# Capturing the Regulatory Agenda: An Empirical Study of Agency Responsiveness to Rulemaking Petitions 

Daniel E. Walters<br>Texas A\&M University School of Law, dkw5367@psu.edu

Follow this and additional works at: https://scholarship.law.tamu.edu/facscholar
Part of the Administrative Law Commons, Environmental Law Commons, and the Law and Economics Commons

## Recommended Citation

Daniel E. Walters, Capturing the Regulatory Agenda: An Empirical Study of Agency Responsiveness to Rulemaking Petitions, 43 Harv. Envtl. L. Rev. 175 (2019).
Available at: https://scholarship.law.tamu.edu/facscholar/1574

This Article is brought to you for free and open access by Texas A\&M Law Scholarship. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of Texas A\&M Law Scholarship. For more information, please contact aretteen@law.tamu.edu.

# CAPTURING THE REGULATORY AGENDA: AN EMPIRICAL STUDY OF AGENCY RESPONSIVENESS TO RULEMAKING PETITIONS 

Daniel E. Walters*


#### Abstract

In environmental regulation as well as in other regulatory domains, a critical question is how outside interests shape the rulemaking agenda. A great deal of skepticism toward regulation stems from the widespread perception that agencies excessively, or even exclusively, cater to business interests. One answer to these concerns is administrative procedure, in particular rulemaking petitions, which are provided for in the Administrative Procedure Act and in many substantive environmental statutes. Although rulemaking petitions could in theory be used by business interests to strengthen their hold on regulatory agenda-setting, a growing number of scholars, bigblighting the critical role a rulemaking petition played in the Supreme Court's 2007 decision forcing EPA action on climate change, have pointed to the potential for rulemaking petitions to combat agency inaction and under-regulation. Despite these warring descriptions, we actually have very little generalizable understanding of how rulemaking petitions operate in practice and to whom the benefits of the institution flow.

In this Article, I take a close look at original data on all the rulemaking petitions submitted to three administrative agencies from 2000 to 2016, statistically tracing petitions' fates from submission to resolution. I find that, although business interests may participate at a bigher rate than public interest groups and individuals, there is little evidence of full-on regulatory capture via petitions. Even in a venue where it would be exceedingly easy to give business interests precisely what they want, agencies remain largely unmoved and evenbanded. The pattern that does emerge-an agency preference for using petitions to inform incremental revision and softening of existing regulations to reflect changed circumstances or new technologies-probably does inure mostly to the benefit of regulated entities, but it is difficult to square these findings with theories of excessive influence or capture of the regulatory process by business interests. At the same time, the findings pour cold water on the more sanguine account of petitions as a tool to advance environmental regulation. Despite the allure of such an account after Massachusetts v. EPA, the reality is that petitions are rarely transformative and will remain so unless significant changes are made to the institution.


## Table of Contents

Introduction ..... 176
I. What Is Known and What Is Not Known About Business Influence in the Regulatory Process. ..... 182
A. Prior Empirical Research on Business Capture in the Regulatory Process ..... 183
B. The Primacy of the Agenda-Setting Stage ..... 187
II. Rulemaking Petitions: Nuts and Bolts ..... 190

[^0]III. The Life Cycle of Rulemaking Petitions: A Quantitative Look at Petitioning Activities and Agency Responses ..... 194
A. Characteristics and Trends of Business Participation ..... 196

1. Static Characteristics ..... 197
2. Submission Patterns ..... 199
B. Distribution of Outcomes ..... 200
C. Timing of Responses and Grants ..... 205
D. After the Grant ..... 208
IV. Capture by Petition? ..... 211
A. Participatory Balance ..... 212
B. Incrementalism and Autonomy ..... 214
V. Big Problems and Incremental Solutions: The Imperfect Marriage between Rulemaking Petitions and Environmental Regulation ..... 216
Conclusion ..... 223

## Introduction

In his first major move as acting Administrator of EPA, Andrew Wheeler signed the paperwork delivering what electric utilities had long desired: a final rule rolling back key requirements from an Obama-era rule covering the disposal and storage of coal combustion residuals, colloquially known as "coal ash." ${ }^{1}$ Coal ash is "one of the largest industrial waste streams generated in the U.S.," with over 110 tons produced each year as part of coal-fired electric generation. ${ }^{2}$ In 2015, EPA responded to a series of environmental catastrophes, including the massive Kingston Tennessee Valley Authority ("TVA") coal ash spill late in 2008, by developing a comprehensive regulatory response under the Resource Conservation and Recovery Act ("RCRA"). ${ }^{3}$ The rule contained provisions to prevent the reoccurrence of such spills, as well as programs to prevent the leaching of the toxic sludge into groundwater supply. ${ }^{4}$

1. See Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One, Part One), 83 Fed. Reg. 36,435 (July 30, 2018) (codified at 40 C.F.R. pt. 257).
2. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 80 Fed. Reg. 21,302, 21,303 (Apr. 17, 2015) (codified at 40 C.F.R. pts. 257, 261).
3. See id. For background on the Kingston TVA coal ash spill, see Susie Hatmaker, On Mattering: A Coal Ash Flood and the Limits of Environmental Knowledge, 4 Envtl. Human. 19 (2014) (providing detailed ethnographic study regarding precursors and aftermath of the Kingston TVA coal ash spill); Laura Ruhl et al., Environmental Impacts of the Coal Ash Spill in Kingston, Tennessee: An 18-Month Survey, 44 Envtl. Sci. \& Tech. 9272 (2010); Kathleen Masterson, QEA: Examining the Tennessee Coal Ash Spill, NPR (Jan. 8, 2009), https:// perma.cc/VZ3X-87H7.
4. See Disposal of Coal Combustion Residuals, 80 Fed. Reg. at 21,304-05.

After the presidential transition, the Utility Solid Waste Activities Group-a consortium of electric utilities and industry associations ${ }^{5}$-filed a petition for rulemaking asking that EPA revisit some aspects of the Obama coal ash rule. ${ }^{6}$ Four months later, in September 2017, then-Administrator Scott Pruitt granted the petition and announced his intent to file a motion to hold litigation before the U.S. Court of Appeals for the District of Columbia Circuit in abeyance pending the completion of the deregulatory action. ${ }^{7}$ EPA told the court that it intended to proceed in two phases, the first of which would focus on revisiting portions of the Obama coal ash rule that had been previously remanded to the agency. ${ }^{8}$ The agency swiftly followed through on its first phase, proposing a rule in March of 2018 that would add "flexibility" to the Obama rule to address industry concerns, allegedly saving industry some $\$ 28-31$ million per year. ${ }^{9}$ After a public comment period, Wheeler signed the final rule, and environmental groups decried the "betrayal" that had unfolded over the course of a year to unwind the progress that had been made in the regulation of coal ash. ${ }^{10}$

This is, of course, but one episode in a larger deregulatory saga playing out in the Trump EPA. ${ }^{11}$ But it also raises interesting-and largely unansweredquestions about the institutional machinery that constructs the regulatory (or deregulatory) agenda. At the center of the coal ash reversal is a rulemaking petition filed by industry groups and ultimately granted by the agency. ${ }^{12}$ Al-
5. Utility Solid Waste Activities Group, Edison Elec. Inst., https://perma.cc/M8BE-WMJB.
6. Utility Solid Waste Activities Group, Petition for Rulemaking to Reconsider Provisions of the Coal Combustion Residuals Rule, 80 Fed. Reg. 21,302 (Apr. 17, 2015), and Request to Hold in Abeyance Challenge to Coal Combustion Residual Rule, No. 15-1219, et al. (D.C. Cir.) (May 12, 2017), https://perma.cc/CW6X-FK88.
7. Letter from E. Scott Pruitt, Administrator, EPA, to Douglas Green, Margaret Fawal, Venable LLP on Petitions Concerning Coal Combustion Residuals Rule (Sept. 13, 2017), https://perma.cc/9CFP-M5XK.
8. Id.
9. Juliet Eilperin \& Brady Dennis, EPA Eases Rules on How Coal Ash Waste is Stored Across U.S., Wash. Post (July 17, 2018), https://perma.cc/MJV2-QFQW.
10. Id.
11. See Lisa Heinzerling, Unreasonable Delays: The Legal Problems (So Far) of Trump's Deregulatory Binge, 12 Harv. L. \& Pol’y Rev. 13, 39-40 (2018) (detailing the Trump Administration's deregulatory efforts, with a focus on environmental rollbacks during Scott Pruitt's tenure as EPA Administrator).
12. Rulemaking petitions must be taken by agencies under the APA, which states that "[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule." 5 U.S.C. § 553(e) (2012). There are also many statutes that likewise grant a right to petition and that impose different requirements on agencies' responses to these petitions. See Jason A. Schwartz \& Richard L. Revesz, Petitions for Rulemaking: Final Report to the Administrative Conference of the United States, Administrative Conference of the United States at 31 (Nov. 5, 2014), https://perma.cc/CB3Z-2UV8 ("Beyond the APA’s general right to petition, Congress has repeatedly experimented with granting new rights to petition for rulemaking under specific statutes."). A general APA petition entitles the petitioner to a
though the public records on petitions at EPA are spotty, we have every reason to believe that the agency receives hundreds of similar rulemaking petitions every year, ${ }^{13}$ and we know that petitions have sometimes prodded the agency into action on key environmental issues, including global climate change. ${ }^{14}$ Massachusetts v. EPA ${ }^{15}$ sharpened petitions' teeth by entitling a petitioner to litigation should EPA ignore or arbitrarily decide the issues presented by them. ${ }^{16}$ Noting this, eminent environmental experts have praised petitions as a means of invigorating environmental regulation and have encouraged environmental groups to petition EPA en masse. ${ }^{17}$ Yet, as the coal ash reversal shows, petitions can just as easily be filed by industry and business groups who see their own opportunity to influence the environmental regulatory agenda and deliver regulatory rollbacks that reduce their compliance burden. This article, by empirically tracking and analyzing hundreds of rulemaking petitions from start to finish, takes a major step toward understanding how agencies build their regulatory agenda in response to petitions from outside groups.

The focus of my analysis is disproportionate business and industry influence on the regulatory process. Few questions have received as much attention in the scholarly literature on regulation. ${ }^{18}$ The relationship between business interests and regulatory policymaking is widely perceived as a close one-so much so that agencies are often thought to be fully "captured" (i.e., controlled)
reasonable response in a reasonable amount of time. See infra notes 90-99 and accompanying text.
13. Jason A. Schwartz \& Richard L. Revesz, Petitions for Rulemaking Final Report—Appendix C, Administrative Conference of the United States (Nov. 5, 2014), https://perma.cc/Z7Q8WR7X (estimating the number of petitions submitted to various agencies based on survey responses, and noting that EPA received "[o]ver 200" petitions in 1986, although that number seems to have dropped in recent years, possibly due to underreporting).
14. See, e.g., Massachusetts v. EPA, 549 U.S. 497 (2007) (holding that EPA arbitrarily denied a petition requesting that the agency promulgate rules to curb automobile emissions of carbon dioxide).
15. 549 U.S. 497 (2007).
16. Kathryn A. Watts \& Amy J. Wildermuth, Massachusetts v. EPA: Breaking New Ground on Issues Other Than Global Warming, 102 Nw. U.L. Rev. Colloquy 1, 2, 11-13 (2007) (noting that the real significance of Massachusetts v. EPA was in its endorsement of the D.C. Circuit's longstanding practice of considering denials of rulemaking petitions to be reviewable for arbitrariness).
17. See infra notes 163-170 and accompanying text.
18. See, e.g., Christopher Carrigan \& Cary Coglianese, George Stigler, 'The Economic Theory of Regulation', in The Oxford Handbook of Classics in Public Policy and Administration 287 (Steven J. Balla, Martin Lodge \& Edward C. Page eds., 2015); William J. Novak, A Revisionist History of Regulatory Capture, in Preventing Regulatory Capture: Special Interest Influence and How to Limit It 25 (Daniel Carpenter \& David A. Moss eds., 2014); Paul J. Quirk, Industry Influence in Regulatory Agencies (1981) (discussing the development of the capture concept).
by the businesses they regulate. ${ }^{19}$ As the economist George Stigler put it in one influential contribution to one strand of "capture theory,"20 generally speaking, "regulation is acquired by the industry and is designed and operated primarily for its benefit." ${ }^{21}$ This story of business capture, in turn, is often cited as a reason for reformation of the administrative process, ${ }^{22}$ if not for the wholesale "deconstruction of the administrative state."23 So goes the thinking, capture is so institutionally implanted that it is better to pull out the entire institution,
19. See Daniel Carpenter \& David A. Moss, Introduction, in Preventing Regulatory Capture: Special Interest Influence and How to Limit It, supra note 18, at 4 (noting that much of the literature on regulation relied on "models in which capture of regulators by incumbent firms is all but inevitable"); Brink Lindsey \& Steven M. Teles, The Captured Economy: How the Powerful Enrich Themselves, Slow Down Growth, and Increase Inequality 12 (2017) (arguing that capture is widespread in federal, state, and local regulation, and that this capture is a major reason for growing economic inequality and stagnant economic growth).
20. William Novak has brought attention to the numerous strands of "capture theory," including variants emanating from political science scholarship, see Marver H. Bernstein, Regulating Business by Independent Commission (1955); Samuel Huntington, The Marasmus of the ICC: The Commission, the Railroads, and the Public Interest, 61 Yale L.J. 467, 472-74 (1952), from historical scholarship, see Gabriel Kolko, The Triumph of Conservatism: A Reinterpretation of American History, 1900-1916 (1963), and even in the work of Progressive era scholars, such as Frank Goodnow and Woodrow Wilson, who helped build the modern administrative state. See Novak, supra note 18. One of the striking things about the many strands of capture theory is that they know no ideological boundaries. See Carpenter \& Moss, supra note 19, at 5 (linking capture theory to a "fatalism" about government regulation that can be "seen in the center, the left, and the right of political discourse").
21. George J. Stigler, The Theory of Economic Regulation, 2 Bell J. Econ. \& Mgmt. Sci. 3, 3 (1971). In this canonical statement, Stigler clearly echoes Richard Olney's remark, made half a century before during the creation of the Interstate Commerce Commission, that " $[t] h e$ Commission . . . is, or can be made, of great use to the railroads. It satisfies the popular clamor for a government supervision of the railroads, at the same time that that supervision is almost entirely nominal. Further, the older such a commission gets to be, the more inclined it will be found to take the business and railroad view of things. . . . The part of wisdom is not to destroy the Commission, but to utilize it." Thomas Frank, Obama and 'Regulatory Capture,' Wall St. J. (June 24, 2009), https://perma.cc/HBL3-2N93.
22. Carpenter \& Moss, supra note 19, at 10 (noting that "arguments stipulating capture often carry policy prescriptions. They move quickly from 'is' to 'ought,' and they are especially likely to recommend deregulation," and citing Simeon Djankov et. al, The Regulation of Entry, 117 Q.J. Econ. 1 (2002) for an example); Steven P. Croley, Regulation and Public Interests: The Possibility of Good Regulatory Government 22 (2008) ("The public choice theory's account of regulation carries with it a reform agenda: The view that the fundamental differences between regulatory and market decisionmaking explain the problem with regulation strongly suggests that market outcomes are preferable to regulatory outcomes.").
23. Philip Rucker \& Robert Costa, Bannon Vows a Daily Fight for 'Deconstruction of the Administrative State,' Wash. Post. (Feb. 23, 2017), https://perma.cc/9S8P-5HVR.
root and branch, than to seek measured reforms. ${ }^{24}$ However, empirical work examining these claims about business influence has returned mixed evidence and ambiguous takeaways.

Studying rulemaking petitions presents a unique opportunity to assess how business and industry interests attempt to shape agency agendas, as well as how often they are successful in doing so. ${ }^{25}$ Rulemaking petitions give these interests the means to further "corrosive capture" via deregulatory petitions, ${ }^{26}$ as well as to further "anti-competitive capture" via proposals for new regulatory requirements that disproportionately affect competitors or establish a monopoly by creating barriers to firm entry. ${ }^{27}$ Moreover, because non-business interests submit petitions as well, almost always to impose additional regulations on business, ${ }^{28}$ it is possible to view the ultimate fate of petitions submitted by these other groups as a window into agencies' alleged propensity to favor business interests by keeping pro-regulatory ideas off the agenda. ${ }^{29}$ In short, rulemaking petitions are a useful lens through which to study business influence in all its varieties at the earliest and most important stages of the regulatory process, and close examination of how rulemaking petitions affect agency agendas thus promises to advance our understanding of business influence on regulation.

