

# **Public Pressure Campaigns and Bureaucratic Policymaking**

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## List of Key Terms

- A **coalition** is a group of people and organizations pursuing the same aims in the same policy fight. Because coordination is difficult to measure, my empirical definition includes individuals and organizations who advocate for the same policy outcomes regardless of overt coordination. A coalition may include organizations lobbying for the same policy outcome for different reasons (e.g., “bootleggers and baptists” coalitions).
- **Going public** describes the choice to pursue an “outside” strategy to influence policy outcomes. It aims to expand the scope of conflict and involve more actors than would be involved if the lobbying organization only employed an “inside” lobbying strategy involving professional policy influencers and focused on the policymakers.
- **Grassroots** and **astroturf** campaigns are both forms of outside lobbying. Grassroots campaigns aim to mobilize individuals based on some pre-existing interest or belief. In contrast, astroturf campaigns aim to create a deceptive appearance of more public support. The people organizing an astroturf campaign are only doing so because they are being paid. Many of the individuals mobilized are often either deceived (e.g., intentionally misled about the policy or its likely effects) or financially incentivized to participate. In the extreme, astroturf campaigns may use the names of fake or non-consenting individuals. In contrast, a more grassroots campaign may also require funding, but groups would choose to use resources for such a campaign even without the quid pro quo. While grassroots campaigns may involve simplification, spin, and even mild deception, it is not decisive for the campaigns ability to mobilize.
- **Lobbying influence** implies a causal effect between an effort to influence policy and a policy outcome.
- **Lobbying success** describes a situation where a group that sought to influence policy got the outcome they sought, without implying a causal relationship between their effort and the policy outcome.

- A **membership organization** is a type of organization formed to serve the interests of a defined membership. Membership organizations may act in the name of their members' narrow material interests or their members' broader visions of the public interest. Some membership organizations are more directly governed by their members than others.
- **Mobilizing groups/organizations** recruit people to take an action (e.g., to sign a petition or submit a public comment).
- An **organization** is usually incorporated as a business, government, or non-profit. Public comments *from* organizations represent the position of the organization as an incorporated entity. I only consider a comment to be on behalf of an organization if the comment text claims to represent the organization. An employee using letterhead is insufficient. Letters from elected officials are only considered to represent their governmental organization (their state, committee, etc.) if they claim to do so *and* are in a position to do so (e.g., a governor or committee chair). Otherwise, I consider elected officials to represent themselves as politicians in a particular political office, not the whole governmental organization.
- A **public interest group** is a type of organization that *primarily* advocates for some vision of the public good, not the private material interest of its owners or members. Policy conflicts may involve competing visions of the public interest and thus multiple public interest group coalitions.
- A **public pressure campaign** is an effort to influence policy by mobilizing a segment of the public to pay attention to the policy process and express their opinions to decision-makers. It can be an astroturf campaign or grass-roots campaign on behalf of public or private interests. Empirically, I focus on public pressure campaigns in public comment periods, often called a “mass commenting campaign.” Comments mobilized by such campaigns are typically form letters and often called “mass comments.” For analytic purposes, I define a mass comment in 2.3.2 as any comment sharing a substantial amount of text with 99 other comments or uploaded in a batch of 100 or more by the same organization.
- **Responsiveness** is observable attention that government officials pay to public input. This can be either substantive policy influence or discursive influence (similar to what Balla et al. (2020) call “procedural responsiveness”).

## **Citations to Primary Documents**

I cite public records, including policy documents and public comments, using government-issued identification numbers. Citations to documents published in the Federal Register include an agency acronym, the year the document was published, and a document number (usually five digits, e.g., “CFPB-2020-14935”). If citing a specific paragraph, the citation will appear as “CFPB-2020-14935/p-134.” Federal Register documents can be accessed by adding “federalregister.gov/d/” before the id number, for example, “federalregister.gov/d/2020-14935/p-134”. Citations to documents posted to regulations.gov begin with a rulemaking docket number, including an agency acronym and the year the rulemaking process officially began, followed by a unique document number (e.g., “IRS-2016-0015-0125”). Regulations.gov documents can be accessed by adding “regulations.gov/document/” before the document id number, for example, “regulations.gov/document/IRS-2016-0015-0125”).

