehouse.archives.gov/the-press-office/2015/03/27/fact-sheet-partnerships-opportunity-and-workforce-and-economic-revitaliz>; *Obama Administration Announces \$65.8 Million Available for Economic and Workforce Development in Coal-Impacted Communities*, Economic Development Administration Press Release (March 17, 2016); *Assistance to Coal Communities*, Economic Development Administration, <https://www.eda.gov/coal/>

⁴⁴⁶ As of 2016, the POWER Initiative was described as “a community-based administration effort involving ten federal agencies working together to align, leverage and target a range of federal economic and

coordinated effort drawing resources and funds from a number of federal agencies to target a particular population, the POWER Initiative exemplifies precisely the type of coordinated assistance recommended by this Article. Furthermore, the specific grants made available through POWER exhibit the type of resources that might be mobilized as a part of an executive-led mitigation strategy. The most recent round of grants, announced in October 2016, is described as “[a] funding opportunity that invests in economic revitalization and workforce training in coal communities across the country... support[ing] 42 economic and workforce development projects in thirteen states...”⁴⁴⁷ A selection of grants awarded include a nearly \$1.5 million grant to Hocking College in Nelsonville, OH to support a program leveraging public and private resources to provide workforce training services targeted to industry needs in North Central Appalachia, “including advanced energy, automotive technology, petroleum technology, welding, and commercial driver’s licenses⁴⁴⁸,” just over \$300,000 to the Centralia College Robotics Workforce Training project in Centralia, WA, to support a workforce training initiative around robotics technology; and just over \$100,000 to Williamson Health and Wellness Center in Williamson, WV, to support an initiative offering workforce training and substance abuse treatment.⁴⁴⁹

As these funds are targeting dislocated workers, they are primarily aimed at economic development and workforce training. Because they are issued in the form of discretionary grants, they support a patchwork of local organizations that will in turn support workers affected by the coal industry. This approach typifies what we might expect from a unilateral executive model of correcting distributional harms caused by regulations – a patchwork of programs imperfectly but deliberately tailored to reach a desired population. In response to other types of harms, such as health hazards of local pollution, a similar strategy might be employed to deliver targeted healthcare services.

The basic function of the POWER Initiative is to provide assistance to dislocated energy-sector workers.⁴⁵⁰ The program follows in the footsteps of existing job training

workforce development programs and resources to assist communities and workers that have been affected by job losses in coal mining, coal power plant operations, and coal-related supply chain industries...” *Fact Sheet: Administration Announces Additional Economic and Workforce Development Resources for Coal Communities through POWER Initiative*, THE WHITE HOUSE (Oct. 26, 2015), <https://obamawhitehouse.archives.gov/the-press-office/2016/10/26/fact-sheet-administration-announces-additional-economic-and-workforce>

⁴⁴⁷ Fact Sheet: Administration Announces Additional Economic and Workforce Development Resources for Coal Communities through POWER Initiative, THE WHITE HOUSE (Oct. 26, 2016), https://www.arc.gov/images/grantsandfunding/POWER2016/POWER2016_Awards_WHFactSheet_10-26-2016.pdf.

⁴⁴⁸ *Id.*

⁴⁴⁹ *Id.*

⁴⁵⁰ Dislocated workers are understood as those who have not been discharged for cause, have at most a very small chance of being recalled to their old job, and have had strong prior attachment to the industry of their pre-displacement employer. Louis S. Jacobson, et al., *Federal Reserve Bank of Chicago, Is Retraining Displaced Workers a Good Investment?*, 29 *ECON. PERSP.* 47, 59 (2005) Such workers can experience especially large earnings losses compared to other job-losers, because dislocated workers possess valuable skills or knowledge particular to their industry or company that may not be transferrable. Because such skills are developed on the job over time, earnings losses are largest for longer-tenured workers. See LOUIS S.

programs for displaced workers provided primarily under two statutory frameworks: Trade Adjustment Assistance (TAA), which serves workers dislocated due to economic shifts caused by free trade agreements, and the Workforce Innovation and Opportunity Act (WIOA), which provides workforce development more broadly.