The paper proceeds in five parts. Part I grounds the study in the tradition of empirical research examining business participation, influence, and capture. Part II then provides background on rulemaking petitions, highlighting how
24. A newer wave of "capture" scholarship paints a much less bleak picture, acknowledging that capture may sometimes exist, but that it is usually something that can be addressed by smart institutional design. See Nicholas Bagley, Agency Hygiene, 89 Tex. L. Rev. 1 (2010); Rachel E. Barkow, Insulating Agencies: Avoiding Capture Tbrough Institutional Design, 89 Tex. L. Rev. 15 (2010).
25. As Michael Livermore and Richard Revesz have noted, petitions come in two kinds: there are "general" petitions for rulemaking and then there are "individualized" petitions, such as petitions for reconsideration or objection. See Michael A. Livermore \& Richard L. Revesz, Regulatory Review, Capture, and Agency Inaction, 101 Geo. L.J. 1337, 1384-85 (2012). My focus throughout this article is on general rulemaking petitions-i.e., those that specifically request the issuance, amendment, or repeal of a rule of general applicability under the APA.
26. Carpenter \& Moss, supra note 19, at 16-18 (describing "corrosive capture" as occurring where "organized firms render regulation less robust than intended in legislation or than what the public interest would recommend").
27. Daniel Carpenter, Corrosive Capture? The Dueling Forces of Autonomy and Industry Influence in FDA Pharmaceutical Regulation, in Preventing Regulatory Capture: Special Interest Influence and How to Limit It, supra note 18, at 153-54 (distinguishing "corrosive capture" from a "Stiglerian account of capture" that "predicts that captured regulation will be stronger in the sense of imposing more rigid and less permeable entry barriers to the market"). See generally Sam Peltzman, Toward a More General Theory of Regulation, 19 J.L. \& Econ. 211 (1976); Gary Becker, A Theory of Competition among Pressure Groups for Political Influence, 98 Q.J. Econ. 371 (1983).
28. See infra Tbl. 1.
29. See Susan Webb Yackee, The Politics of Ex Parte Lobbying: Pre-Proposal Agenda Building and Blocking During Agency Rulemaking, 22 J. Pub. Admin. Res. \& Theory 373, 374 (2011).
little is known about the institution. Part III turns attention to an analysis of original data on the complete set of petitions submitted to three non-environmental federal administrative agencies from 2000 through the early part of 2016. I analyze two key questions using quantitative data collected on the lifecycle of each petition: Who petitions (and for what)? and How often (and how quickly) does the agency listen and respond? On the whole, the analysis suggests that, while they succeed in petitioning more often by some measures, business interests have something less than a stranglehold on regulators' agendas. Moreover, most of the success of business interests in petitioning is confined to some of the least troubling kinds of requests-i.e., those from diffuse business interests asking for technical changes to existing regulations to provide regulatory relief or update outdated provisions. I argue that the evidence supports the idea that agencies engage with interest groups with critical distance at the agendasetting stage, and that the driving force in agency decision-making is not the identity or interests of the petitioner, but instead the agencies' incrementalist, pragmatic orientation toward improving existing regulatory programs. ${ }^{30}$ Agencies, at least those covered here, largely ignore ambitious petitions, and especially so when they might attempt anti-competitive capture. In Part IV, I discuss what these findings mean for our general understanding of business influence in the regulatory process.

Finally, in Part V, I return to environmental law, applying the insights from the rest of the paper to assess claims about the potential of petitions to invigorate environmental regulation. While EPA unfortunately does not make or keep publicly accessible data on the petitions it receives and processes, ${ }^{31}$ we can learn much about business capture of environmental law, in particular, by seeing how petitions operate in other, non-environmental agencies. Although, as many scholars have noted, Massacbusetts v. EPA seemed to signal the possibility that petitions could be used by diffuse public interests to advance the ball on environmental issues, the reality is that EPA's petition docket is so opaque that we really have no idea whether petitions do anything for environmental advocates. And in light of the evidence from this empirical study that petitions often move other agencies in a deregulatory direction, one should skeptically approach claims that petitions are a panacea for regulatory inaction, even if they occasionally seem to instigate environmental progress. At the end of the day, and as the coal ash reversal so poignantly demonstrates, petitions are a two-way ratchet, and they are therefore unlikely to fundamentally transform environmental regulation.
30. See infra Part IV.B.
31. See Livermore \& Revesz, supra note 25, at 1384 n.239.

## I. What Is Known and What Is Not Known About Business Influence in the Regulatory Process

There is little question that business interests are extensively involved in American policymaking. Whether viewing from 30,000 feet or from within the weeds of a specific institutional context, empirical studies are more or less unanimous in finding that business interests are active and sophisticated in their participation, ${ }^{32}$ and that these well-heeled interests often get what they want. ${ }^{33}$ There are probably innumerable venues in which this business activity is operative, including in campaign spending, ${ }^{34}$ in lobbying Congress for legislation, ${ }^{35}$ and in the generation of influential ideas and policy solutions in think tanks, ${ }^{36}$ but the focus in this paper is on business participation in a more circumscribed domain: the regulatory process, and in particular, rulemaking.

Why focus on regulatory rulemaking? First, rulemaking is how most law is made-the number of regulations promulgated each year far exceeds the number of laws produced by Congress. ${ }^{37}$ Second, according to a tradition known as "capture theory," the regulatory process is virtually hardwired for pathological business domination. ${ }^{38}$ The argument stems from the logic of collective action,
32. See, e.g., Frank R. Baumgartner et al., Lobbying and Policy Change: Who Wins, Who Loses, and Why 12 (2009); Kay Lehman Schlozman \& John T. Tierney, Organized Interests and American Democracy 8 (1986).
33. See, e.g., Larry M. Bartels, Unequal Democracy: The Political Economy of the New Gilded Age (2d ed. 2016); Martin Gilens \& Benjamin I. Page, Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens, 12 Persp. on Pol. 564 (2014). But see Omar S. Bashir, Testing Inferences About American Politics: A Review of the "Oligarchy" Result, 2 Res. \& Pol. 1 (2015) (taking issue with the Gilens \& Page study, supra); J. Alexander Branham et al., When Do the Rich Win?, 132 Pol. ScI. Q. 43 (2017) (same); Peter K. Enns, Relative Policy Support and Coincidental Representation, 13 Persp. on Pol. 1053 (2015) (same).
34. See generally Richard L. Hasen, Plutocrats United: Campaign Money, the Supreme Court, and the Distortion of American Elections 37-59 (2016).
35. See generally Lee Drutman, The Business of America Is Lobbying: How Corporations Became Politicized and Politics Became More Corporate 72-96 (2015).
36. See generally Daniel W. Drezner, The Ideas Industry: How Pessimists, Partisans, and Plutocrats Are Transforming the Marketplace of Ideas 123-45 (2017).
37. Croley, supra note 22, at 14 ("[Agencies'] decisions dwarf those of the other three branches, certainly by volume and arguably by importance as well."); Cornelius Kerwin \& Scott R. Furlong, Rulemaking: How Government Agencies Write Law and Make Policy 91 (2011).
38. See Croley, supra note 22, at 22 (noting that under accounts of regulatory capture, " $[t]$ he regulatory system advances concentrated interests not accidentally or incidentally, but rather by its very structure and design."). Capture theory is oftentimes treated interchangeably with a somewhat broader research tradition known as "public choice" theory, which basically applies simplistic rational choice economic modeling to government institutions, such as the bureaucracy. For general background on public choice theory in the law, see generally Daniel A. Farber \& Philip P. Frickey, Introduction to Law \& Public Choice: A Critical Introduction 1-11 (2010); Jerry L. Mashaw, Greed, Chaos, and Governance: Us-
which posits that those narrow interests with the most to gain or lose will always be more motivated to organize, mobilize, and participate than more diffuse interests with only small stakes in any given policy fight. ${ }^{39}$ While regulatory policymaking certainly imparts substantial diffuse aggregate benefits to the public at large, ${ }^{40}$ it also often imposes substantial concentrated costs of compliance on regulated businesses, making them much more acutely interested and motivated to take countervailing action in the otherwise obscure field of agency rulemaking. ${ }^{41}$ With these asymmetrical stakes, business interests can generally be expected to invest a great deal of resources in seeking to control, or at least influence, regulatory policy relative to other more unorganized and inattentive public interests. Whatever one thinks about the second-order question about whether business influence in the regulatory process amounts to full-on capture, ${ }^{42}$ the logic of collective action strongly predicts disproportionate participation and influence by business interests. Regulators, for their part, are thought to be dependent on this participation, ${ }^{43}$ which makes this participatory skew likely to manifest in skewed outcomes as well.

## A. Prior Empirical Research on Business Capture in the Regulatory Process

Many students of the regulatory process have examined just this hypothesis, exploiting the fact that publicly visible administrative procedures for rulemaking bring some (but certainly not all) regulatory lobbying by business to the surface. This feature of the administrative process, known as "notice-andcomment rulemaking," is established by the Administrative Procedure Act ("APA"), ${ }^{44}$ and it basically entails requirements that agencies issue a detailed
ing Public Choice to Improve Public Law 118-23, 140-42 (1999); David B. Spence \& Frank Cross, A Public Choice Case for the Administrative State, 89 Geo. L.J. 97, 99-100 (2000).
39. See generally Mancur Olson, The Logic of Collective Action (1965).
40. Richard L. Revesz \& Michael A. Livermore, Retaking Rationality: How Cost-Benefit Analysis Can Better Protect the Environment and Our Health 9 (2008) (noting that regulations create "large benefits" but also impose "great costs").
41. See James Q. Wilson, The Politics of Regulation ix (1980).
42. For an argument that capture is conceptually distinct from, and far less common than, ordinary business influence, see Carpenter \& Moss, supra note 19, at 5-7, 64.
43. See Cary Coglianese, Richard Zeckhauser \& Edward Parson, Seeking Truth for Power: Informational Strategy and Regulatory Policymaking, 89 Minn. L. Rev. 277, 278 (2004) ("Often, the best source of information about the risks of products, the behavior of individuals and firms, the costs of remediation or mitigation, or the feasibility of different technologies will be the very firms that the government agency regulates."); Wendy Wagner, Katherine Barnes \& Lisa Peters, Rulemaking in the Shade: An Empirical Study of EPA's Air Toxic Emission Standards, 63 Admin. L. Rev. 99, 102 (2011) ("Business groups . . . benefit from the agencies' need for information that only regulated interests can provide.").
44. 5 U.S.C. § 553 (2012).
proposal of their planned course of action, allow for a period (usually a few months) of public submission of comments, and then issue a final rule addressing the public feedback. ${ }^{45}$ Although agencies largely remain free to receive ex parte contacts while engaged in rulemaking, ${ }^{46}$ interested parties have strong incentives to submit written comments between the introduction of a proposed rule and issuance of a final rule. ${ }^{47}$ Likewise, after the comment period, agencies must submit the most important rules to the White House Office of Information and Regulatory Affairs ("OIRA"), which reviews the rules under certain Executive Orders and, importantly, grants and logs any meetings with any interested party that would like to seek changes. ${ }^{48}$ Because at each of these stages it is possible to view rules before and after observable lobbying by business interests, it is possible to test the extent of business influence by documenting the presence of business interests in regulatory processes and linking observed changes to requests made.

On the whole, these studies have revealed striking evidence of business dominance of these procedural opportunities for participation. Virtually every study of business participation finds that business interests do in fact have an outsized voice (i.e., participate more consistently) in the regulatory process, particularly in the context of the APA's "notice-and-comment" process. ${ }^{49}$ For in-
45. See Peter L. Strauss, The Rulemaking Continuum, 41 Duke L.J. 1463, 1466 (1992) (describing notice-and-comment rulemaking, also known as "informal rulemaking"). In reality, there are many steps before, between, and after these bare-bones steps of notice-and-comment rulemaking. See Rachel Augustine Potter, Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking, 79 J. Pol. 841, 842 (2017) ("[C]reating a new binding rule is an administrative feat that involves many steps.").
46. See Sidney A. Shapiro, Two Cheers for HBO: The Problem of the Nonpublic Record, 54 Admin. L. Rev. 853, 854-56 (2002).
47. Doing so allows one to preserve an issue for possible pre-enforcement challenge of a rulemaking in federal court. Otherwise, courts will likely consider any claims in judicial review not exhausted. See Wagner, Barnes \& Peters, supra note 43, at 116-17 (noting that a party that does not comment waives its right to appeal).
48. These requirements, which have existed since the Reagan Administration but have maintained the same basic form since the Clinton Administration, require agencies to perform a cost-benefit analysis of significant proposed rules and revise those rules in response to OIRA's feedback before finalizing them. See Alex Acs \& Charles M. Cameron, Does White House Regulatory Review Produce a Cbilling Effect and 'OIRA Avoidance' in the Agencies?, 43 Pres. Stud. Q. 443, 446-47 (2013); Steven Croley, White House Review of Agency Rulemaking: An Empirical Investigation, 70 U. Chi. L. Rev. 821, 821-23, 824-30 (2003); Simon F. Haeder \& Susan Webb Yackee, Influence and the Administrative Process: Lobbying the U.S. President's Office of Management and Budget, 109 Am. Pol. Sci. Rev. 507, 509 (2015).
49. See, e.g., Frederick J. Boehmke, Sean Gailmard \& John W. Patty, Business as Usual: Interest Group Access and Representation Across Policy-Making Venue, 33 J. Pub. Pol. 3, 25 (2013); Scott R. Furlong \& Cornelius M. Kerwin, Interest Group Participation in Rule Making: A Decade of Change, 15 J. Pub. Admin. Res. \& Theory 353, 356, 361 (2004); Jason Webb Yackee \& Susan Webb Yackee, A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy, 68 J. Pol. 128, 128-29 (2006). One exception is the study of three
stance, in a first-of-its-kind study, Cary Coglianese showed that business interests were both omnipresent and numerically dominant in public comment periods in a sample of important environmental rulemakings from 1989 through 1991. ${ }^{50}$ Specifically, industry associations commented in $80 \%$ and individual businesses commented in $96 \%$ of the rules he examined. ${ }^{51}$ Overall, business interests filed almost $60 \%$ of the comments submitted. ${ }^{52}$ Several subsequent studies drawing on more diverse samples of agency rulemaking confirm that these findings were not anomalous or specific to EPA. For instance, Jason and Susan Yackee find that over $57 \%$ of comments in their sample of rulemakings from across the executive branch came from business interests. ${ }^{53}$ Wendy Wagner and colleagues find that the number is even greater in the context of hazardous air pollutant regulation, amounting to $81 \%$ of the comments submitted. ${ }^{54}$ Rule review at OIRA is similarly dominated by business interests, with such interests logging well over $50 \%$ of the meetings in each of the major studies of participation. ${ }^{55}$ These patterns have been confirmed again and again in a variety of stages of the regulatory process. ${ }^{56}$