## Introduction

This dissertation is about public pressure campaigns that target U.S. federal agency rulemaking, technocratic policy processes where public participation is usually limited to a few policy insiders but that occasionally explode into the most contentious policy conflicts of our time. I examine who organizes public pressure campaigns and why, whether these campaigns affect congressional oversight, and whether they affect policy. Answering these questions informs our understanding of bureaucratic politics and interest group lobbying, organizing, and mobilizing tactics. At a time when the vast majority of federal policy is made in the bureaucracy, the relationship between citizens and government depends on bureaucratic policymaking. If ordinary people have a voice in bureaucratic policymaking, I argue, it is through public pressure campaigns. The capacities required to influence national-level policy are those of organized groups, not individuals acting alone. Thus, understanding the nature and effects of these campaigns is key to understanding modern democracy.

With the rise of the administrative state, U.S. federal agencies have become a major site of policymaking and political conflict. By some estimates, upward of 90% of legally binding U.S. federal policy is now written by agencies. Agency rules are revised much more frequently than statutory law (Wagner et al., 2017). In the years

or decades between legislative enactments, federal agencies make legally binding rules interpreting and reinterpreting old statutes to address emerging issues and priorities.

Examples are striking: Many effects of the Dodd-Frank Wall Street Reform and Consumer Protection Act were largely unknown until the specific regulations were written, and U.S. policy on banking continues to change as these rules are revised. Congress authorizes billions of dollars in grants, subsidies, and leases for public lands, but who gets these benefits depends on agency policy. In the decades since the last major environmental legislation, agencies have written thousands of pages of new environmental regulations and thousands more changing tack under each new administration.

Agency rules significantly shape lives and fortunes. For example, in 2006, citing the authority of statutes last amended in the 1950s, the Justice Department’s Bureau of Prisons proposed a rule restricting eligibility for parole. In 2016, the Bureau withdrew this rule and announced it would require fewer contracts with prison companies, precipitating a 50% loss of industry stock value. Six months later, a new administration announced these policies would again be reversed, leading to a 130% increase in industry stock value. Agency clearly rulemaking matters.

Less clear, however, is how the new centrality of agency rulemaking fits with democracy. In addition to the bureaucracy’s complex relationships with the president, Congress, and the industries they support and regulate, agencies have complex and poorly understood relationships with the public and advocacy groups. Relationships with constituent groups may even provide agency officials with a degree of “autonomy” from their political principals in Congress (Carpenter, 2001).

Bureaucratic organization is a core feature of nearly all ambitious human projects, including modern democracies. Bureaucracy—and agency rulemaking in particular—

responds to two major challenges faced by large democracies. First, large democracies are vulnerable to the fleeting passions of the mass public. To combat this, many decisions are left to unelected experts who, ideally, exercise judgment loosely guided by the public. Second, not everyone can vote on every policy decision. We thus delegate power to elected representatives (who then delegate it to deputies), create temporary mini-publics, or solicit input from those most affected or moved by a public decision.<sup>1</sup> Most policy in large democracies is thus made by bureaucrats, supposedly guided indirectly through elected representatives and directly by limited public input.

While bureaucracies address both problems—they institutionalize expert counterweights to mass politics and make larger volumes of policy than any plebiscite could—they do not resolve them. Both problems persist in bureaucratic policymaking. Using bureaucracy to address problems as diverse resisting populism and ensuring representation creates contradictions in the tasks assigned to government officials (Wilson, 1989). Bureaucracies are run by experts who are often embedded in professional networks (Carpenter, 2001, 2014). At the same time, officials are deputized by and thus accountable to elected officials. Moreover, many bureaucracies also have procedures that create opportunities for public input. The result is the famous “Bureaucracy Problem” (Wilson, 1967); it is far from clear how bureaucratic decisions are to balance expertise, accountability to elected officials, and responsiveness to public input in policymaking.

Participatory processes like public comment periods, where government agencies must solicit public input on draft policies, highlight the tensions of bureaucratic pol-

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<sup>1</sup>As imagined by Dahl (1989), mini-publics are deliberative and representative bodies of individuals selected at random. Besides juries, however, randomly selected deliberative bodies are rare. Instead, citizens more often engage in government decisions when given opportunities to opt-in, such as hearings, petitions, and public comment periods. These mechanisms of civic engagement generate a different, more contentious flavor of public input than the discourse imagined by scholars who focus on deliberation.

icymaking in a democracy. Comment periods are said to provide political oversight opportunities (Balla, 1998; McCubbins and Schwartz, 1984), democratic legitimacy (Croley, 2003; Rosenbloom, 2003), and new forms of expertise and technical information (Yackee, 2006; Nelson and Yackee, 2012; Wagner, 2010).