TAA originated in 1962 to mitigate dislocation of workers and firms affected by international trade liberalization.⁴⁵¹ Most recently reauthorized in 2015, the current version of TAA offers eligible workers training and reemployment services, income support for workers who have exhausted other available unemployment compensation, a wage insurance program to subsidize the wages of older workers who obtain reemployment at a lower wage, and a health coverage tax credit.⁴⁵²

WIOA, enacted in 2014, is the latest in a series of laws which also trace their roots to 1962.⁴⁵³ WIOA funds demand-based workforce development activities such as job training and adult education services, administered through a network of “One-Stop Career Centers” that coordinate a host of federal workforce development activities, including TAA benefits.⁴⁵⁴ Although WIOA benefits are available to a far larger pool of citizens, TAA benefits are significantly more generous.⁴⁵⁵

Both Richard Nixon and Barack Obama sought to consolidate disparate federal job training services into a single, more robust program to assist any and all dislocated workers, rather than targeting particular populations as under TAA.⁴⁵⁶ Both Presidents, however, ran into political barriers, and federal worker dislocation assistance remains a patchwork.⁴⁵⁷ While Obama emphasized adult job training in his second term, and

JACOBSON ET. AL., THE HAMILTON PROJECT, POLICIES TO REDUCE HIGH-TENURED DISPLACED WORKERS’ EARNINGS LOSSES THROUGH RETRAINING 8-9 (2011).

⁴⁵¹ J.F. HORNBECK, CONG. RESEARCH SERV., R41922, TRADE ADJUSTMENT ASSISTANCE (TAA) AND ITS ROLE IN U.S. POLICY 6-7 (2013). This was the first legislation offering adjustment assistance relative to free trade; prior, the only protection for workers affected by free trade was temporary protectionism in the form of higher tariffs or quotas. *See* EDWARD H. ALDEN, FAILURE TO ADJUST: HOW AMERICANS GOT LEFT BEHIND IN THE GLOBAL ECONOMY 115-22 (2016). Since 1962, the TAA has undergone periodic changes under different administrations, and has faced a variety of administrative and funding difficulties. For a brief history of the evolution of TAA, *see id.*, at 115–22.

⁴⁵² BENJAMIN COLLINS, CONG. RESEARCH SERV., R44153, TRADE ADJUSTMENT ASSISTANCE FOR WORKERS AND THE TAA REAUTHORIZATION ACT OF 2015 5-10 (2016).

⁴⁵³ DAVID H. BRADLEY, CONG. RESEARCH SERV., R44252, THE WORKFORCE INNOVATION AND OPPORTUNITY ACT AND THE ONE-STOP DELIVERY SYSTEM 2 (2015).

⁴⁵⁴ *Id.* at 4-7.

⁴⁵⁵ ROBERT MAXIM, COUNCIL ON FOREIGN RELATIONS 10, 13, 19 (updated 2016)

⁴⁵⁶ *See* ALDEN, *supra* note 451, at 122.

⁴⁵⁷ For example, a 2011 report identified 47 federal employment and training programs administered by nine federal agencies. *See* GOVERNMENT ACCOUNTABILITY OFFICE, MULTIPLE EMPLOYMENT TRAINING PROGRAMS; PROVIDING INFORMATION ON COLOCATING SERVICES AND CONSOLIDATING ADMINISTRATIVE STRUCTURES COULD PROMOTE EFFICIENCIES 5 (2011). Although passage of WIOA in 2014 effectuated some consolidation, employment services continue to draw on a network of statutory authorities, and supports for dislocated workers remain split between WIOA and TAA. *See* Maxim, *supra* note 455, 19.

consistently increased funding in this area,⁴⁵⁸ the United States still provides far less funding for labor market adjustment than other industrialized countries.⁴⁵⁹