The empirical evidence is much more mixed, however, when it comes to assessing business influence, defined as an association between participation and policy changes. Some, but certainly not all, studies are able to trace linkages between participation and favorable outcomes, particularly in the case of business interests. ${ }^{57}$ Some studies have further shown that business interests are more influential than other groups when they submit comments or meet with
significant rulemakings conducted by Justice Tino Cuéllar, which found extensive citizen participation far outpacing business participation in public comment periods. See MarianoFlorentino Cuéllar, Rethinking Regulatory Democracy, 57 Admin. L. Rev. 411, 414, 460 (2005).
50. Cary Coglianese, Challenging the Rules: Litigation and Bargaining in the Administrative Process 69-75 (1994) (unpublished Ph.D. dissertation, University of Michigan) (on file with author).
51. Id. at 71-73.
52. Id. at 70-71.
53. Yackee \& Yackee, supra note 49, at 133.
54. Wagner, Barnes \& Peters, supra note 43, at 13.
55. See Rena Steinzor, Michael Patoka \& James Goodwin, Behind Closed Doors At The White House: How Politics Trump Protection Of Public Health, Worker Safety And The Environment 5 (Ctr. For Progressive Reform ed., 2011); Croley, supra note 48, at 871; cf. Haeder \& Yackee, supra note 48, at 516 (noting a statistically significant increase in rule change by 2.3 percentage points for each additional industryonly meeting with the Office of Management and Budget ("OMB") and OIRA officials).
56. See Boehmke, Gailmard \& Patty, supra note 49, at 5; Cary Coglianese, Citizen Participation in Rulemaking: Past, Present, and Future, 55 Duke L.J. 943, 951-52 (2006).
57. Compare Yackee \& Yackee, supra note 49, with David C. Nixon, Robert M. Howard \& Jeff R. DeWitt, With Friends Like These: Rule-Making Comment Submissions to the Securities and Exchange Commission, 12 J. Pub. Admin. Res. \& Theory 59 (2002).
decisionmakers, particularly when they are unopposed. ${ }^{58}$ These kinds of studies code changes as either increasing or decreasing the stringency of proposed rules, and then show that requests for increases or decreases in stringency in public comments from business interests are associated with such changes. ${ }^{59}$ Yet, in many of the studies, it is not clear how impactful the changes were as a matter of policy. This is both because large-n studies do not usually attempt to assess comprehensively the policy issues at play and because the change in policy is usually measured relative to a recent iteration of the rulemaking process (for instance, the changes from the proposed rule to the final rule). One might not expect much serious change in these short windows of time, as too significant a change could run afoul of administrative law requirements that final rules be a logical outgrowth of the proposed rule. ${ }^{60}$ Moreover, agencies may sandbag against business influence of this sort by issuing proposed rules that are more stringent than they would even prefer. ${ }^{61}$ Where the sample has been large enough to assess the policy significance of changes linked to greater participation, researchers have generally concluded that most changes are insignificant. Often, they are technical in nature, and rarely do they "alter[ ] the heart of the proposal." ${ }^{62}$

Of course, almost all of the research to date examines participation in the latest stages of the regulatory process, when most of the important political disputes over the agency's agenda and the broad substance of agency action have been resolved. ${ }^{63}$ The focus on these late stages poses serious methodological
58. See, e.g., Haeder \& Yackee, supra note 48 ; Yackee \& Yackee, supra note 49.
59. Yackee \& Yackee, supra note 49, at 131-35.
60. Envtl. Integrity Project v. EPA, 425 F.3d 992, 996-98 (D.C. Cir. 2005) (discussing the logical outgrowth rule).
61. Croley, supra note 22, at 252 ("[A]gencies may propose overly stringent rules in part for tactical reasons, because they anticipate objection and so that through subsequent revisions of proposed rules they can appear responsive.").
62. Marissa Martino Golden, Interest Groups in the Rule-Making Process: Who Participates? Whose Voices Get Heard?, 8 J. Pub. Admin. Res. \& Theory 245, 259 (1998) (finding that only one rule in her sample saw notable substantive changes between proposal and finalization); see also William F. West, Formal Procedures, Informal Processes, Accountability, and Responsiveness in Bureaucratic Policy Making: An Institutional Policy Analysis, 64 Pub. Admin. Rev. 66, 73 (2004) (finding a majority of rules in his sample did not change substantially between proposal and finalization).
63. See, e.g., Sheldon Kamieniecki, Corporate America and Environmental Policy: How Often Does Business Get Its Way? 133 (2006) (arguing that proposed rules reflect most of the important decisions that agencies make and are likely to contain indicia of business influence); Cary Coglianese \& Daniel E. Walters, Agenda-Setting in the Regulatory State: Theory and Evidence, 68 Admin. L. Rev. 93, 99 (2016); Richard Murphy, Enhancing the Role of Public Interest Organizations in Rulemaking Via Pre-Notice Transparency, 47 Wake Forest L. Rev. 681, 693 (2012) (noting "the well-known fact of administrative life that most of the real policymaking in legislative rulemaking occurs well before an agency publishes an NPRM in the Federal Register").
problems that limit what we can learn from empirical study. First, showing influence at these later stages most often means showing that business interests are successful in encouraging agencies to tinker with the technical minutiae of rulemaking proposals that may well still impose substantial costs on the regulated and deliver substantial benefits to the public. ${ }^{64}$ Consider, for instance, National Ambient Air Quality Standards ("NAAQS"), which EPA promulgates and updates on a set schedule mandated by the Clean Air Act. ${ }^{65}$ Evidence that business interests (producers of electricity) succeed in influencing EPA to relax the permissible concentration levels of an air pollutant between a proposed rule and final rule might show up in a carefully designed empirical study as evidence of influence, but that fact alone would tend to obscure the fact that NAAQS overwhelmingly benefit the general public. ${ }^{66}$ Second, precisely because what typically remain in the latest stages of the rulemaking process are technical, detail-oriented questions that require substantial expertise and on-theground knowledge of the regulated activity, it is hardly surprising that business interests have disproportionate influence, as they tend disproportionately to possess this expertise and information. ${ }^{67}$ The focus on the latest stages of the rulemaking process (and the comparison to earlier proposals that may well have already been heavily influenced by business) therefore threatens to significantly understate the true scope of business influence on regulation.

## B. The Primacy of the Agenda-Setting Stage

As just discussed, there is extensive evidence that businesses participate in the regulatory process at high rates but little evidence that any of this participation is truly consequential. But that may simply reflect the fact that the late stages of the regulatory process that have been the focus of this literature would
64. See Golden, supra note 62 , at 262 (finding that most changes attributable to business influence in the public comment process were minor, technical changes with no clear impact on the overall stringency of the rule). But see Haeder \& Yackee, supra note 48, at $513 \mathrm{n} .20,518$ (analyzing the substantive significance of changes to rule texts during review in OIRA and finding that business interests were able to influence OIRA to adopt substantively significant changes at an even later stage than the public comment period).
65. See 42 U.S.C. $§ § 7408-7409$ (2012) (prescribing EPA's duties to promulgate and revise NAAQS for criteria air pollutants).
66. See EPA, The Benefits and Costs of the Clean Air Act from 1990 to 2020, at 2 (2011), https://perma.cc/85A5-JSDP (estimating the net benefits by 2020 of Clean Air Act regulations, including about $85 \%$ attributable to reductions in mortality from particulate matter and ozone, at $\$ 2.0$ trillion and the costs at $\$ 65$ billion).
67. See Cary Coglianese, Richard Zeckhauser \& Edward Parson, Seeking Truth for Power: Informational Strategy and Regulatory Policymaking, 89 Minn. L. Rev. 277, 278 (2004) ("Often, the best source of information about the risks of products, the behavior of individuals and firms, the costs of remediation or mitigation, or the feasibility of different technologies will be the very firms that the government agency regulates.").
not be suspected to yield many changes of any kind. In large part because administrative procedures like notice-and-comment rulemaking and OIRA review put significant pressure on agencies to present polished work, agencies have actually pushed almost the entirety of rule development to the pre-proposal stage. ${ }^{68}$ Agencies that do not sufficiently hone and vet their proposal before the issuance of a proposed rule cannot conduct the kind of public comment dialogue that courts expect, ${ }^{69}$ and they also risk vacatur for violating the logical outgrowth rule. ${ }^{70}$ Thus, for most agencies, the agenda-setting stage of the rulemaking process will likely see the weightiest agency decisions being made about the content of the rules. ${ }^{71}$ And where there are weighty decisions being made, the logic of collective action tells us that the groups with the most at stake are not likely to be too far behind. ${ }^{72}$ Consequently, empirical studies of business interest influence in the regulatory process that ignore agenda-setting are likely to miss much of the action. Indeed, political scientists interested in political power have long cautioned against ignoring the "second face of power"-the decision not to take on a particular agenda item from among the universe of possible agenda items-precisely because these kinds of decisions open opportunities for disproportionate influence on policymaking. ${ }^{73}$

To be sure, research on business influence has not entirely ignored what comes before the rulemaking proposal. Taking advantage of the fact that agencies sometimes issue so-called advanced notices of proposed rulemaking ("ANPRM") and accept open-ended comments when they are considering a particular agenda item, Susan Yackee and colleagues have shown that businesses are not only frequently involved in reinforcing agencies' inclination to act, but also exercise influence by engaging in agenda-blocking. ${ }^{74}$ Similarly, Wendy Wagner, Katherine Barnes, and Lisa Peters show that regulated businesses submitted "at least 170 times more informal communications . . . during the pre-NPRM stage than public interest groups" in a sample of EPA's hazardous air pollutant rulemakings. ${ }^{75}$ However, because in both these studies regu-
68. See Murphy, supra note 63, at 687-88, 691; West, supra note 62, at 72-73.
69. See, e.g., United States v. Nova Scotia Food Prods. Corp., 568 F.2d 240, 249-53 (2d. Cir. 1977).
70. See Murphy, supra note 63, at 685; William F. West, Inside the Black Box: The Development of Proposed Rules and the Limits of Procedural Controls, 41 Admin. \& Soc'y 576, 581 (2009).
71. See Coglianese \& Walters, supra note 63, at 94.
72. See Wagner, Barnes \& Peters, supra note 43, at 111 (arguing that " $[i]$ ndustry enjoys a particularly privileged position in the development of rules"); West, supra note 70, at 589.
73. See Peter Bachrach \& Morton S. Baratz, Decisions and Nondecisions: An Analytical Framework, 57 Am. Pol. Sci. Rev. 632, 632 (1963); Peter Bachrach \& Morton S. Baratz, Two Faces of Power, 56 Am. Pol. Sci. Rev. 947, 948 (1962).
74. Yackee, supra note 29, at 373; see also Keith Naughton et al., Understanding Commenter Influence During Agency Rule Development, 28 J. Pol'y Analysis \& Mgmt. 258, 259 (2009).
75. Wagner, Barnes \& Peters, supra note 43, at 125.
lated entities knew proposed rules were coming because of the ANPRM, or because a statutory deadline required the rulemaking, these studies do not explain how interest groups may have influenced the agency to act in the first place. That is, these studies do not isolate influence on the agenda-setting decisions that agencies make.

Going one step further, William West and Connor Raso get at agendasetting by sampling finalized agency rules and then tracing them to their origins. ${ }^{76}$ West and Raso find that about half of these rules emerged from the informal interaction of government officials and business interests within the context of existing programs, and that they were most often demonstrably nonconsequential efforts to update or correct rules based on feedback and experience in implementation. ${ }^{77}$ The remaining rules were non-discretionary-i.e., compelled by statute or court order, and thus only loosely the product of lobbying. ${ }^{78}$ A more recent study by Wendy Wagner and colleagues likewise uncovers a rich tapestry of "incrementalist" adaptations of existing rules encouraged by business interests and other groups. ${ }^{79}$ These studies suggest that business interests are influential when it comes to the workaday rule amendments that represent the bulk of rulemaking activity. ${ }^{80}$ But, at the same time, these studies suggest that this business influence does not diminish public welfare because the influence is over low-salience matters.

Of course, even these latter two studies examine only one side of the equation. In each instance, the sample is drawn from instances of successful lobbying; unsuccessful attempts by business interests to shape the agenda were not observed. More informative would be a study of discrete instances where agencies are presented with a choice to add an item to their agenda (either at the urging of business interests or of more diffuse, public interests) and make decisions that either do or do not benefit business interests.

In summary, there is much more that can be gleaned about the nature and impact of business involvement in the regulatory process from examination of the stage of the process where business influence is most likely to be truly formative, consequential, and contrary to the public's interest: the agenda-setting stage of the regulatory process. ${ }^{81}$ Looking for evidence of excessive business
76. William F. West \& Connor Raso, Who Shapes the Rulemaking Agenda? Implications for Bureaucratic Responsiveness and Bureaucratic Control, 23 J. Pub. Admin. Res. \& Theory 495, 499 (2012).
77. Id. at 508.
78. Id. at 505 .
79. Wendy Wagner et al., Dynamic Rulemaking, 92 N.Y.U. L. Rev. 183, 229-32 (2017).
80. Coglianese \& Walters, supra note 63, at 99-103.
81. See Susan Webb Yackee, Reconsidering Agency Capture During Regulatory Policymaking, in Preventing Regulatory Capture: Special Interest Influence and How to Limit It, supra note 18, at 292, 299 n .44 (collecting sources making just this point); Coglianese \& Walters, supra note 63, at 97 (highlighting the probable importance and paucity of scholarly research on the agenda-setting phase of the regulatory process).
influence during public comment periods is somewhat like losing one's keys and looking only where the light is good. Business participation and influence at this stage is easy to observe because it is so public, but there is every reason to believe that the potential payoff of business participation at the much less visible agenda-setting stage is greater. ${ }^{82}$ If we are looking for an accurate picture of business interests' ability to sway regulators to act contrary to the public interest, and perhaps to effectively control and capture agency decision-making, we need to go where the influence is likely to be most pronounced, not where the light happens to be. In the next part, I explain why rulemaking petitions can shed new light on the agenda-setting stage.

## II. Rulemaking Petitions: Nuts and Bolts

The right to petition the government is older than the Constitution itself, and it has always offered its users the promise of political influence. ${ }^{83}$ One way petitions offer the promise of influence is through a sort of meta-politics of petitioning. In the antebellum Republic, for instance, women anti-slavery activists used petitions to Congress to build powerful political coalitions that would later support the women's suffrage movement. ${ }^{84}$ Even though such petitioning has rarely led to any concrete action from the target of the petition, the opportunity to network has touched off social movements, party building, and state building. ${ }^{85}$ But petitions can also be efficacious in a more narrow, procedural
82. See Yackee, supra note 81, at 309 (reporting results that "imply that studying the politics of the preproposal stage may be just as important as the notice and comment period," and that " i$]$ f influence exists-indeed, if agency capture exists-then it may be directed toward stopping unwanted proposals early in the policy formation process"); Wagner, Barnes \& Peters, supra note 43, at 102 (noting that public participation during public comment periods on proposed rules is likely the "tip of the iceberg in providing avenues for interest groups to inform agencies' rulemaking projects").
83. See, e.g., Schwartz \& Revesz, supra note 12, at 7 (tracing the First Amendment right to "petition the Government for a redress of grievances" to "frustration over the repeated denial of the colonists' petitions sent to their government in England"); Maggie McKinley, Lobbying and the Petition Clause, 68 Stan. L. Rev. 1131, 1142 (2016) (characterizing 2015 as the "eighth hundredth anniversary of the right to petition" because its roots go back at least to Magna Carta); Jonathan Weinberg, The Right to be Taken Seriously, 67 U. Miami L. Rev. 149, 192-95 (2002).
84. See Daniel Carpenter \& Colin D. Moore, When Canvassers Became Activists: Antislavery Petitioning and the Political Mobilization of American Women, 108 Am. Pol. Sci. Rev. 479, 480 (2014).
85. See generally Daniel Carpenter, Recruitment by Petition: American Antislavery, French Protestantism, English Suppression, 14 Persp. on Pol. 700 (2016); Daniel Carpenter \& Benjamin Schneer, Party Formation through Petitions: The Whigs and the Bank War of 1832-1834, 29 Studs. in Am. Pol. Dev. 213 (2015); Maggie McKinley, Petitioning and the Making of the Administrative State, 127 Yale L.J. 1538 (2018); Clayton Nall, Benjamin Schneer \& Daniel Carpenter, Paths of Recruitment: Rational Social Prospecting in Petition Canvassing, 62 Am. J. Pol. Sci. 192 (2018).
sense. As some constitutional scholars have noted, petitions invoke a regularized process and afford some semblance of due process to the petitioner, effectively making them a protector of minoritarian rights. ${ }^{86}$ When that process is ignored, petitioners have more recourse than they otherwise would have to force an institutional response.