Activists, politicians, and the press often discuss comments periods as if they were an inherently majoritarian or pluralist institution. After one particularly controversial policy battle, coverage in the New York Times reporters wrote that “The purpose of the public comment period was to objectively gauge Americans sentiment before changing a policy that could profoundly affect their lives.” It is clear that rulemaking profoundly affects lives. The extent to which public comment periods gauge public sentiment is much less clear. Of the thousands of policies that government institutions make each year, direct public input tends to be limited to only the most contentious policy debates. Even elected officials in positions to oversee bureaucratic policymaking infrequently play any role in bureaucratic policymaking. While recent scholarship on agency policymaking has shed light on the sophisticated lobbying by businesses and political insiders (Yackee and Yackee, 2006), we know surprisingly little about the vast majority of public comments, which are submitted by ordinary people as part of public pressure campaigns.

Activists frequently target agency policymaking with letter-writing campaigns, petitions, protests, and by mobilizing people to attend hearings, all classic examples of “civic engagement” (Verba and Nie, 1987). As I show in 2.4, most comments submitted to regulations.gov are form letters, more akin to petition signatures than sophisticated lobbying. Indeed, approximately 40 million out of 50 million (80%) of these public comments were mobilized by just 100 advocacy organizations. Yet civic engagement remains poorly understood in the context of bureaucratic policymaking.

The occasional bursts of civic engagement in bureaucratic policymaking that public pressure campaigns generate raise practical and theoretical questions for the practice of democracy. These practical and theoretical questions hinge on unanswered empirical questions: Who is behind these campaigns? Do they affect policy? If so, by what mechanisms? Existing research finds that commenters believe their comments matter (Yackee, 2015) and that the number of public comments varies across agencies and policy processes (Moore, 2017).

In particular, scholars have found that mass comment campaigns drive significant participation of ordinary people in Environmental Protection Agency rulemaking (Potter, 2017a; Balla et al., 2018). Cuéllar (2005), examining public input in three rulemaking processes, finds that members of the lay public, not professional policy influencers, made up the majority of commenters, demonstrating “demand among the mass public for a seat at the table in the regulatory process.” Yet, the relationship between the scale of public engagement and policy change remains untested. Indeed, we have much to understand about the causes and effects of public pressure campaigns before we are in a position to ask if they are a mechanism for groups to influence policy. Most critically, we must understand who mobilizes public pressure campaigns and why.

Leading models of influence in bureaucratic policymaking focus on two key political forces: sophisticated interest group lobbying and political constraints from Congress and courts. As bureaucrats learn about policy problems and balance interest-group demands, public comment processes allow lobbying organizations to provide useful technical information and inform decision-makers of their preferences on draft policies. Agencies may then update policy positions within constraints imposed by their political principals.

While this may describe most cases of bureaucratic policymaking, these models neither explain nor account for the contentious politics that occasionally inspire millions of ordinary people to respond to calls for public input on draft agency policies. Political scientists have largely ignored mass engagement in bureaucratic policymaking, leaving a weak empirical base for normative and prescriptive work. Like other forms of mass political participation, such as protests and letter-writing campaigns, mass public comments on draft agency rules provide no new technical information. Nor do they wield any formal authority to reward or sanction bureaucrats, as comments from members of Congress might. The number on each side, be it ten or ten million, has no legal import for an agency's response.

How, if at all, should scholars incorporate mass engagement into models of bureaucratic policymaking?

I take up a part of this question in each of the following chapters. Each draws on different kinds of literature to better understand bureaucratic policymaking. Chapter 1 brings in the literature on public opinion and the attention of parties to different issues over time, setting pressure campaigns aside and zooming out to the broadest relationships between mass politics and policy outputs. Chapter 2 brings the focus to specific policy fights, integrating literature on interest-group mobilization and bureaucratic politics to understand why public pressure campaigns target agencies in the first place. Chapter 3 focuses squarely on the classic bureaucratic politics question of interest group influence in policymaking but expanded to account for public pressure campaigns. Chapter ?? then zooms out again, this time bringing in the literature on social movement pressure to show that pressure campaigns are more than a lobbying tactic; they are also an institutionalized form of contentious politics. These chapters address the literature on public opinion, party politics, interest groups, lobbying, and

social movements in turn.