Studies of the effectiveness of benefits provided under TAA and WIOA have found mixed results, and more research is needed to identify effective and ineffective approaches. A study commissioned by the Department of Labor (DOL) to evaluate the predecessor of the 2015 TAA reauthorization found that TAA beneficiaries earned \$3,300 *less* per year than a control group that received non-TAA unemployment benefits four years after members of each group lost their jobs.⁴⁶⁰ However, the DOL studies did suggest that TAA benefits may have a greater impact on workers who received job training services under the program than those who received income support without training.⁴⁶¹ A similar, ongoing evaluation of the Adult and Dislocated Worker Program administered under WIOA found inconclusive results after the first 15 months, and stated that it is too soon to judge the effectiveness of training benefits.⁴⁶²

Unfortunately, there is a dearth of experimental evidence about the effectiveness of government assistance for dislocated workers, and the limited evidence available shows mixed results.⁴⁶³ There is evidence, however, that displaced workers underinvest in retraining relative to the benefits, supporting the notion that subsidizing retraining is sensible in theory.⁴⁶⁴ A recent study of returns to community-college retraining produced

⁴⁵⁸ DEPARTMENT OF LABOR, BUDGET IN BRIEF 9 (2017). *See also* ALDEN, *supra* note 451, 122.

⁴⁵⁹ Mark Muro and Joseph Parilla, *Maladjusted: It's Time to Reimagine Economic 'Adjustment' Programs*, BROOKINGS INSTITUTION (Jan. 10, 2017) <https://www.brookings.edu/blog/the-avenue/2017/01/10/maladjusted-its-time-to-reimagine-economic-adjustment-programs/>.

⁴⁶⁰ MATHEMATICA POLICY RESEARCH, INC., THE EVALUATION OF THE TRADE ADJUSTMENT PROGRAM: A SYNTHESIS OF MAJOR FINDINGS 7 (Ronald D'Amico et al. 2012). Other studies have likewise found mixed results in the effectiveness of TAA training services. *see* David B. Muhlhausen and James Sherk, *Trade Adjustment Assistance: Let the Ineffective and Wasteful 'Job Training' Program Expire*, THE HERITAGE FOUNDATION 4 (2014).

⁴⁶¹ MATHEMATICA, *supra* note 460 (2012). Another study found that occupational skills training administered under TAA does reduce the earnings losses from dislocation when the trainee succeeds at acquiring new skills. Jooyoun Park, *Does Occupational Training by the Trade Adjustment Assistance Program Really Help Reemployment? Success Measured as Occupation Matching*, 20 REV. OF INT. ECON. 999 (2012).

⁴⁶² MATHEMATICA POLICY RESEARCH, INC., PROVIDING PUBLIC WORKFORCE SERVICES TO JOB SEEKERS: 15-MONTH IMPACT FINDINGS ON THE WIA ADULT AND DISLOCATED WORKER PROGRAMS 125 (Sheena McConnell et al. 2016).

⁴⁶³ *See* CHRISTOPHER J. O'LEARY ET AL., JOB TRAINING POLICY IN THE UNITED STATES 77-79 (2004). Indeed, the available evidence suggests that programs for dislocated workers in particular are less effective than programs for otherwise disadvantaged workers. *See* CAROLYN J. HEINRICH, TARGETING WORKFORCE DEVELOPMENT PROGRAMS: *WHO SHOULD RECEIVE WHAT SERVICES? AND HOW MUCH?* 11-12 (2013). However, there is strong evidence of significant earnings increases for dislocated workers who enroll in community college programs. *see* Louis S. Jacobson, et al., *Federal Reserve Bank of Chicago, Is Retraining Displaced Workers a Good Investment?*, 29 *Economic Perspectives* 47, 59 (2005). Jacobson, et al. found that both the personal and social benefits of investing in community college outweigh the costs, though the authors cautioned that workers who select into training programs are those who expect the largest benefit, and that subsidizing training may induce participation by individuals who expect less significant benefits. *Id.* at 62.