Administrative law has incorporated and largely replaced the constitutional petitioning right, providing a (fairly narrow) procedural means for petitioning government agencies. ${ }^{87}$ The APA provides that any "interested person" can file a petition with an agency and request "issuance, amendment, or repeal of a rule." ${ }^{88}$ Petitions may mirror the informal, ex parte contacts that generate so much of the incrementalist activity documented above-indeed, the APA's definition of a petition may technically extend to such oral contacts ${ }^{89}$-but once a petition is defined as such, it triggers obligations on the part of the agency to respond. The APA spells out the duty in unequivocal terms: "Prompt notice shall be given of the denial in whole or in part of a written application, petition, or other request of an interested person made in connection with any agency proceeding. Except in affirming a prior denial or when the denial is self-explanatory, the notice shall be accompanied by a brief statement of the grounds for denial." ${ }^{30}$ Section 555(b) of the APA prevents agencies from simply sitting on petitions without making a decision by providing that "within a reasonable time, each agency shall proceed to conclude a matter presented to it." ${ }^{91}$ Agency rules often spell out additional procedures for the processing of petitions, including tight deadlines for responses and requirements that certain information be included with the petition. ${ }^{92}$

The principal advantage of filing a petition rather than informally lobbying an agency is just this procedural formality. Because of this formality, petitioners have a legal recourse when their petition is ignored. ${ }^{93}$ When an agency
86. Akhil Reed Amar, The Bill of Rights as a Constitution, 100 Yale L.J. 1131, 1155-56 (1991); McKinley, supra note 83, at 1184-85 (discussing how the historical petition right, as enshrined in the First Amendment to the U.S. Constitution, had "more in common with the right to procedural due process than it [did] with free speech," and how the "petition right preserved only the procedures of acceptance, consideration, and response for each petition without respect to the political power of the petitioner").
87. See McKinley, supra note 85, at 1548.
88. 5 U.S.C. § 553(c) (2012).
89. See Schwartz \& Revesz, supra note 12, at 24-25.
90. 5 U.S.C. § $555(\mathrm{e})(2012)$.
91. 5 U.S.C. § 555(b) (2012).
92. See Schwartz \& Revesz, supra note 12, at 31-32 (reviewing agency-imposed procedures governing appropriate petitioners, what constitutes a "grant," deadlines for agency responses, tiers or stages of review, and decision criteria).
93. Sidney Shapiro offers a useful metaphor for thinking about the role petitions play: likening agencies to businesses, Shapiro says petitions are a "side window" where "[e]specially demanding and impatient customers come in" and try to "avoid the crowd that is pressing at the front and back doors," where clients usually come to resolve most complaints. Sidney A. Shapiro, Agency Priority-Setting and the Review of Existing Agency Rules, 48 Admin. L. Rev.
fails to respond sufficiently quickly or thoroughly, the petitioner may sue to force a response. ${ }^{94}$ For instance, in a recent decision the U.S. Court of Appeals for the Ninth Circuit held that EPA had to respond to a petition submitted by the Natural Resources Defense Council requesting a ban of the pesticide chlorpyrifos, which has been linked to brain damage in children. ${ }^{95}$ According to the court, EPA's nearly nine-year delay in deciding on the petition was "egregious and warrant[ed] mandamus relief." ${ }^{96}$ Moreover, if there is denial of the petition, what would otherwise have been a "simple nondecision[ ]," which courts generally lack jurisdiction to review, becomes a "decision[] not to decide," which is presumptively reviewable. ${ }^{97}$ Lingering legal uncertainties about whether denials of petitions for rulemaking are final agency actions were definitively resolved in Massachusetts v. EPA..$^{98}$ There, EPA's rejection of a rulemaking petition requesting that the agency take action to curb greenhouse gas emissions from automobile sources eventually resulted in the U.S. Supreme Court ordering EPA to either ground its petition denial in factors recognized by the statute or grant the petition-and EPA chose the latter on remand.

370, 370 (1996). The side window approach is in essence an escalation of a potential legal dispute between the agency and the interested party.
94. The APA gives courts the power to review agency actions unreasonably delayed. See Telecomms. Res. \& Action Ctr. v. FCC (TRAC), 750 F.2d 70, 80 (D.C. Cir. 1984) (applying a multi-factor test for determining whether there was an unreasonable delay of legally required agency action). In effect, courts treat this TRAC factor analysis under the APA as synonymous with the test for granting writ of mandamus. See Independence Mining Co., Inc. v. Babbitt, 105 F.3d 502, 507 (9th Cir. 1997) ("Although the exact interplay between [mandamus and APA relief] has not been thoroughly examined by the courts, the Supreme Court has construed a claim seeking mandamus under the MVA, 'in essence,' as one for relief under § 706 of the APA." (quoting Japan Whaling Ass'n v. Am. Cetacean Soc'y, 478 U.S. 221, 239 n. 4 (1986))). To be sure, this is generally a difficult hurdle for plaintiffs to jump: courts have always treated mandamus as a "drastic and extraordinary remedy reserved for really extraordinary causes." Cheney v. U.S. District Court, 542 U.S. 367, 380 (2004) (citing Ex Parte Fahey, 332 U.S. 258, 259-60 (1947)) (internal quotations omitted).
95. In re Pesticide Action Network N. Am. v. EPA, 798 F.3d 809, 811 (9th Cir. 2015).
96. Id.
97. Cass R. Sunstein \& Adrian Vermeule, The Law of "Not Now": When Agencies Defer Decisions, 103 Geo. L.J. 157, 159 n. 2 (2014); see also Cass R. Sunstein, Reviewing Agency Inaction After Heckler v. Chaney, 52 U. Chi. L. Rev. 653, 672 (1985) (noting that inaction is less reviewable when it involves mere delay, rather than a "decision not to act").
98. Massachusetts v. EPA, 549 U.S. 497, 527 (2007) (holding that "[r]efusals to promulgate rules are . . . susceptible to judicial review" because, "in contrast to nonenforcement decisions," which are presumed unreviewable under Heckler v. Chaney, 470 U.S. 821 (1985), "agency refusals to initiate rulemaking 'are less frequent, more apt to involve legal as opposed to factual analysis, and subject to special formalities, including a public explanation.'" (quoting Am. Horse Prot. Ass'n, Inc. v. Lyng, 812 F.2d 1, 4 (D.C. Cir. 1987))); see also Fox Television Stations, Inc. v. FCC, 280 F.3d 1027, 1037 (D.C. Cir. 2002). For a discussion of how rulemaking petitions render different kinds of traditionally unreviewable agency actions reviewable, see Sean Croston, The Petition is Migbtier Than the Sword: Rediscovering an Old Weapon in the Battles Over "Regulation Through Guidance," 63 Admin. L. Rev. 381 (2011).

Although the Court emphasized that the level of deference given to petition denials may be greater than it is under ordinary arbitrary and capricious review, ${ }^{99}$ the decision was hardly deferential to EPA's stated reasons for inaction. In sum, courts stand at the ready to review agency decisions regarding rulemaking petitions, which means rulemaking petitions can be a powerful tool to influence agenda-setting.

Although it is easy enough to point to major rulemakings that began with petitions, ${ }^{100}$ such as EPA's regulations of carbon emissions, we know practically nothing about how rulemaking petitions work in practice. Indeed, "[ $[$ ]here is scant empirical evidence on the number of petitions received and how they are ultimately disposed," ${ }^{101}$ and "[1]ittle is known about stakeholder and agency practices with respect to submitting and addressing petitions." ${ }^{102}$

That has begun to change, however, with a number of studies suggesting that petitions are quite often an effective means of influencing agency agendas. Michael Livermore and Richard Revesz first brought valuable attention to the potential functions of petitions in their work on Clean Air Act petitions submitted to EPA. ${ }^{103}$ Wendy Wagner and colleagues, in their study of rule revisions, showed the more general reach of petitions, identifying informal interest group pressure and rulemaking petitions as the second and third most frequent sources of rule revisions ahead of court orders, congressional action, and presidential requests. ${ }^{104}$ Most of the lobbying and petitions came from "regulated industries" with the greatest "incentives to keep agency rules operating prop-
99. See Massachusetts v. EPA, 549 U.S. at 527-28.
100. A common view among administrative law scholars, fed by readily available examples of petition-initiated regulatory proposals, is that petitions can be a vehicle for public interest groups to check agency inaction and prevent capture. See Croley, supra note 22, at 259-60 (discussing a rulemaking petition to regulate tobacco that "showed agency responsiveness to public interest advocates acting through the administrative process rules to affect . . . agencies' agendas"); Livermore \& Revesz, supra note 25, at 1377-81. The quantitative look that I provide in Part III, infra, will allow some evaluation of this widespread triumphalist assumption about how petitions work in practice.
101. Cornelius Kerwin \& Scott R. Furlong, Rulemaking: How Government Agencies Write Law and Make Policy 78-79 (2011).
102. Steven J. Balla \& Susan E. Dudley, Stakeholder Participation in Regulatory Policymaking in the United States 13 (2014). While one Senate report found that petitions "submitted by representatives of those outside a regulatory industry approximated or exceeded petitions submitted by regulated industries," see Croley, supra note 22, at 260 n. 2 (citing Study of Federal Regulation, vol. 3: Public Participation in Regulatory Agency Proceedings 14-15), there has been little detailed work on patterns of petitioning.
103. Livermore \& Revesz, supra note 25. As I will discuss in Part V, although Livermore and Revesz study a sample of 38 petitions submitted to EPA from 1999 through 2011 and glean important insights about how petitions likely operate at EPA, their limited sample is not necessarily complete even in capturing all of the petitions submitted to EPA.
104. Wagner et al., supra note 79, at 218 fig. 7.
erly." ${ }^{105}$ Eric Biber and Berry Brosi studied the somewhat specialized petitions process for Endangered Species Act listing decisions, finding that citizen petitions relay critical information to the U.S. Fish and Wildlife Service as it makes decisions affecting wildlife. ${ }^{106}$ David Nixon provides the most in-depth look at petitioning to date in his examination of rulemaking petitions filed at the Federal Communications Commission, where about half of all rulemakings originate with a granted rulemaking petition. ${ }^{107}$ Relevant to discussions of business influence and capture, Nixon found that "[i]nstitutionalized players clearly enjoy advantages in getting the Commission to accept their proposals for policy change. ${ }^{108}$ However, Nixon's research does not trace the fate of granted petitions after the agency's decision, nor does it attempt to evaluate the policy significance or the general content of the petitions that were granted.

These studies show a growing appreciation of the importance of rulemaking petitions in agency agenda-setting, but important questions remain about whether petitions facilitate excessive or inappropriate business interest influence.

## III. The Life Cycle of Rulemaking Petitions: A Quantitative Look at Petitioning Activities and Agency Responses

In this Part, I analyze an original dataset comprising the lifecycle of rulemaking petitions submitted to three different agencies: the U.S. Consumer Product Safety Commission ("CPSC"), the Food Safety \& Inspection Service ("FSIS") in the U.S. Department of Agriculture, and the National Highway Traffic Safety Administration ("NHTSA") in the U.S. Department of Transportation. I selected the agencies because they are high-volume rulemaking agencies, because data on rulemaking petitions ${ }^{109}$ received by the agencies are available or reasonably accessible for a period of time encompassing multiple presidencies and configurations of power in Congress, ${ }^{110}$ and because they are

[^1]representative of the diversity of relevant characteristics across the regulatory state. ${ }^{111}$ On this last point, the agencies vary on whether they are independent agencies or executive agencies, and they also differ in their ideological leaning, at least by the estimation of Clinton-Lewis scores. ${ }^{112}$ The dataset covers all petitions submitted to these three agencies between 2000 and most of 2016-a total of 290 petitions. While full records from start to decision were available for 175 of these petitions, 115 of the petitions were right censored (i.e., did not receive a response from the agency during the period of observation, and we cannot be sure whether this is because the study ended before a response could issue or because the petition was constructively denied by nonresponse). We can observe essential characteristics of these petitions, as well as the fact of nonresponse, but in many cases we cannot know what the agency thought of the petition because it never weighed in.

These technical considerations aside, there are three frames through which to analyze petitioning and the relative influence of business interests: 1) the characteristics of petitions and the timing of submission; 2) the outcomes of petitioning; and 3) the timing of outcomes. The data allow analysis within each of these frames. First, by reading each petition or the description of the petition offered by the agency, it was possible to content code petitions on a number of dimensions, including what type of party submitted the petition, ${ }^{113}$ whether they sought a pro-regulatory or deregulatory change, ${ }^{144}$ whether the change sought was substantive or technical, ${ }^{115}$ and whether the petition asked for an entirely new regulation or sought to amend an existing regulation. ${ }^{116}$ I made

NHTSA, which posted almost all petitions it received on regulations.gov (the remainder were discovered through systemic searches of the Federal Register). For CPSC and FSIS, the bulk of the submitted petitions were docketed on agency websites, although some missing information required a trip to FSIS's physical docket room in Washington, D.C.
111. See generally David E. Lewis \& Jennifer L. Selin, Sourcebook of United States Executive Agencies (2012).
112. See Joshua D. Clinton \& David E. Lewis, Expert Opinion, Agency Characteristics, and Agency Preferences, 16 Pol. Analysis 3, 5 (2007). On these scores, which rely on expert evaluation of agency ideological leanings to generate a scaled ideology estimate, the CPSC scored -1.69 (very liberal), the Department of Transportation scored . 07 (moderately conservative), and the Department of Agriculture scored 16 (more conservative). See id. at 17-18.
113. The possibilities were individual citizens, single businesses (individual firms), industry associations (industry-wide advocacy groups), and public interest groups (any non-businessoriented advocacy group).
114. A petition was coded as pro-regulatory if it sought to add new regulatory requirements or standards or to strengthen existing regulatory requirements or standards or to change language to maintain current levels of control in the face of technological changes. It was coded as deregulatory if it sought to rescind or soften existing regulations.
115. A petition was coded as substantive if it would likely have significant policy effects or would involve a policy change. It was coded as technical if the change sought was likely to be consistent with the current operation of the regulatory program.
116. A petition was coded as original if it asked for the creation of a new CFR section. It was coded as derivative if the petition asked for existing language to be amended.
these content-based coding determinations myself, and I validated this coding by giving a research assistant a random sample of petitions to code and computing inter-coder reliability statistics. ${ }^{117}$ Second, data on dispositions at several stages of the petitioning process were collected, including whether the agency ever responded at all to the petition, whether it granted the petition, and whether it finalized a rule stemming from the grant. ${ }^{118}$ Finally, the data note the dates associated with each major stage of petition processing, ${ }^{119}$ which makes it possible to examine the ways the agencies manage their petition dockets over time and to assess any disparities in the processing time for petitions.

## A. Characteristics and Trends of Business Participation

The content coding of petitions yielded important information about the aggregate patterns of petitioning-what kinds of groups participated, to what degree they participated, and what they asked for when they participated. Of course, for the purposes of this Article, the most relevant information concerns business interests' patterns of involvement. Fully 170 of the 290 petitions in the data (58.62\%) were filed by business interests, a category comprising both single business corporations, such as the Ford Motor Company or Tyson Foods, and industry associations, such as the American Trucking Association or American Association of Meat Processors. However, although business interests numerically dominate the petition process, the data reveal that business interests are far from monolithic, with diffuse business interests (industry associations) pursuing notably different strategies than discrete business interests (single businesses).
117. Each of the variables fell well within the range of acceptable agreement for inter-coder reliability, with results ranging from "moderate agreement" (deregulatory petition had an agreement rate of $82.5 \%$ and Cohen's kappa score of .548 ) to "almost perfect agreement" (petitioner type had an agreement rate of $87.5 \%$ and a Cohen's kappa score of .835). See Anthony J. Viera \& Joanne M. Garrett, Understanding Interobserver Agreement: The Kappa Statistic, 37 Fam. Med. 360, 362 (2005). The Cohen's kappa statistic is a measure of the difference between observed agreement and the agreement that would be expected by random chance. Id. at 361.
118. For FSIS, the agency's final response was usually included on the website where petitions were collected. For CPSC and NHTSA, I usually had to do structured searches of the Federal Register to log final responses. I searched for a petition number (if applicable), party names, and key petition terms for any Federal Register log of activity related to each petition identified. This painstaking process was aided by the fact that NHTSA and CPSC were relatively consistent in how they formatted responses to petitions. Of course, there remains some chance that these searches missed some responses, but most should be accounted for. The difficulty of tracking down these records underscores the need for more systematic docketing activities for petitions. See Schwartz \& Revesz, supra note 12, at 47-48.
119. Two petitions did not have a date of submission, making these observations drop from the analysis involving agency response times.