The theories about the drivers of public participation and the mechanisms by which it may affect policy that I advance and test in the following chapters may apply to many contexts where public pressure is aimed at decision-makers. My empirical terrain, however, is policymaking by U.S. federal agencies, specifically the process of “notice-and-comment” rulemaking prescribed in the Administrative Procedure Act (APA). The APA governs the process by which federal agencies develop and issue legally binding policies. It requires agencies to publish proposed (draft) and final policies (rules) in the Federal Register and provide opportunities for the public to comment on draft rules. The legal requirements of the APA impose a great deal of structure on the politics of rulemaking, making it well-suited for quantitative study Carpenter et al. (2020). At the same time, APA requirements have created an extremely legalistic and technocratic form of discourse, leading scholarship on rulemaking to be dominated by legal scholars.

### **Administrative Law Scholarship**

In contrast to political scientists, legal scholars have long debated what to make of mass commenting in rulemaking. In 2018, the Administrative Conference of the United States (ACUS) identified public pressure campaigns (“mass commenting”) as a top issue in administrative law. In their report to ACUS, Sant’Ambrogio and Staszewski (2018) conclude,

“The ‘mass comments’ occasionally submitted in great volume in highly salient rulemakings are one of the more vexing challenges facing agencies in recent years. Mass comments are typically the result of orchestrated campaigns by advocacy groups to persuade members or other like-minded

individuals to express support for or opposition to an agency’s proposed rule.”

Most administrative law scholars focus on reforms to help agencies collect more useful information (Farina et al., 2011; Farina, Newhart and Heidt, 2014; Rauch, 2016). The ACUS report “explores agency strategies to enhance public engagement prior to and during informal rulemaking. It seeks to ensure that agencies invest resources in a way that maximizes the probability that rulewriters obtain high-quality public information.” Among other things, this committee is debating how best to gather “quality public information,” how “to get new people/groups into the real or virtual room” (Farina, 2018), and whether broad engagement is even desirable on all rules (White, 2018).

Administrative law scholars have explored these questions theoretically for decades, but only a few offer empirical analysis. Mendelson (2011) finds that agencies often discard non-technical comments but argues that they should be given more weight. Others worry that mass commenting distracts agencies from good policy and the broader public interest (Coglianese, 2006). Farina et al. (2012, p. 112) claim that “[Mass] comments typically are neither factually informative nor reliable indicators of citizens’ informed value preferences.” Some even call them “spam” (Balla et al., 2018; Noveck, 2004). In this prevailing view, “high-quality” and “relevant” mean novel technical information, not opinions. Herz (2016, p. 208) concludes “The goal of e-rulemaking is to more fully capture such credible, specific, and relevant information, not to solicit the views of random, self-nominating members of the public.” Similarly, Epstein, Heidt and Farina (2014, p. 4) dismiss mass comments as “effectively, votes rather than informational or analytical contributions. Rulemaking agencies are legally required to make policy decisions based on fact-based, reasoned

analysis rather than majority sentiment; hence, even hundreds of thousands of such comments have little value in the rulemaking process.” Notably, the ACUS draft recommendations on “Mass and Fake Comments in Agency Rulemaking” suggests that “effective comments” give “reasons rather than just reactions” (ACUS, 2018, p. 33). If true, most public reactions to proposed rules, such as those expressed in the mass comments generated by public pressure campaigns, would not affect rulemaking.

Early optimism among legal scholars that the internet would “change everything” (Johnson, 1998) and that “cyberdemocracy” would enable more deliberative rulemaking has faded. While commenting and mobilizing others to comment has become easier, Coglianese (2006) concludes that little else has changed. Predictions by Sunstein (2001) and others that the internet would primarily facilitate more of the same kind of engagement among the like-minded (i.e. mass-commenting) has largely been correct. In this sense, the “quality” of discourse has not improved.