⁴⁶⁴ *See id.* at 10-11. The authors found that workers earned approximately 4.4 percent more per year after retraining. However, because of prohibitive near-term financial costs, workers underutilize existing programs. *Id.* at 14. The authors further found, using Cost-Benefit Analysis, that subsidizing "high-return" retraining is an efficient investment. *Id.* at 15.

valuable insights into features which may make government programs more effective.⁴⁶⁵ For example, losses from displacement correlate positively with length of tenure, suggesting that programs might target workers with longer tenure prior to dislocation;⁴⁶⁶ programs that are more technical in nature produced substantially higher returns than non-technical programs, so funding should target “high-return” retraining programs;⁴⁶⁷ and retraining was especially effective for displaced workers who had already completed some post-secondary education, indicating that other interventions may be more appropriate for workers with a lower baseline level of education.⁴⁶⁸

A federal initiative to channel resources to workers dislocated by environmental regulation must consider insights such as these while recognizing the remaining knowledge gap about the effectiveness of current government programs assisting such populations. Ensuring that money is channeled to support evidence-based solutions is essential. However, the fragmented nature of the existing programs, as well as the fact that the greatest benefits – those provided under TAA – are only available for workers dislocated as a consequence of free trade, underscore the vulnerability of workers dislocated by environmental regulation, and the imperative to assist them.

While the Power Initiative exemplifies the necessary type of policy- and resource-coordination to assist populations burdened by environmental regulations, this Article advocates for something more—an *institutional structure* for forming such policy. The POWER Initiative was created as an ad hoc remedy for the problem of coal-industry dislocation. Building on that isolated experience, this Article advocates for a standing executive unit that would mobilize in response to an OIRA determination of substantially disproportionate regulatory harm.

Insofar as unilateral executive distribution draws on authority and funding from multiple agencies, an interagency working group is the ideal structure for formulating such a policy. Such a group would bring varied institutional expertise to bear in solving a problem or formulating a policy. The IWG benefitted from the broad institutional expertise of its constituent agencies in determining an estimate for the social cost of carbon.⁴⁶⁹ So would an interagency working group charged with coordinating redistributive assistance benefit from such expertise. With a birds-eye-view of agency expertise and capability, such a group would be able to identify and mobilize the best resources available from across the administrative bureaucracy.

So far, this subsection’s discussion has focused on unacceptable distributional consequences that are best addressed through mitigation. But the interagency working group would similarly be well positioned where the preferred response is a rule change and

⁴⁶⁵ See LOUIS S. JACOBSON ET. AL., THE HAMILTON PROJECT, POLICIES TO REDUCE HIGH-TENURED DISPLACED WORKERS’ EARNINGS LOSSES THROUGH RETRAINING (2011).

⁴⁶⁶ See *Id.* at 5.

⁴⁶⁷ See *id.* at 10-13.

⁴⁶⁸ See *id.* at 21-22.

⁴⁶⁹ Revesz, *supra* note 391, 581–83. President Trump disbanded the IWG. See Exec. Order No. 13,783, 82 Fed. Reg. 16,093 (Mar. 31, 2017).

the agency with authority to make this change is not the agency attempting to promulgate the rule with the negative distributional consequences.

CONCLUSION

This Article calls for a fundamental rethinking of the administrative state and challenges one of the academic literature's dominant paradigms. Addressing unacceptable distributional consequences of particular environmental, health, and safety regulation cannot be left to congressional action focused on the income tax system because this system, as it has evolved for over a century, is not well suited to address the core consequences of such regulation. And, compounding the problem, the serious gridlock that Congress currently experiences makes this approach even more of a non-starter.

And, while to date the Executive Branch has similarly not dealt effectively with distributional concerns, it has, at times, used coordination mechanisms that could be adapted to provide effective government-wide distributional responses. The goal of this Article is to build upon discrete examples of such coordination and suggest a more robust standing institutional structure that can focus on properly addressing distributional issues.

This Article, however, should not be read as endorsing roving Executive Branch action designed to counteract general distributional inequities, for example, constraining the very large range in income and wealth across the populations. Skeptics would say that only Congress can effectively and constitutionally undertake social policy of that magnitude. The focus here is both narrower and far more grounded in an accepted intellectual paradigm. For decades, the administrative state has paid lip service to distributional consequences but has not put in place structures to effectively deal with this issue. After establishing these failings, this Article moves to fill the void.