## 1. Static Characteristics

As a first cut, Table 1 breaks out the count of petitions by the basic petitioner types and the petition type. Business interests (combining both industry associations and single businesses) are far more likely to seek deregulatory changes, technical changes, and derivative changes to existing text than are non-business interests. The profile is clear: the model petition submitted by a business interest is a narrow request to amend existing regulations by eliminating or softening certain requirements. For example, in April 2007, the Alliance of Automobile Manufacturers ("AAM")—an industry association representing BMW, DaimlerChrysler, Ford Motor Company, General Motors, Toyota, and Volkswagen at the time-petitioned NHTSA to amend a list of approved Child Restraint Systems ("CRS"). ${ }^{120}$ AAM aimed to fix a specific problem that had emerged because NHTSA had not kept up to date the list of approved CRS systems for safety testing, as it had promised when its advanced airbag rule had initially been promulgated. The list was populated with CRS systems that were no longer even in production, making it "impossible for vehicle manufacturers to acquire the CRSs that are needed to conduct certification tests to assure compliance with the requirements of the standard." ${ }^{121}$ AAM's proposed solution called for NHTSA to "allow manufacturers the option of certifying vehicles to any edition of [the list] for five model years after the edition first becomes effective," in effect giving manufacturers more flexibility to comply using a variety of standards. ${ }^{122}$

As Table 1 shows, it is somewhat atypical for business interests to seek pro-regulatory, substantive, and original proposals, but such petitions do exist. Consider the National Chicken Council's petition to FSIS requesting that the agency "adopt regulations establishing labeling requirements for not-ready-toeat (NRTE) stuffed chicken breast products that may appear ready-to-eat (RTE)." ${ }^{123}$ As the National Chicken Council explained, it was "becoming increasingly aware that some consumers may not know how to properly recognize and prepare NRTE stuffed chicken breast products that may appear RTE. ${ }^{124}$ Perhaps as a means of protecting itself from liability or preemptively protecting the industry's reputation against bad apples, the Council saw more regulation of

[^2]124. Id.
labeling as needed and sought to have that codified as a new section in the Code of Federal Regulations.

Table 1: Characteristics of Petitions by Petitioner Type

|  | Direction |  | Nature |  | Scope |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deregulatory | Regulatory | Technical | Substantive | Derivative | Original |
| Individual | $12(29.27)$ | $29(70.73)$ | $8(19.51)$ | $33(80.49)$ | $25(60.98)$ | $16(39.02)$ |
| Public Interest | $5(6.41)$ | $73(93.59)$ | $5(6.41)$ | $73(93.59)$ | $30(38.46)$ | $48(61.54)$ |
| Single Business | $55(56.12)$ | $43(43.88)$ | $50(51.02)$ | $48(48.98)$ | $80(81.63)$ | $18(18.37)$ |
| Industry Ass'n | $42(58.33)$ | $30(41.67)$ | $33(45.83)$ | $39(54.17)$ | $61(84.72)$ | $11(15.28)$ |
|  |  |  |  |  |  |  |
| Non-Business | $18(15.00)$ | $102(85.00)$ | $13(10.83)$ | $107(89.17)$ | $56(46.67)$ | $64(53.33)$ |
| Business | $97(57.06)$ | $73(42.94)$ | $83(48.82)$ | $87(51.18)$ | $141(82.94)$ | $29(17.06)$ |
|  |  |  |  |  |  |  |
| Total | $115(39.66)$ | $175(60.34)$ | $96(33.10)$ | $194(66.90)$ | $197(67.93)$ | $93(32.07)$ |

Notes: Figures are raw counts. Parenthetical figures show the percentage breakdowns within each row and supercolumn.

While business interests writ large do appear to share some general inclinations toward deregulatory and derivative petitions, there are important differences between single businesses (which are more discrete interests with potentially more to gain through a strategy of anti-competitive capture) and industry associations (which are more diffuse interests representing a host of businesses in competition with one another). Compared with single businesses, industry associations are marginally more likely to seek substantive changes and deregulatory changes, and more likely as well to target existing rules for amendment rather than proposing new programs. Table 2 focuses on just the category of single businesses, showing notable differences in strategy depending on firm characteristics. Large firms, defined by inclusion on either the Fortune 500 or the Global Fortune $500,{ }^{125}$ or both, were significantly more likely to seek proregulatory changes and technical changes, and marginally more likely to propose original programs. Consider, for example, a petition submitted by General Motors NA-number 8 on the Fortune 500 and number 18 on the Global Fortune 500-requesting that NHTSA "require the installation of daytime running lamps (DRLs) on passenger cars, multipurpose passenger vehicles, trucks and buses that have a gross vehicle weight rating under 4,536 kilograms. ${ }^{" 126}$ Somewhat similarly, petitions submitted by repeat players, defined as

[^3]petitioners who submitted at least one other petition during the period of study, were more likely to be pro-regulatory and technical, but were also more likely to be derivative in the sense of toying with existing rule text.

Table 2: Characteristics of Single Business Petitions by Business Characteristics

|  | Direction |  | Nature |  | Scope |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Deregulatory | Regulatory | Technical | Substantive | Derivative | Original |
| Fortune 500 | $12(48.00)$ | $13(52.00)$ | $15(60.00)$ | $10(40.00)$ | $20(80.00)$ | $5(20.00)$ |
| Small Bus. | $43(59.72)$ | $29(40.28)$ | $35(48.61)$ | $37(51.39)$ | $59(81.94)$ | $13(18.06)$ |
|  |  |  |  |  |  |  |
| Repeat Player | $15(45.45)$ | $18(54.55)$ | $21(63.64)$ | $12(36.36)$ | $28(84.85)$ | $5(15.15)$ |
| One Sbotter | $39(60.94)$ | $25(39.06)$ | $28(43.75)$ | $36(56.25)$ | $51(79.69)$ | $13(20.31)$ |
|  |  |  |  |  |  |  |
| Total | $55(56.12)$ | $43(43.88)$ | $50(51.02)$ | $48(48.98)$ | $80(81.63)$ | $18(18.37)$ |

Notes: Figures are raw counts. Parenthetical figures show the percentage breakdowns within each row and supercolumn.

Together, these patterns may suggest that the biggest business players may use petitions to impose regulatory barriers to entry, whereas the smaller business players tend to seek regulatory relief. At the very least, the findings demonstrate that there is no one-size-fits-all approach to business participation in rulemaking petitions. Business interests seek a wide variety of regulatory actions.

## 2. Trends in Submission Patterns

The data also allow some treatment of the patterns of petitioning over time, given that the sample comprises petitions submitted over a 16-year period encompassing three presidential administrations. As Figure 1 demonstrates, one of the most striking overall trends is a generally steady decline in petitioning activity over this time period. Since this time period mostly corresponds to the shift from a Republican President (George W. Bush) to a Democratic President (Barack Obama), one possible explanation (albeit one that is hard to validate with these data) is that business petitioners generally see more opportunity in a Republican administration than in a Democratic administration. The upper left quadrant of Figure 1 shows that the bulk of the spike in petitions during the Bush years came from business interests. Another potential explanation would be that if Democratic administrations are, on balance, more proactive with respect to regulation, there would be less potential agenda space to be filled by petitioning, and therefore less potential payoff for using the device.

Figure 1: Number of Petitions Submitted By Year, 2000-2016


Figure 1 also reveals some notable trends with regard to petition characteristics. Most apparent are the sizeable differences in the trends of business interest participation versus non-business interest participation, on the one hand, and of original versus derivative petitions on the other. In both instances, a disproportionate amount of the general surge of petitions during the George W. Bush Administration comes from business interests and is derivative (i.e., seeks changes to existing text rather than proposing wholly new programs). The trends for the opposites of these categories (i.e., non-business interest petitions and original petitions) are relatively static over the entire sixteen-year period. Compare this to deregulatory and pro-regulatory petitions, which were filed at about the same rate over time, although that base rate itself changed.

## B. Distribution of Outcomes

The second frame through which to view petitioning activity concerns outcomes. Although there may be some symbolic petitioning, ${ }^{127}$ on the whole it is fair to assume that when a party submits a petition, a major goal is to have

[^4]the agency grant that petition and begin a rulemaking responsive to the request. In the aggregate, only $60.34 \%(n=175)$ of petitions in the data received a response during the course of the study, and of these, only $36 \%(n=63)$ were granted. This translates to a $21.72 \%$ chance of a grant ex ante. Clearly, petitioning most often does not achieve even the most basic goals of the petitioner.

When it comes to competition across petitioner type for these few grants, however, the evidence suggests the playing field is not entirely level. Figure 2 displays the results of two separate logistic regressions of the basic determinants of agencies' decisions to respond to and grant petitions. ${ }^{128}$ The results suggest two basic-and somewhat contradictory-biases in the decisions agencies make about petitions. First, in terms of responding to petitions (and, for the moment, ignoring the substance of the disposition), agencies favor relatively discrete interests, such as individuals and single businesses. In terms of marginal probabilities, individual petitioners have well over a $70 \%$ chance of hearing back from the agency when they petition, whereas public interest groups have less than a $50 \%$ chance. Single businesses also fare better on average than industry associations, although that difference is not statistically significant. Second, the bias shifts toward relatively diffuse interests when it comes to the ultimate decision to grant a petition. Whereas individuals were the most successful parties in terms of garnering an agency response to their petitions, they have far less success with grants, with only a $20 \%$ chance of a grant compared to a $52 \%$ chance of a grant for industry associations. Industry associations' $52.4 \%$ chance of a grant is higher than single businesses' $33.8 \%$ chance (the difference is statistically significant at the $\mathrm{p}=.017$ level). And while public interest groups had an estimated $34.3 \%$ chance of a grant, the $95 \%$ confidence interval extends as high as $59.1 \%$. On the whole, the most diffuse interests (both business-oriented and public-oriented) have the upper hand in terms of actually receiving a grant, even as more discrete interests are more likely to have their "day in court." ${ }^{129}$

[^5]As discussed in Part III.A, business interests are hardly monolithic in terms of the substantive changes they seek by petitioning, and as Figure 3 demonstrates, there are measurable differences in the kinds of business requests that are likely to sway agencies. The results are from six logistic regressions: one for single businesses, one for industry associations, and one for public interest groups, for each of the two critical decisions to respond to and grant petitions. ${ }^{130}$

## Figure 2: Effects of Petitioner Type on Petition Responses and Grants



Notes: Labels represent the point estimates of logistic regressions with response and grant conditional on response as dependent variables. Whiskers represent $95 \%$ confidence intervals. In each regression, robust standard errors are clustered at the agency level. For the logistic regression of responses, the total observations were 288 and the pseudo R2 was .0556. For the logistic regression of grants conditional on response, the total observations were 175 and the pseudo R2 was .1012. Petitions submitted by individuals serve as the reference group, or baseline, for Petitioner Type.

For responses, the important factors are whether the petition seeks a deregulatory and/or a substantive change. On the whole, pro-regulatory petitions and technical petitions are more likely to generate responses. Interestingly, whether

[^6]the petitioner is a repeat player is not a significant factor. For grants (conditional on receiving a response at all), technical petitions are similarly favored. However, there are two important shifts in emphasis at this threshold. First, prior experience on the part of the petitioner becomes an extremely important factor, at least for single businesses. A petition submitted by a single business that filed at least one other petition improved the chances of a grant from $27.1 \%$ to $44.4 \%$. Second, whereas pro-regulatory petitions submitted by single businesses fared far better in terms of garnering a response of some kind, once a deregulatory petition receives a response, it is actually far more likely to be granted than a pro-regulatory petition: The probability of a grant jumps from $25.5 \%$ to $41.5 \%$, holding all else constant.

What can these results say about business influence and capture via petitions? On the level of influence, business interests clearly hold an advantage, with business interests on the whole having a $40.9 \%$ chance of a petition grant compared with a $27.7 \%$ chance for non-business interests (statistically significant at the $\mathrm{p}=.028$ level).

Figure 3: Effect of Interactions Between Petitioner Type and Petition Characteristics on Petition Responses and Grants


Notes: Labels represent the point estimates of logistic regressions with response and grant conditional on response as dependent variables. Whiskers represent $95 \%$ confidence intervals. In each regression, robust standard errors are clustered at the agency level. For the response models, the observations and model fit were as follows for each group: single businesses ( $\mathrm{n}=97$, pseudo $\mathrm{R} 2=.0801$ ); industry association ( $\mathrm{n}=72$, pseudo $\mathrm{R} 2=.0544$ ); and public interest group ( $\mathrm{n}=78$, pseudo $\mathrm{R} 2=.0427$ ). For the grant conditional on response models, the observations and model fit were as follows for each group: single businesses ( $\mathrm{n}=68$, pseudo $\mathrm{R} 2=.1332$ ); industry association ( $\mathrm{n}=42$, pseudo $\mathrm{R} 2=.0223$ ); and public interest group ( $\mathrm{n}=35$, pseudo $\mathrm{R} 2=.1607$ ).

Without a plausible measure of the public interest, however, it is difficult to say that petitions facilitate capture. Moreover, if petitions were facilitating the most pernicious form of capture-the use of regulation to impose restrictions that disproportionately burden business competitors and erect barriers to entry ${ }^{131}$ not only would we expect to see single businesses fare better than more diffuse business interests such as industry associations, but we would also expect to see

[^7]pro-regulatory petitions from single businesses being granted more frequently than deregulatory petitions. Neither is the case.

However, the results are at least theoretically consistent with an account of corrosive capture where individual businesses succeed in relieving themselves from regulatory requirements that broadly apply. ${ }^{132}$ One of the strongest patterns in the data is the success of deregulatory petitions, provided that these petitions can survive some disproportionate skepticism in the selection decision to respond in the first place. Agencies seem to be most inclined to use petitions from business interests to identify opportunities to trim existing regulations and dole out regulatory relief, particularly when doing so involves a technical fix that the regulated clientele has identified. ${ }^{133}$ This last caveat may suggest, however, that the data are more consistent with healthy regulatory incrementalism than with highly consequential regulatory rollbacks. ${ }^{134}$

## C. Timing of Responses and Grants

While receiving up-or-down determinations on petitions may be the ultimate goal for petitioners, half of the battle is against the clock. Agencies sometimes act within days of receiving a petition, but often they sit on petitions for extraordinarily long periods of time. ${ }^{135}$ For the petitions in my data that received a response, the longest observed delay before an official response was 3,805 days, or almost 10.5 years. ${ }^{136}$ To be sure, agencies' median response time
132. Id. at 154-55 (discussing the mechanisms of "corrosive capture," which aims to "push the regulatory process in a 'weaker' direction, not with the aim of reducing entry, but with the aim of reducing costly rules and enforcement actions that reduce firm profits").
133. Wagner et al., supra note 79, at 244-45 ("Our study reveals that some revision techniques are rigorous and transparent, but that others lack transparency and fail to provide opportunities for all relevant interests to weigh in on technical issues and policy changes. As such, they may facilitate the kinds of subterranean decisionmaking long associated with agency capture.")
134. Id. at 227-41 (discussing the policy benefits of rulemaking incrementalism); see also Neil R. Eisner \& Judith S. Kaleta, Federal Agency Reviews of Existing Regulations, 48 Admin. L. Rev. 139, 140-43 (1996) (same); Robert L. Glicksman \& Sidney A. Shapiro, Improving Regulation Through Incremental Adjustment, 52 U. Kan. L. Rev. 1179 (2004) (same). For a more general discussion, see infra Part IV.C.
135. In theory, a long delay might entitle a petitioner to sue for an order to respond to the petition. See Schwartz \& Revesz, supra note 12, at 13-17. However, Schwartz and Revesz report that there is, all told, very little "unreasonable delay" litigation over pending petitions. $I d$. at 67 (noting that "[s]tatistics bear out that litigation over petitions is not very common," and that "[s]ome stakeholders will threaten litigation to force an agency response after a long delay, but often the agency simply takes that opportunity to deny the petition, and the lawsuit is dropped").
136. Of course, some petitions in the data never received a response during the period of observation, and if they are considered with the rest, then the maximum consideration time was essentially the entire duration of the study: 6,197 days, or 16.98 years.
was considerably more palatable, with fully $50 \%$ of petitions receiving their response within 573 days and $25 \%$ within 264 days.