Even scholars who suggest reforms aimed at “regulatory democracy” aim to increase the “sophistication” of ordinary peoples’ comments (e.g., Cuéllar, 2005; Johnson, 2013). For example, Noveck (2004) is critical of “notice and spam,” arguing instead for “participative practices—methods for ‘doing democracy’ that build the skills and capacity necessary for citizens, experts, and organizations to speak and to be heard. Rulemaking, after all, is a communicative process involving a dialogue between regulators and those affected by regulation” (Noveck, 2005, pg. 3). These reformers see mass expressions of opinion as worse than unhelpful. They argue that we need better, more sophisticated citizens to engage in informed discourse that tells policymakers things they do not already know.

This scholarship has improved the theory and practice of policy learning in bureaucratic policymaking. But a focus on sophisticated deliberation and technical

information overlooks the potential role of political information—information about the political context in which policymakers make decisions.<sup>2</sup> Whereas administrative law scholars have focused on “how technology can connect the expertise of the many to the power of the few” (Noveck, 2009), I ask whether it may also connect the power of the many to the decisions of the few.

## Outline of the book

In Chapters 2-??, I develop and test theories about the roles of individuals, organizations, coalitions, and social movements in bureaucratic policymaking. Chapter 1 first introduces the scale of policymaking and the types of policies that federal agencies make, examining how patterns in bureaucratic policymaking do and do not align with shifts in the broader political system. Chapter 5 concludes with remarks about the implications for my analysis for ongoing debates over potential reforms to the policy process.

Chapter 1, “Bureaucratic Policymaking in American Politics,” situates agency rulemaking in the context of the broad view of American politics. Tracing broad trends over the past 40 years, I show that rulemaking has become a major site of policymaking and political conflict.

Chapter 2, “Why Do Agencies (Sometimes) Get So Much Mail?” addresses who participates in public pressure campaigns and why. Are public pressure campaigns, like other lobbying tactics, primarily used by well-resourced groups to create an “astroturf” impression of public support? Or are they better understood as conflict expansion tactics used by less-resourced “grassroots” groups? I find that mass com-

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<sup>2</sup>But see insights from Golden (1998), Nelson and Yackee (2012), Rauch (2016), and Potter (2017a) on political information, Cuéllar (2005) on participation and voice, and Reich (1966) and Seifter (2016) on representation, which I review in 2.2.

ment campaigns are almost always a conflict expansion tactic. Furthermore, I find no evidence of negativity bias in public comments. While most comments opposed proposed rules during the Trump administration, most comments supported proposed rules during the Obama administration. This is because public comments tend to support Democratic policies and oppose Republican policies, reflecting the asymmetry in mobilizing groups.

Chapter 3, “Do Public Pressure Campaigns Influence Policy?” leverages a mix of hand-coding and computational text analysis methods to assess whether public pressure campaigns increase lobbying success. To measure lobbying success, I develop computational methods to identify lobbying coalitions and estimate their effect on each rule posted for comment on regulations.gov. I then validate these methods against a random sample of rules, hand-coded for whether each lobbying coalition got the policy outcome they sought. Finally, I assess potential mechanisms by which mass public engagement may affect policy. I focus on congressional oversight as a mediator in policy influence, i.e., the extent to which public pressure campaigns affect policy indirectly through their effects on legislators’ oversight behaviors. I find that public pressure campaigns are correlated with congressional attention but have little relationship with policy outcomes.

Chapter 4, “The Environmental Justice Movement and Bureaucratic Policymaking,” examines the discursive effects of environmental justice claims both qualitatively and quantitatively. I write about the role of Native activists and environmental groups in shaping federal environmental regulations. I find that agencies are more likely to add language addressing environmental justice in their final rules when public comments raise environmental justice concerns.

Chapter 5, “Reforming the Policy Process,” reviews dominant ways of thinking

about public comment periods and proposed reforms to participatory processes in light of the empirical evidence in the previous chapters. I start with a sketch of the various positions staked out by administrative law scholars, each rooted in different theories of democracy. I then review several specific challenges and proposed reforms to the policy process.

— 1 —

## Bureaucratic Policymaking in American Politics

### 1.1 Introduction

Do the issues that dominate political discourse translate into actual policy? To the extent that broad theories of American politics go beyond elections and attempt to explain the resulting policies, they generally focus on landmark legislation and items at the top of presidential agendas. Yet as the administrative state and our understanding of it have grown, political scientists are increasingly paying attention to policy outputs, both for their own sake and how policy outputs shape politics.

Agency rules and regulations are where the rubber hits the road for both legislation and presidential agendas (Yackee and Yackee, 2009b). Ninety percent of U.S. law is now written by agencies rather than Congress (West and Raso, 2013), and the real impact of most new statutes and executive orders is largely unknown until the ink is dry on the agency rules and regulations that implement them. Legally binding regulations give specific meaning and force to legislation and presidential agendas.

As the substantive outputs of policy processes, if changes in public attention or opinion and elected leaders' priorities matter for policy, we would expect to see these

changes borne out in the number and type of agency rules published. Changes in outputs may reflect changes in the substantive inputs—“issue structure” and policy agendas—or changes in how issues are filtered and activated by the institutional structures of policymaking.

This chapter martials data on federal agency policymaking from 1981 to 2018 to sketch broad trends in federal policymaking. Broad theories of American politics suggest three types of predictions: (1) patterns in the substantive issues addressed by policy, (2) patterns in the relationship between partisan control and issue attention, and (3) patterns in the pace of policy change. The systematic data on agency rulemaking that I introduce here permit us to assess the extent to which broad theories of American politics align with the substance, volume, and timing of policy outputs.

This exercise has two purposes. First, I introduce a large dataset on federal policymaking and situate these data in the broader context of American politics. These policies (federal agency rules) and their potential to change are the contexts for the political dynamics that I explore in Chapter 2 and the dependent variable for Chapter 3. Thus, this chapter helps to show patterns of variation in the dependent variable (policy change) and puts it in a context broader than bureaucratic politics.

Second, I contrast the hard data with broad political science theories. This assessment is descriptive and intended to be provocative—an attempt to stretch the conceptual ground of theories of American politics to include a large volume of often-neglected policy outcomes. The extent to which the match between theory and data is unsatisfying may point toward opportunities for theorizing, a narrow portion of which I take up in the following chapters that focus squarely on expanding theories of bureaucratic policymaking.

My aim is to compare research on the social structure and political behavior of

the American public and political elites with what government actually does. Agency rulemaking is driven in part by laws passed by Congress and in part by the president's agenda. Discrepancies may indicate either a true disconnect between electoral politics and executive action or that executive policymaking was constrained by other political forces. This chapter's brief sketch of possible alignments and disconnects between theories of mass and party politics and bureaucratic politics aims to call scholars of public opinion and party politics to see rulemaking as a relevant dependent variable. Likewise, it is a call for bureaucratic politics scholars to consider how mass politics and social movements may impact the policy outcomes we study.

Connecting broad theories of the American political landscape to the nuanced daily actions of government is not easy. I focus on relatively fine-grain policy outputs, draft and final rules published by agencies in the Federal Register and reported to the Office of Information and Regulatory Affairs. This approach has the advantage of capturing the making of law as it is, not how it is framed by elites or thought of by the electorate. The disadvantage is its distance from policy inputs. While public opinion and attention can be studied with surveys and connected to voting patterns, it is much more difficult to say how they affect the lawyers sitting at desks in the federal bureaucracy writing the minutiae of the law. The subsequent chapters of this dissertation take up the task of more directly linking policy change to public attention and expressed opinion through public pressure campaigns, congressional oversight, and social movements.

## 1.2 Theory

There are many causal pathways between public opinion or attention and policy outcomes. Most are long and complex. Before exploring the extent to which these

shifts observed in public opinion polls and party agendas show up in policy outputs, I briefly review what we know about the pathways by which this may or may not occur.

### 1.2.1 Party Control and Policy Issues

The role that parties play in the making of regulations is unclear. Parties may have the greatest effect on agency rules through presidential platforms and agendas (Yackee and Yackee, 2009*b*). Still, partisan control of Congress also matters (Yackee and Yackee, 2009*a*), especially when Congress is making policy (West and Raso, 2013) or when agencies fear that a hostile Congress will override their policy decisions (Potter, 2017*b*). We may think of agency policymaking as consistently affected by presidential agendas, with Congress providing shocks and constraints.

Concerning the anticipated level of attention paid to different policy areas, theories of American politics that focus on policy substance can be lumped into two types: (1) those that generally predict that both parties pay attention to the same issues at the same time (theories of partisan alignment (e.g., Sundquist) and (2) those that generally predict that parties pay attention to different issues (including both theories of party ideologies (Gerring, 1998) and theories of party coalitions (Schlozman, 2015)).