With such drastic ranges of consideration time, it is clear that there is a possibility of disparate treatment across groups and types of requests. We can use survival analysis to examine the factors that determine how swiftly agencies process petitions. I estimated response times using a Cox proportional hazard regression, which allows comparison across groups while holding characteristics of petitions constant. Figure 4 shows the resulting survival curves-an estimation of the probability of receiving a particular response at any given time-for both the fact of the agency's official response (left panel) and the response if the response was a grant (right panel), both broken out by petitioner type. These curves show statistically significant disparities in the pace of processing petitions submitted by different kinds of interests. Starting with the left panel, we see that, relative to the baseline group (individual petitions), petitions from single businesses ( $\mathrm{p}=.000$ ), industry associations ( $\mathrm{p}=.011$ ), and public interest groups ( $\mathrm{p}=.022$ ) are processed faster. Of the four petitioner types, single businesses are the fastest, with a hazard ratio of 1.68 , or about a $68 \%$ greater chance of receiving a response at any given time than an individual petition. Compared to more diffuse interests (i.e., industry associations and public interest groups), single businesses are $37 \%$ and $24 \%$ more likely to receive a response at any given time. Of the characteristic covariates, only deregulatory petitions are significantly different in terms of response time: with a hazard ratio of 1.20 ( $\mathrm{p}=.012$ ), such petitions are about $20 \%$ more likely to receive a response at any given time than pro-regulatory petitions, holding all else constant.

Figure 4: Timing of Responses and Grants by Petitioner Type


Notes: The plots represent survival estimates derived from a Cox proportional hazards regression. The estimated survival curves control for the following covariates: deregulatory, substantive, original, repeat player.

However, when the analysis changes to the processing of grants (right panel) and not just responses, the advantage of single businesses falls away and the most significant advantage goes to public interest groups. Public interest groups have a hazard ratio of $2.13(p=.000)$, meaning they are fully $113 \%$ more likely to receive a grant at any given time than individual petitioners. They are, moreover, $68 \%$ more likely to receive a grant at any given time than industry associations, and $108 \%$ more likely than single businesses to receive a grant.

Much as Figure 3 broke out the interactions between petitioner type and petition characteristics, Table 3 below reports the effect on timing of agency responses for the different kinds of requests petitioners make. The results are reported as hazard ratios, or the likelihood of receiving a determination at any particular time, where estimates above 1.0 indicate faster processing and estimates below 1.0 indicate slower processing. The results in Table 3 show that the most important factors in speeding up a response vary across petitioner type. Single businesses are $203 \%$ more likely to receive a response and $324 \%$ more likely to receive their grant at any given time if they are a Fortune 500 or Global Fortune 500 honoree than if they are not. Similarly, industry associations are $144 \%$ more likely to receive a response and $492 \%$ more likely to receive their grant if they are a repeat player in the data than if they are not. By
contrast, the most important determinant of public interest group success is when they petition for deregulatory changes: indeed, they are $545 \%$ more likely to receive a response at any given time and $280 \%$ more likely to receive their grant at any given time if they are breaking from their usual pattern and suggesting regulations should be weakened in some way.

## Table 3: Cox Proportional Hazard Regressions of the Determinants of the Timing of Petition Responses and Grants

|  | Respond |  |  |  | Grant (If Responded) |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single Bus. | Industry Ass'n | Pub. Int. | Single Bus. | Industry Ass'n | Pub. Int. |  |  |
| Deregulatory | .992 | .838 | $5.45^{* * *}$ | .575 | 1.24 | $2.80^{* * *}$ |  |  |
| Substantive | 1.85 | .902 | .655 | $3.85^{*}$ | .929 | .622 |  |  |
| Original | 1.08 | 1.14 | $1.86^{*}$ | 2.12 | .276 | $2.06^{*}$ |  |  |
| Repeat Player | $.581^{* *}$ | $1.44^{*}$ | .999 | .733 | $4.92^{*}$ | 1.05 |  |  |
| Fortune 500 | $2.03^{* * *}$ |  |  | $3.24^{* *}$ |  |  |  |  |
| N | 66 | 42 | 34 | 22 | 22 | 11 |  |  |
| Wald $\mathrm{X}^{2}$ | 11.79 | .05 | 52.71 | .19 | 11.82 | .24 |  |  |
| Prob $>\mathrm{X}^{2}$ | .0027 | .9744 | 0.000 | .6612 | .0027 | .4300 |  |  |

Notes: Statistical significance is denoted as follows: ^ indicates $\mathrm{p}<.1,{ }^{*}$ indicates $\mathrm{p}<.05$, ** indicates $\mathrm{p}<.01$, and ${ }^{* * *}$ indicates $\mathrm{p}<.001$.

In sum, survival analysis shows significant disparities among petitions in terms of response time and grant time. One of the strongest findings is that public interest groups get to the finish line (i.e., a grant) much more quickly than other groups. While single businesses got some kind of news from the agency much faster, the agencies were at the same time much slower to grant petitions from single businesses than from diffuse groups. Still, some evidence does fit the "capture" story. Looking more closely at business interests, there is some evidence that large businesses do better than small businesses, and that being a repeat player often helps in the process.

## D. After the Grant

The ultimate measure of success is convincing the agency not only to begin a rulemaking, but also to finish it. By this test, rulemaking petitions are far from a sure bet. Of the 290 petitions in the data, only $40(13.8 \%)$ resulted in a final rule during the period of study. ${ }^{137}$ But while success is, overall, rare, the

[^8]first column of Figure 5 (which presents the results of logistic regressions with the dependent variable set as adoption of a petition as a final rule) makes clear that there are certain ex ante predictors of success. These models, unlike the ones before, control for a number of covariates that are expected to affect agencies' ability to finalize rules. ${ }^{138}$ Relative to individual petitioners, only public interest groups are more likely to see their petition materialize as a final rule. Likewise, deregulatory petitions are more likely to succeed, and substantive petitions are less likely to succeed. It would be difficult to square these probabilities with a story of capture or even of excessive business influence, although by the same token the kind of petition that succeeds hardly fits the triumphalist narrative of petitions as a means of spurring major regulation. The most successful petitions tend to be technical and deregulatory, even if they are submitted by public interest groups.

Then there is the question of petitions that made it through the gauntlet and garnered a grant. Grants of petitions only mean that the agency will initiate rulemaking. Many proposed rules-even those that don't have their origin in a rulemaking petition-are withdrawn before they are finalized. ${ }^{139}$ And, in the context of petitions, there might be situations where the agency insincerely grants petitions it does not intend to finalize, whether to appease the filer or to satisfy the terms of a court order. ${ }^{140}$ Is there any evidence that the agencies used this mechanism to award disparate benefits to different types of groups?
138. These additional covariates are \# Final Rules (count of the number of actions in the Unified Agenda of Federal Regulatory and Deregulatory Actions at the final rule stage at the time of the agency's decision on the petition; \# Proposed Rules (count of the number of actions in the Unified Agenda at the proposed rule stage at the time of the agency's decision on the petition; for the Fall 2018 version of the Unified Agenda, see Fall 2018 Unified Agenda of Regulatory and Deregulatory Actions, Office of Information and Regulatory Affairs, https:// perma.cc/8ZHH-Z7HZ.); \# Pre-Rules (count of the number of actions in the Unified Agenda at the pre-proposal stage at the time of the agency's decision on the petition); Dem. President (dummy variable for whether the President was from the Democratic Party); Divided Government (dummy variable for whether either chamber of Congress and the President differed in party identification); and Consideration Time (the number of days from the petition filing to the agency's decision to grant the petition).
139. See Anne Joseph O'Connell, Political Cycles of Rulemaking: An Empirical Portrait of the Modern Administrative State, 94 VA. L. Rev. 889, 959-63 (2008) (presenting data on rulemaking withdrawals captured by the Unified Agenda of Federal Regulatory and Deregulatory Actions).
140. Schwartz \& Revesz, supra note 12, at 11-12 (discussing the phenomenon of pro forma denials in response to court orders to respond).

Figure 5: Determinants of Adoption of Regulatory Proposals in Final Rules


Notes: Labels represent the point estimates of logistic regressions with response and grant conditional on response as dependent variables. Whiskers represent $95 \%$ confidence intervals. In each regression, robust standard errors are clustered at the agency level. For the "All Petitions" model, the total observations were 171 and the pseudo R2 was .2476 . For the "Granted Petitions" model, the total observations were 62 and the pseudo R2 was .6147. Petitions submitted by individuals serve as the reference group, or baseline, for Petitioner Type.

Figure 5 again provides some of the answers to these questions. The results of the logistic regression suggest that no one type of petitioner does particularly well relative to the baseline category of individuals. In fact, the only petition characteristic correlated with finalization is substantive ambition. Overall, there is little evidence that grants are insincere for any particular group.

These results must be taken with a grain of salt, however. Some of the failures to finalize might simply be the result of the rulemaking process failing to run its course. Rulemaking can take many years, and many of the observed grants happened within the last few years of the available data. These results are therefore just a preliminary look at how agencies treat granted petitions after the formal response.

## IV. Capture by Petition?

Rulemaking petitions present a unique opportunity to examine business influence in action. In the world of rulemaking, the opportunity to observe discrete agency choices about agenda-setting is extremely rare. ${ }^{141}$ Rulemaking petitions are an exception to the general rule that both interest group participation and agency responses at the agenda-setting phase of the rulemaking process are invisible. Often, the only trace of this process that emerges is the decision to initiate a rulemaking proceeding by announcing a notice of proposed rulemaking or, in some instances, an advanced notice of proposed rulemaking. ${ }^{142}$ The participation and lobbying that did not result in changes or any kind of agency response might as well have never occurred.

But with rulemaking petitions, it is possible to trace systematically the requests for regulatory change straight through both decisions and non-decisions, revealing the full spectrum of influence. And not only do rulemaking petitions come at the very earliest possible stages of the rulemaking process, when opportunities for influence are the greatest and the most likely to yield significant fruit, ${ }^{143}$ but they also allow a relatively "pure" observation of influence. Almost by definition, an agency needs to be influenced if a petition is submitted. Petitioners would have little reason to submit the petition if the agency was already fully on board with the request. ${ }^{144}$ Would-be petitioners could spare themselves the trouble if the only purpose was to ensure that agencies were aware of an issue-there are open telephone lines for that kind of communication. ${ }^{145}$ Formalizing a petition suggests that the petitioner believed that the agency needed nudging. Thus, any positive agency action in response to petitions suggests that agencies were in fact influenced-to move out of a state of inertia, at the very least.

Studying rulemaking petitions thus presents the possibility of overcoming some of the difficulties that have dogged empirical assessment of claims of excessive business influence and capture in the rulemaking process. Empirically examining who petitions, for what purposes, and with what kind of success is a path to a better overall understanding of business influence, both attempted and achieved. What emerges in this study is the strong probability that business influence on regulatory agenda-setting, and by implication, on regulatory policy, is quite limited.

[^9]145. See Shapiro, supra note 46, at 854-56.

## A. Participatory Balance

In evaluating the evidence, I draw on Susan Yackee's three-prong test for identifying capture empirically. First, if capture exists, we would "expect that a subpopulation of individuals or organizations-be it business interests or some other subpopulation-will stand out as the top lobbying participant." ${ }^{146}$ Second, we would "expect that a subpopulation will stand out as consistently influential." ${ }^{147}$ Finally, but only if the first two prongs are satisfied, we would "expect to see agency decision making gravitate toward the policy preferences of the subpopulation, even when technical information, data, or evidence points decisionmaking in a different direction." ${ }^{148}$

On the first prong, the data do reveal business interests as the dominant petitioners, at least when one considers single business corporations and industry associations as part of a larger category of business interests. As reported, business interests accounted for $58.62 \%$ of the observed petitions. But content coding the substance of the petitions, even to the limited extent possible here, suggests that there is significant heterogeneity even within the business community as to the overall goals of petitioning-and that may complicate the story. While business interests as a whole seek more deregulatory and "derivative" petitions (in effect, amendments to existing rules to soften their requirements) than do public interest groups or individuals, single business corporations more often seek out pro-regulatory changes that impose new requirements on an industry. This is particularly the case with the biggest corporations, i.e., Fortune 500 or Global Fortune 500 players, which were significantly more likely to seek pro-regulatory changes than smaller businesses. By contrast, industry associations are more focused on deregulatory, technical changes, perhaps reflecting their more diffuse interests as representatives of an entire industry.

If business interests are split to account for this heterogeneity, then it is clear that there is no dominant interest. Single businesses account for the highest percentage (33.91\%) of the sample, but public interest groups are not far behind at $26.99 \%$. Industry associations account for only $24.91 \%$ of the sample. It also bears mentioning that individual petitioners $\left(14.19 \%{ }^{149}\right)$ most often ad-
146. Yackee, supra note 81, at 300-01.
147. Id.
148. Id.
149. This figure indicates that individuals meaningfully participate in the petitions process at a much higher rate than they do in later stages of the rulemaking process. See Coglianese, supra note 56 (discussing studies finding minimal individual participation). Although Justice Tino Cuéllar finds that the vast majority of public comments in three important rulemakings came from individuals, he does not distinguish "between comments from individual members of the public who chose to send in comments with little prodding from organized interests . . . and those whose comment was generated as a result of interest group organizing." Cuéllar, supra note 49, at 462 tbl.4, 434. In contrast with these mass commenting cam-
vance requests similar to the ones submitted by public interest groups. Consider, for instance, a petition submitted by Justine May, whose recreational vehicle's tires kept blowing out because the collective weight of appliances and attachments exceeded the maximum load. ${ }^{150}$ When she complained to the manufacturer, it "said they have no regulations they are required to follow" as far as reporting the maximum carrying capacity. ${ }^{151}$ Her petition sought to change that (and the agency followed through on her request). ${ }^{152}$ Most other individual petitions are similarly oriented toward consumer issues and take on a similar posture toward business regulation. Considered together, public interest groups and individual petitions accounted for a plurality of the petitions observed. The predominance of business interests thus depends in part on how one defines business interests.

Proceeding to the second prong, the evidence stands in tension with a conclusion that business interests achieve consistently higher influence than any other group. Together, business interests had a greater chance of having any given petition granted, and the difference was statistically significant. Additionally, there are indications that status as a repeat player or a multinational corporation helps business interests garner a grant or capture the limited attention of the regulator. But when we disaggregate business interests, public interest groups do at least as well as, if not better than, either single corporations or industry associations. Certainly, no one group does consistently better than all the other groups. Moreover, the frame through which we evaluate outcomes matters a great deal. For instance, individual petitioners do better than most other groups when it comes to garnering a formal response from the agency.

The lack of consistently disproportionate influence is striking because of how easy it would be to give business interests whatever they want. Rulemaking petitions, because of their low visibility and low risk of oversight, are prime territory for "subsystem politics." In contrast with notice-and-comment rulemaking, where the agency publicly notifies interested parties of the opportunity to respond to proposals, the difficulty of monitoring petitioning activity insulates the agency from exposure to countervailing perspectives and competing interests. While there are occasionally letters submitted supporting or opposing a petition, ${ }^{153}$ usually all the agency has to go on is the information provided by the petitioning party, and all it has to worry about, from a strategic

[^10]perspective, is disappointing that party and perhaps engendering litigation. This is the kind of area where expectations of business influence are high, if traditional models of public choice are to be believed. But agencies are decidedly reluctant to act on petitions, both with respect to business interests in particular and as a general matter.

Given these results, it is not even necessary to proceed to Yackee's third prong-i.e., effective control over agencies against the agency's preferences. ${ }^{154}$ The data strongly suggest that agencies keep their distance from the petitioning parties, casting serious doubt on the validity of the public choice account of agency capture.

## B. Incrementalism and Autonomy

As just discussed, the identity of the party does not seem to drive agency decision-making with regard to rulemaking petitions. What does apparently drive agency decision-making, however, is a certain type of interaction with petitioners of all kinds. Specifically, agencies favor rulemaking petitions that request narrow, technical changes in a deregulatory direction. In terms of marginal probabilities, requesting a deregulatory change raises the probability of a grant (conditional on response) $16.92 \%$ (statistically significant at the $\mathrm{p}=.007$ level) and requesting a substantive change decreases the probability of a grant (conditional on response) $20 \%$ (statistically significant at the $\mathrm{p}=.000$ level), holding all else, including petitioner type, constant. These patterns suggest that business interests find petitions useful as a device to bring agencies' attention to outdated provisions in existing regulatory programs, and that agencies likewise find these suggestions useful as a way of structuring their ongoing monitoring of regulatory programs. ${ }^{155}$ When combined with the overall low rates of petition grants, the picture that emerges is one of an adaptive and incrementalist dialogue between regulated entities and agencies, ${ }^{156}$ with agencies retaining a great deal of autonomy and directorship of the deliberations.

That agencies apparently use rulemaking petitions in this way is not terribly surprising. When agencies engage in rulemaking, they are not, and cannot
154. As discussed above, one advantageous aspect of studying petitions is that they represent instances where the agency probably does not itself prefer to act. Thus, in some ways, the evidence of influence doubles as evidence of (a lack of) control. The fact that business interests do not influence the agency at a higher rate than any other group means that business interests do not control the agency.
155. This conclusion is entirely consistent with prescriptive calls to use rulemaking petitions to structure retrospective review of regulatory programs. See Bull, supra note 105, at 265. For a general discussion of retrospective review (also known as regulatory "look back"), see Cass R. Sunstein, The Regulatory Lookback, 94 B.U. L. Rev. 579 (2014).
156. See Eisner \& Kaleta, supra note 134; Glicksman \& Shapiro, supra note 134; Wagner et al., supra note 79.
be, "synoptic." ${ }^{157}$ They are bound to make mistakes, and one of the critical functions of stakeholder engagement is to identify these mistakes and generate ideas for how to fix them. ${ }^{158}$ Often, the most targeted (and least costly) way to fix mistakes is to revise problematic rule text, rather than tossing out the rule in its entirety or issuing informal enforcement guidance that ameliorates the problem. ${ }^{159}$ By some accounts, this kind of incrementalist dialogue with interest groups, including regulated entities, is a sign that the regulatory process is working as it should to adapt pragmatically to changed circumstances. ${ }^{160}$ So long as the "deregulatory drift" and predominance of business interests does not reach certain thresholds ${ }^{161}$-and it does not appear to have in the rulemaking petitions analyzed in this study-then all is well.

In sum, even in this forum, where the deck is seemingly stacked in favor of rent-seeking behavior, ${ }^{162}$ subsystem politics, and agency capture, agencies appear to remain basically autonomous fair dealers, motivated by techno-bureaucratic commitments above all else. While this might mean that petitions may fail to contribute much to the democratic bona fides of the regulatory process, ${ }^{163}$ the findings also ought to throw some cold water on the hegemony of the public choice account of agency decision-making.
157. Martin Shapiro, Who Guards the Guardians? Judicial Control of Administration 151 (1988).
158. See Biber \& Brosi, supra note 106 (finding that citizen petitions provided essential information to agency officials about the need for Endangered Species Act listing); Wagner et al., supra note 79, at 187-88 (noting that "mistakes are inevitable" in the rulemaking process and that "a regulatory agency's wellbeing depends on its regulations remaining current with changing public attitudes and the political preferences of those in a position to influence its actions"); West \& Raso, supra note 76, at 508 ("Even where agencies are identified as the primary impetus for policy initiatives, their decisions are often based on feedback from affected interests. Indeed, the environment of program implementation is such that it is often impossible to separate bureaucrats from stakeholders as initial sources of policy initiatives.").
159. Wagner et al., supra note 79, at 197-98 (describing the pitfalls of wholesale rescission, replacement, and informal interpretation as against revising the text through the rulemaking process).
160. See id. at 242-43 (praising the "virtues" of incrementalist "dynamic rulemaking").
161. See id. at 241; see also Schwartz \& Revesz, supra note 12, at 26 ("Congress and the courts have expressed some concerns with an overly permissive right to petition for amendments and repeals [of rules], which may interfere with specific statutory schemes to manage legal challenges to recently enacted rules, and which may force agencies to continually revisit and re-litigate long-established rules.").
162. See Teresa M. Schwartz, Consumer Product Safety Commission: A Flawed Product of the Consumer Decade, 51 Geo. Wash. L. Rev. 32, 76 (1982) (arguing that petitions are a vector for special interest influence).
163. See generally Reeve T. Bull, Making the Administrative State "Safe for Democracy": A Theoretical and Practical Analysis of Citizen Participation in Agency Decisionmaking, 65 Admin. L. Rev. 611 (2013).

## V. Big Problems and Incremental Solutions: The Imperfect Marriage Between Rulemaking Petitions and Environmental Regulation

I now want to complete the circle by briefly returning to the environmental realm. This article started with an example of an electric utility industry petition that led to the defanging of an important EPA coal ash regulation-a development that looked like a classic instance of "corrosive capture." ${ }^{164}$ Notwithstanding this example, environmental scholars and advocates have generally advanced a rather sanguine story about the potential role of rulemaking petitions in pushing environmental regulation forward.

For instance, Michael Livermore and Richard Revesz have argued that petitions can help to counteract under-regulation by forcing on-the-record engagement with pro-regulatory interests. ${ }^{165}$ Hence, they suggest that OIRA might be able to prevent inertial capture by anti-regulatory interests if it begins reviewing petitions submitted to agencies the way it reviews proposed rules. ${ }^{166}$ Building on this work, Richard Revesz and Jason Schwartz suggested that "[a]gencies can use high-quality petitions to harness petitioners' data and apply the diffuse, collective wisdom of the public to help produce more efficient regulations that will advance agencies' missions. ${ }^{1{ }^{167}}$ Likewise, Eric Biber and Berry Brosi argue, based on their analysis of listing petitions under the Endangered Species Act, that there is some evidence that petitions can "lead to better-informed decisionmaking" by agencies and help give the public a meaningful say in agency agenda-setting. ${ }^{168}$ They suggest that this function is extremely important insofar as Congress has in its lawmaking failed to keep pace with the need for environmental regulation and left most important environmental decisions to agency discretion. ${ }^{169}$ Sandra Zellmer sees petitions as particularly important
164. Carpenter, supra note 27, at 153-54.
165. Livermore \& Revesz, supra note 25, at 1382-84.
166. Id. at 1382-83.
167. Schwartz \& Revesz, supra note 12, at 69.
168. Biber \& Brosi, supra note 106, at 378. It bears noting that Endangered Species Act listing petitions may be more likely to move the agencies that receive them than the general rulemaking petitions that are the focus of this article. Listing petitions are more targeted, and the process for processing them is consequently more routinized. The main role that the listing petitions play is in conveying scientific information to the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration about the need for species protection; the rulemaking task is already well defined. With general rulemaking petitions, agencies are being asked to do much more. Biber and Brosi acknowledge as much when they say that "the listing process in the ESA is a relatively narrow range of decisions that involve a relatively narrow range of factors" and that petitions may be less useful when decisions are more complex and less technical. Id. at 378-79.
169. Id. at 382-83 ("It has been many years since Congress has enacted a significant environmental statute that lays out new regulatory tasks for agencies, so as time passes, the initiative for updating environmental standards to keep pace with evolving technology, understanding of environmental harms, and changes in public preferences has shifted to administrative agen-
to environmental law, where they can serve as part of a "portaging strateg[y]" for environmental advocates who see gridlock and dysfunction in the elected branches as a barrier to comprehensive environmental legislation. ${ }^{170}$ While environmental law is a field of big problems, rulemaking petitions are often hailed as a (potentially) big solution, particularly during times when EPA and other environmental agencies appear unwilling to act of their own volition.

These claims have a major data point in their favor: the Supreme Court's decision in Massachusetts v. EPA that EPA's response to a petition asking for regulation of greenhouse gas emissions from automobile sources was arbitrary and capricious under the APA. ${ }^{171}$ The case brought together a simple peti-tion-one that could have been filed by anyone who cared-and the single biggest environmental issue of our time-global climate change-to force a hesitant EPA to do something. ${ }^{172}$ Applied generally, petitions might thus have far-reaching implications. By itself, and even assuming that it worries about environmental harms, EPA might be reticent to tackle the "wicked problems" ${ }^{173}$ it increasingly faces using regulatory authority that has mostly not been updated since the 1970s, 1980s, and 1990s. ${ }^{174}$ But facing a petition that might end up in front of a court someday, the agency could perhaps be bolder. At a minimum, it would have to acknowledge and grapple with the issues flagged by even the least well-heeled interests in civil society. ${ }^{175} \mathrm{On}$ its face, the optimistic take on environmental petitions also seems quite plausible. Environmental non-govern-
cies. . . . If our environmental policy agenda is increasingly being set in administrative agencies rather than in Congress, then the tools by which the public has a say in that agendasetting (such as petitions or lawsuits over agency inaction) will become increasingly important.").
170. Sandra Zellmer, Treading Water While Congress Ignores the Nation's Environment, 88 Notre Dame L. Rev. 2323, 2327 (2013).
171. Massachusetts v. EPA, 549 U.S. 497 (2007).
172. For background on the case and its likely implications, see Lisa Heinzerling, Supreme Court Reviews: Massachusetts v. EPA, 22 J. Envt'l L. \& Litig. 301 (2007); Watts \& Wildermuth, supra note 16; Jonathan H. Adler, Massachusetts v. EPA Heats Up Climate Policy No Less than Administrative Law: A Comment on Professors Watts and Wildermuth, 102 Nw. U. L. Rev. Colloquy 32 (2008).
173. For discussions of the idea of "wicked problems" in an environmental context, see Richard J. Lazarus, Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future, 94 Cornell L. Rev. 1153 (2008); Kelly Levin et al., Overcoming the Tragedy of Super Wicked Problems: Constraining Our Future Selves to Ameliorate Global Climate Change, 45 Pol’y Sci. 123 (2012); J.B. Ruhl \& James Salzman, Climate Change, Dead Zones, and Massive Problems in the Administrative State: A Guide for Whittling Away, 98 Cal. L. Rev. 59 (2010).
174. See Jody Freeman \& David B. Spence, Old Statutes, New Problems, 163 U. Pa. L. Rev. 1 (2014); Zellmer, supra note 170, at 2324 (noting that many "question whether federal environmental laws have passed their prime").
175. Surprisingly, there is no work that I am aware of that connects concerns about environmental justice to petitions. On their face, petitions do seem well suited to incorporate environmental justice perspectives into the regulatory process, even if only by making voices heard. This is probably the most promising aspect of petitions.
mental organizations are notoriously well organized and are presumably well equipped to file persuasive, compelling petitions urging action and to sometimes follow up with lawsuits if the agency ignores them. ${ }^{176}$ There is therefore little question that environmental petitions might occasionally result in substantial commitments on the part of EPA and other agencies to address serious environmental harms. Indeed, in the years since Massachusetts v. EPA, there have been a few high-profile petition grants at the agency. For instance, in 2012, EPA granted a 2007 petition from environmental groups asking the agency to regulate greenhouse gas emissions from commercial aircraft. ${ }^{177}$

But the ultimate test of whether the institution is effective and worth the effort is not how the exceptional petition fares, but how the run-of-the-mill petition fares. As Kathryn Watts and Amy Wildermuth noted in the aftermath of Massachusetts v. EPA, "there are petitions—and then there are petitions." ${ }^{178}$ This observation that there are ordinary petitions and exceptional petitions should foster more sober thinking and critical analysis both about the institution's relevance to contemporary environmental regulatory practice and about ways that the institution might be improved through better transparency.

Unfortunately, it would be impossible to perform the kind of empirical study conducted in Part III with EPA petitions because EPA does not maintain any comprehensive data or uniform records of all the petitions it receives and its decisions on those petitions. ${ }^{179}$ Rather, it publishes general rulemaking petitions on an ad hoc basis, usually only when it grants a petition. Even if one scoured public websites for any mention of the word "petition" and logged each instance, there is no way to know whether EPA received other petitions and simply did not report them or decide them. ${ }^{180}$ Consequently, there is no way to gauge overall success rates across groups of petitioners, to calculate the average time from filing to decision or to analyze any disparities across groups, or to say anything general about what the modal petition looks like in terms of who is
176. Livermore \& Revesz, supra note 25, at 1385 ("[E]nvironmental organizations have, to some extent, overcome collective action costs and are relatively well-represented in the regulatory process, especially compared to civil society actors in other issue areas, such as consumer protection regulation.").
177. Proposed Finding That Greenhouse Gas Emissions From Aircraft Cause or Contribute to Air Pollution That May Reasonably Be Anticipated To Endanger Public Health and Welfare and Advance Notice of Proposed Rulemaking, 80 Fed. Reg. 37,758, 37,765 (proposed July 1, 2015) (to be codified at 40 CFR pts. 8, 1068).
178. Watts \& Wildermuth, supra note 16 , at 14.
179. See Livermore \& Revesz, supra note 25, at 1384 n .239 ("Unfortunately, there is no available public repository containing all petitions submitted to the EPA.").
180. This is effectively what Livermore and Revesz did in their study of EPA petitions. Id. As they recount, " $[\mathrm{t}]$ he petitions analyzed in this case study were collected from a variety of sources, including: the Federal Register, the Federal Digital System of the U.S. Government Printing Office, the EPA website, LexisNexis and Westlaw, and other Internet publications." Id.
filing it and what it asks for. ${ }^{181}$ Anecdotally, there have been several instances where EPA appears to have slow-walked petitions into the ground, leading to protracted litigation. ${ }^{182}$ Not every petitioner has the resources to fight these long court battles, which means that for every petition that prompts litigation, there are likely many more that simply languish at the agency. Meanwhile, because it is possible to grant a petition and complete a rulemaking without ever acknowledging the petition, nobody can know for sure what percentage of deregulatory rulemaking actions-in the Trump Administration and in other administrations-were actually the product of industry petitions.

With so little reliable and systematic information available on the full scope of petitioning activity before EPA, the only thing one can do is extrapolate from other contexts where we do have such data. Relying on the data from NHTSA, CPSC, and FSIS analyzed in Part III, one would have to assume that the few successful deployments of petitions by environmental groups celebrated by proponents of petitions are outweighed or substantially offset by the many deregulatory (albeit often incrementalist) deployments by industry and business groups. To reiterate the findings, business and industry petitions in these three other agencies outnumber petitions from public interest groups, and while I found no evidence of full-on capture, the most successful petitions were far from the model of the transformative petition in Massachusetts v. EPA. Instead, successful petitions tended to be substantively unambitious and often expressly deregulatory. ${ }^{183}$ For public interest group and individual petitioners, the probability of the agency granting a pro-regulatory, substantively ambitious pe-
181. It is commonplace to state that " $[t]$ he majority of petitions for rulemaking are submitted by environmental interest groups or states." Zellmer, supra note 170, at 2385. These claims are typically traceable to Livermore and Revesz, but their study explicitly cautioned that their sample was likely incomplete due to EPA's spotty record keeping. Livermore \& Revesz, supra note 25 , at 1384 n .239.
182. See, e.g., Nw. Envt'l Advocates v. EPA, 537 F.3d 1006, 1025 (9th Cir. 2008) (describing the drawn-out history of a petition asking EPA to undo an exemption for the discharge of ballast tank water from Clean Water Act regulations-an exemption widely believed responsible for an influx of invasive species in the Great Lakes, see Dan Egan, The Death and Life of the Great Lakes (2017)—and ordering EPA to reconsider the petition after it had been denied); Oral Argument, League of United Latin Am. Citizens v. Pruitt, 17-71636 (9th Cir. July 9, 2018), https://perma.cc/APF5-GQ8J (discussing the long history in the Ninth Circuit dealing with a 2007 petition to EPA to revoke tolerances for the pesticide chlorpyrifos and considering whether the denial of the petition in 2017 after a mandamus order from the court was arbitrary).
183. To be sure, this extrapolation does not line up with what Livermore and Revesz found in their reconstructed sample of petitions at EPA, at least not as to the balance of participation and the general direction of the average petition. They found only five industry petitions out of thirty-eight filed between 1999 and 2011, and of these none were deregulatory. See Livermore \& Revesz, supra note 25, at 1386. Again, though, even Livermore and Revesz acknowledged that there is reason to doubt that the sample is fully representative. Id. at 1384 n. 239 ("[T]here is a possibility that some petitions were not included in this case study, especially if they were never published.").
tition was $15.78 \%$, well below the average for all petitions in the sample. Moreover, the data strongly suggest that the attention agencies give to the model petition does not come close to matching the amount of effort that petitioners put into petitions. Most petitions go unanswered, and the ones that are answered usually wallow for years.