These two types of theories generate broadly contrasting predictions about what we expect the government to do under various configurations of party control.

If partisan alignment theories explain variation in agency rulemaking, we would expect to see agency policymaking dominated by the same major issues of the day under both parties. Parties may have opposite positions on these issues leading the agencies to be pulled in opposite directions by political leaders, but each agency's set of dominant policy issues demanding attention will remain largely the same. Indeed,

the push and pull should lead to sustained high volumes of policy, as each new presidential administration and Congress reverse policies made by their predators or by other branches. Occasionally, an agency with somewhat overlapping authority may be given control of a program taken from an adjacent agency. For example, Carpenter (2001) documents how the Forest Service was relocated from the Department of Agriculture to the Department of the Interior. Nevertheless, the level of attention and volume of policymaking across broad policy areas should be relatively similar under both parties.

In contrast, if theories of party ideologies and party coalitions explain variation in agency policymaking, party control should greatly affect which issues get attention the issues. Thus, partisan control should have a much larger effect on which agencies are making more policy. This may occur through positive agenda control that the president has to direct agency policymaking or negative agenda control through the Office of Information and Regulatory Affairs review (Haeder and Yackee, 2015; Potter, 2017b). Negative agenda control is likely to dominate in Congress (Cox and McCubbins, 2005; Lowande and Potter, 2021), but the threat of Congressional action may be sufficient to influence agency policymaking (Potter, 2017b).

#### *1.2.1.1 The Implications of Partisan Alignment*

Partisan alignment theories necessarily identify dominant issue dimensions where each party is doing the opposite of the other. In Sundquist's model, realignment can occur slowly or rapidly, whereas Manza and Brooks emphasize how social structures, and thus issues, change slowly. However, almost all prominent alignment theories identify 1980 through 2020 as one period (indeed, most see 1936 as the critical election that has oriented the modern era). Thus instead of engaging realignment theories on the

issue of realignment, I draw on them for the issues that they claim constitute the dimension of the current alignment. By these theories, the dimensions of substantive conflict and thus the distribution of agency policymaking should be relatively stable over the period I consider here.

Realignment theories suggest that certain policy areas consistently dominate all others and, while the direction of policy will likely change, the issues will vary little with changes in partisan control. Presidential transitions may be marked by withdrawal or reversal of policies made under the previous administration, and Congress may overturn agency rules. Still, the relevant agencies will be the same, generally those dealing with social welfare.

#### *1.2.1.2 The Implications of Issue Ownership and Party Coalitions*

The second type of theory about the effects of party control focuses on the differences of party ideologies, and its predictions are less clear. Gerring (1998) identifies distinct and consistent ideologies in both parties. Rather than a dominant dimension of conflict where parties respond to each other (as in alignment theories) or an underlying dimension of issue structure (e.g., Claggett and Shafer, 2010), for Gerring, party ideologies are the policy agendas of party elites. “Party constituencies were generally conservative forces, whereas party elites were the agents of change” (Gerring, 1998, pg. 272).

In the current era, Gerring argues, Republicans are driven by Neoliberalism and Democrats by Universalism. Like others, Gerring sees social values (behavioral norms) playing a prominent role in Republican policy agendas from 1980 to when the book was published in 1996 (see pg. 277). Yet, he argues, the platform’s core was neoliberal opposition to the welfare state and promotion of less regulated markets. In

contrast, the Democratic platform in this period consistently emphasized broad unifying issues like Medicare and education. Grossmann, Mahmood and Isaac (2021) reach a similar conclusion: The Republican Party represents business interests while the Democratic Party represents middle-class opinions and advocacy groups. Theories of party ideologies and coalitions offer concrete predictions about the policy areas likely to receive attention under Democrats than Republicans.

Under theories emphasizing party ideologies and interests, the volume of policymaking at different agencies would often change substantially when a different party captures the presidency. Specifically, if Gerring (1998) correctly identified the party ideologies of the current era, we would expect significantly more civil rights and welfare policymaking under Democratic administrations and more neoliberal economic policy under Republican administrations, especially when presidents' co-partisans have majorities in Congress. Gerring's distinction between Democrats' statism and Republicans' anti-statism may also suggest more rulemaking overall in Democrat administrations.