If extrapolation from other agencies to environmental petitioning at EPA is even close to appropriate, ${ }^{184}$ then there are a number of important implications. First, environmental advocates might want to reconsider whether the strengthening of judicial review of petition decisions in Massachusetts v. EPA inures to the benefit of environmental protection. While that doctrinal development may strengthen environmental advocates' position to force EPA and other agencies to engage with them, ${ }^{185}$ they must keep in mind that these doctrinal developments also strengthen the position of other parties with less interest in environmental protection. In fact, after Massachusetts v. EPA was decided, the business bar responded by noting the opportunities for influence created by the decision. ${ }^{186}$ If business and industry petitions to EPA are common, then the effect of these court decisions may in fact be a net loss for public benefits as the agency focuses more of its limited resources, bandwidth, and time accommodating business and industry requests for exemptions and exceptions to regulations. Petitions are ultimately a two-way ratchet, and strengthening the tool
184. There is, of course, always danger in extrapolating from the experiences in one agency to another agency. Even across the three agencies in the sample, there are substantial differences. For instance, NHTSA received far more petitions than either of the other two agencies (it received 160 petitions, versus FSIS's 90 and CPSC's 40 ). The "grant rate" also varied across the agencies from about $15 \%$ at CPSC to $25 \%$ at NHTSA. One might wonder whether EPA is really like the other agencies studied here on any number of dimensions. I have attempted to mitigate these concerns by selecting agencies that engage in substantial rulemaking on issues of public health and safety. It bears mentioning as well that NHTSA has some isolated, albeit important, power to shape environmental regulation, as demonstrated by its recent rulemaking with EPA rolling back Obama-era corporate average fuel economy standards and rescinding the "California waiver" that had traditionally allowed California to set its own standards for fuel efficiency in automobiles that might be higher than the federal standards. See The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021-2026 Passenger Cars and Light Trucks, 83 Fed. Reg. 42,986 (Aug. 24, 2018). Thus, the results for NHTSA are potentially directly relevant to environmental law.
185. As a side note, it is not at all clear that it has. The lower courts appear to have read Massachusetts v. EPA quite narrowly, and the D.C. Circuit may even be "hostile" to petition litigation. See Schwartz \& Revesz, supra note 12, at 20-24; Zellmer, supra note 170, at 2389 ("Few post-Massachusetts decisions have followed suit, and most courts continue to scrutinize denials of petitions lightly or not at all.").
186. See Jeffrey A. Rosen, A Chance for a Second Look: Judicial Revierw of Rulemaking Petition Denials, 35 Admin. L. \& Reg. L. News 7, 9 (2009) (arguing that the tactic endorsed by Massachusetts v. EPA "need not be monopolized by advocacy organizations attempting to add new regulatory requirements" and that it "also creates an opportunity for judicial review of petitions to simplify rules, or petitions to achieve regulatory objectives in less costly ways, for example, if supported by statutory text").
does not guarantee that policy will swing in the more protective of the two directions. Second, environmental advocates should consider the opportunity costs of a petition-based strategy that works only intermittently in their favor. ${ }^{187}$ Producing a well-supported petition takes time and resources that could be better spent on efforts to promote comprehensive legislative solutions to environmental challenges. In fact, although this point is subtle, a petition-based strategy concedes the adequacy of the status quo and implicitly asks only for incrementalist responses. Moreover, even when environmental advocates succeed with a petition, that victory only commits the government to commence a regulatory process that is often slow, open for compromise, and far from a sure bet. To take just one obvious example, even though the Supreme Court jumpstarted a regulatory effort to address the challenge of global climate change in Massachusetts v. $E P A$, that process has yet to run its course and does not appear to be likely to run its course in the near future. ${ }^{188}$ One could actually partially blame the fact that EPA had effectively been ordered by the Court to start the process of regulating climate change under the Clean Air Act for the failure in the early years of the Obama Administration to push through a comprehensive legislative solution, such as a carbon tax or a cap-and-trade program..$^{189}$ The fact that EPA was working on the problem might have sapped momentum for a legislative change. Finally, and somewhat relatedly, the data suggest that the danger of agenda derailment-i.e., the distraction from big problems to little problems-is a real one, despite what a number of studies have argued. ${ }^{190}$

By emphasizing these points, I do not mean to suggest that rulemaking petitions never serve a purpose in environmental law. I acknowledge that they can be an important method for agencies to crowdsource ideas ${ }^{191}$ and that they can deliver important legitimizing effects on the regulatory process since they are in principle available to any party willing to put pen to paper. ${ }^{192}$ All of these benefits exist regardless of the agency's formal response to the petition. Nor do
187. But see Biber \& Brosi, supra note 106, at 370-73 (arguing that the transaction costs of petitioning, at least in the context of Endangered Species Act listing petitions, is low and outweighed by the informational benefits they bestow on agencies).
188. See generally Climate Deregulation Tracker, Sabin Center for Climate Change Law, https://perma.cc/5SG4-394G (tracking major deregulatory actions on the climate regulation front during the Trump Administration).
189. Cf. Ryan Lizza, As the World Burns, New Yorker (Oct. 11, 2010), https://perma.cc/24LDNEZX (discussing how the negotiations over a potential cap-and-trade bill in the early Obama years collapsed under the weight of a complex series of compromises that created distrust among the negotiators, one of which was a promise from Democrats to Republicans to include language stripping EPA's authority to regulate greenhouse gas emissions).
190. See Biber \& Brosi, supra note 106, at 321 (taking issue with prior scholarship that had suggested that petitions could be disruptive if they took up too much bandwidth and distracted agencies from using their own expertise to determine priorities).
191. See id. at 368-70 (noting that petitions can help aggregate expertise and deliver it to agencies).
192. See Lind \& Tyler, supra note 129 and accompanying text.

I mean to suggest that the institution could not be significantly improved through sensible transparency reforms along the lines of what Administrative Conference of the United States ("ACUS") has recommended. ${ }^{193}$ In particular, the practice of environmental petitioning could be greatly improved were EPA to begin tracking every petition it receives from "cradle to grave" in one public repository. ${ }^{194}$ Not only would this make it easier for scholars and advocates to assess whether petitions are serving public interests and improving rational pri-ority-setting, but it would also allow the public to track-and therefore to comment on or challenge-proposed actions stemming from those petitions submitted by business and industry groups. The single largest problem with EPA's current practice is that it is usually impossible for the general public to know even the basic fact that a business has asked for a rule revision through a petition. ${ }^{195}$ Without that knowledge, effective public engagement in all that follows is an impossibility. Almost all of the critical decisions about the scope and substance of regulation are made at the earliest stages of the process, and very few changes can be made once a notice of proposed rulemaking is issued. ${ }^{196}$ This is an easily correctable deficiency.

On the whole, though, rulemaking petitions should not be viewed as a panacea for regulatory inaction in the environmental arena. The findings from this study suggest that general rulemaking petitions are, on balance, more likely to advance incrementally a business and industry perspective in environmental law. Massachusetts v. EPA is the proverbial exception that proves the rule. Environmental scholars and advocates would do well to scrutinize their own decisions about whether to direct resources into the institution, at least barring significant changes to how the EPA processes petitions.
193. ACUS has twice offered recommendations to federal agencies about best practices for the processing of petitions. See Administrative Conference of the United States, Petitions for Rulemaking, Recommendation 2014-6, 79 Fed. Reg. 75,114 (Dec. 5, 2014) [hereinafter 2014 Recommendation]; Administrative Conference of the United States, Petitions for Rulemaking, Recommendation 86-6, 51 Fed. Reg. 46,988 (Dec. 4, 1986) [hereinafter 1986 Recommendation]. Of particular importance is the suggestion in both recommendations that agencies should "establish by rule basic procedures for the receipt, consideration, and prompt disposition of petitions for rulemaking" and further that they should provide for the "maintenance of a publicly available petition file." See 1986 Recommendation, supra, at 46,988-89; 2014 Recommendation, supra, at 75,118-19 (recommending that agencies "provide a way for petitioners and other interested persons to learn the status of previously filed petitions," including by maintaining a "summary log or report listing all petitions, the date each was received, and the date of disposition or target timeline for disposition").
194. See 2014 Recommendation, supra note 193, at 75,119 .
195. In fact, according to the survey performed by Schwartz and Revesz, even petitioners themselves "report that it can be difficult to learn the status of a previously filed petition." 2014 Recommendation, supra note 193, at 75,118 .
196. See Murphy, supra note 63, at 682.

## Conclusion

This article provides one of the first empirical studies of rulemaking petitions from submission to resolution. The analysis reveals a reality that is perhaps simultaneously comforting and disappointing. It is comforting in that, despite petitions presenting a very real opportunity of advancing business and industry capture of regulation, there is little evidence that agencies kowtow to any and every demand that the business world makes in petitions. On the other hand, it is disappointing in that public interest and individual petitions, which are far more pro-regulatory than business and industry petitions, are rarely effective in combatting agency inaction. The model successful petition incrementally amends existing regulations in a deregulatory direction. Although the study could not be extended to environmental petitions due to EPA's failure to keep full records of petitions, the findings from the other agencies with data provide reason to doubt that environmental petitions will ever be the transformative device that scholars and advocates might hope they will be. Overall, the findings suggest that environmental advocates are likely to face an unreceptive audience and an uphill battle at the EPA, especially during the current administration, but also in more ostensibly environmentally friendly administrations. Outsider control of the regulatory agenda appears to be elusiveneither business interests nor more diffuse public interests come close to steering agencies. Formative changes in regulatory policy are far more likely to come from comprehensive legislation or cultural changes in agencies than they are through rulemaking petitions.


[^0]:    * Regulation Fellow, University of Pennsylvania Law School. I thank Cary Coglianese, Susan Yackee, Ryan Owens, Dave Weimer, and Donald Downs for their guidance on this project, Gabe Scheffler and Shana Starobin for their feedback, and Dori Molozonov and Melinda Wang for their helpful research assistance. Finally, I would like to thank the editors of the Harvard Environmental Law Review for their extremely helpful editing on the article.

[^1]:    105. Id. at 226. If this focus on technical adaptation is a common feature of petitions, Reeve Bull's suggestion that rulemaking petitions could serve as a useful structuring device for retrospective rulemaking (i.e., reviewing existing rules and making adjustments or rescinding outdated regulations) makes a good deal of sense. See Reeve T. Bull, Building a Framework for Governance: Retrospective Review and Rulemaking Petitions, 67 Admin. L. Rev. 265 (2015).
    106. Eric Biber \& Berry Brosi, Officious Intermeddlers or Citizen Experts? Petitions and Public Production of Information in Environmental Law, 58 UCLA L. Rev. 321 (2010).
    107. David C. Nixon, Setting the Agenda for Federal Agencies: Rulemaking Petitions at the FCC, 23 Just. Sys. J. 241, 244 (2017).
    108. Id. at 251.
    109. My focus is entirely on general rulemaking petitions. Agencies routinely accept other kinds of petitions, such as petitions for waivers from generally applicable regulations, but much as rulemaking is the most important way that agencies set policy, rulemaking petitions are the most important kind of petitions. See Schwartz \& Revesz, supra note 12, at app. C-3.
    110. Although regulations.gov is, in theory, a central electronic docketing system for all agency activities, including petitions received, it is in practice usually incomplete. An exception is
[^2]:    120. Alliance of Automobile Manufacturers, Petition for Rulemaking to Amend FMVSS No. 208 with Respect to Testing with Child Restraint Systems, at 1 (Apr. 27, 2007), https://per ma.cc/L3M6-GBQD.
    121. Id. at 4.
    122. Id. at 6 .
    123. National Chicken Council, Petition to Establish Regulations for the Labeling and Validated Cooking Instructions for Not-Ready-to-Eat Stuffed Chicken Breast Products That Appear Ready-to-Eat, at 1 (May 24, 2016), https://perma.cc/NMB2-NUME.
[^3]:    125. Coding was based on the lists published in 2017. See Fortune 500, https://perma.ce/ XT69-XSV5; Global Fortune 500, https://perma.cc/A45E-N79K.
    126. General Motors NA, Petition for Rulemaking to Mandate the Installation of Daytime Running Lamps, at 1 (Dec. 20, 2001), https://perma.cc/7Y3J-9Y2T.
[^4]:    127. Again, historical work on petitions in Congress suggests that coalition building and political mobilization was a major purpose of petitioning, see supra notes 83-85 and accompanying text, and there is no reason to think that this purpose has faded away in the context of rulemaking petitions. Interest groups frequently publicize petitions.
[^5]:    128. I also estimated these models as a Heckman selection model, see Francis Vella, Estimating Models with Sample Selection Bias: A Survey, 33 J. Hum. Res. 127 (1998), but the results were substantively similar and diagnostics suggested there was no need to specify a selection model (i.e., the factors that determine responsiveness per se are substantively different from the factors that determine grants). This means there is no real risk that agency tendencies in the response stage are statistically biasing the estimates of the factors that determine grants.
    129. It is worth pausing to note the importance of the fact that agencies generally do individual petitioners the courtesy of officially responding even when they decline to act on a petitioner's request. That is, the data suggest agencies take "the right to be taken seriously" seriously. Weinberg, supra note 83. Social psychological research suggests that, when it comes to the factors that shape citizens' perceptions of government, showing that the government is listening is more important than giving citizens the outcomes they desire. See, e.g., E. Allan Lind \& Tom R. Tyler, The Social Psychology of Procedural Justice 207-08 (1988). The agencies in this study deserve some credit for their special responsiveness to the least powerful players in the process.
[^6]:    130. Again, running these models as a Heckman selection model made no substantive difference. See supra note 128 and accompanying text.
[^7]:    131. Carpenter, supra note 27, at 153-54 (noting that the sine qua non of the "Stiglerian account" of capture is that it "predicts that captured regulation will be stronger in the sense of imposing more rigid and less permeable entry barriers to the market," in effect allowing the industry to use "regulation to form a cartel and restrict supply and/or entry").
[^8]:    137. Finding this result is somewhat surprising, given that courts do review delays in finalizing rules initiated via petition, and may in fact "treat the cessation of a rulemaking with more scrutiny than a straight denial of a petition." Schwartz \& Revesz, supra note 12, at 26.
[^9]:    141. Coglianese \& Walters, supra note 63; West \& Raso, supra note 76.
    142. See supra notes $74-75$ and accompanying text.
    143. West, supra note 70 , at 583.
    144. It is not unimaginable, however, that agencies might encourage parties to petition for certain changes that both the petitioner and the agency are on board with if the agency believes that it needs political and legal cover for its action.
[^10]:    paigns, the individual petitions here are truly individual contributions to the regulatory process, and they are not a negligible fraction of the total petitioning activity.
    150. Justine May, Petition to the National Highway Traffic Safety Administration (Jan. 14, 2000), https://perma.cc/Z2MS-Z3PL.
    151. Id.
    152. NHTSA, Federal Motor Vehicle Safety Standards; Cargo Carrying Capacity 72 Fed. Reg. 68,441 (Dec. 4, 2007) (codified at 49 C.F.R. pt. 571).
    153. In some cases, the agency will open a public comment period on the petition, although it is not required to by the APA. See Schwartz \& Revesz, supra note 12, at 54-55.