Theories that focus on interest groups and coalitions also suggest that issues will vary with party control. If parties contain coalitions of intense policy demanders (Cohen et al., 2008; DiSalvo, 2012), the issues to which they attend will reflect these different coalitions. Disalvo shares Gerring's conclusion regarding the anti-statism of the Republican party. Most clearly, Schlozman (2015) links Democratic politics and labor groups. While Schlozman emphasizes that labor groups frequently fall short of their goals within the Democratic coalition, no other group is a stronger anchor. We thus expect much more labor policy (e.g., from the Department of Labor) under Democratic administrations. As the interest groups Schlozman identifies, anchoring the Republican party are focused on behavioral norms. Because policy governing

behavioral norms is less concentrated in certain agencies, we are less able to speculate on which agencies should do more policymaking under each party. Again, a president having co-partisans in Congress ought to increase these effects.

The theories discussed above all emphasize party difference, either on ideology (on the same issues for Sundquist, on different issues for Gerring) or anchoring interests. However, the observable implications are different for patterns of bureaucratic policymaking we should find. If party alignment theories explain policy outputs, the volume of agency rules will concentrate on the same salient issues and agencies, even as parties change. Here policymaking for both parties is driven by issues of the day and party conflict on these salient issues. In contrast, if issue ownership and party coalition theories explain policy outputs, the volume of agency rules at different agencies should vary by partisan control.

This is because party leaders care about and “own” different issues and constituencies that should lead them to emphasize different policy areas, not simply reversing course on the same policy area. Specifically, Democrats should emphasize labor policy (Schlozman, 2015), civil rights, and welfare policy more than Republicans. Republicans may emphasize market-making institutions.

### **1.2.2 Policymaking and Policy Outcomes On Different Issues**

While many theories of mass and party politics have implications for bureaucratic policymaking, many consider the period covered by my data (1980 to 2020) to be one period and thus do not offer predictions about variation in agency policymaking over this time period. However, Shafer (2016) observes two different patterns of congressional policymaking during this period: first, a pattern of consistent major policymaking prior to 1992 and then a pattern of punctuated equilibrium after 1992. To

the extent that congressional policymaking drives rulemaking, such patterns of policymaking should be visible in patterns of rulemaking as well. Importantly, Shafer (2016) does not only consider landmark policies as patterns of policymaking. The “Era of Divided Government” (1969-1992) saw a steady flow of major policies, especially regarding the economy and the environment, and was dominated by social welfare and cultural values and cross-partisan coalitions, suggesting that the volume of policy outputs should be concentrated on social policy and civil rights and be fairly consistent across configurations of party control.

In contrast, the “Era of Partisan Volatility” (1992 through the present) is characterized by periods of policy stability and punctuation.

This chapter aims to assess the extent to which patterns of agency policymaking fit these patterns.<sup>1</sup> Schafer characterizes this era by long stretches of policy stasis punctuated by spikes of activity. If these broad patterns in congressional policymaking explain policy outputs in bureaucratic policymaking, we would expect to see a similar pattern of lulls and spikes in rulemaking. Furthermore, party control may lead to different types of policymaking moving together depending on partisan control. The observation of punctuated equilibrium in legislative policymaking could also suggest a pattern where, in the absence of new legislation, the president may have a larger effect over patterns of agency rulemaking.

Scholarship thus gives us predictions regarding the issues that dominate American politics and how party control will affect the translation of issues into policy. However, the two-fold space for disagreement raises a problem for studying policy outputs in the present analysis. If we do not see policymaking on an issue, it could be evidence that

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<sup>1</sup>Shafer is clear that his periods are characterized by their policy process, not policy outputs. Nevertheless, given a certain intersection of dominant issues and type of policy process, we may expect to see a pattern of policy outputs.

the issue was not as important as claimed or that the party in power deemphasized it. Only by assuming a certain issue structure or a certain theory of party effects could we say that an absence of policymaking supports one perspective or another regarding issues or institutional structure. The evidence is sufficient, however, to rule out some explanations. The remainder of the chapter focuses on consistencies and inconstancies between the evidence and theories.

### **1.2.3 Observed Patterns in Policy Issues**

Mayhew (2000) argues that the policy issues driving American politics vary over time. Drawing on public opinion polls and presidential platforms, Claggett and Shafer (2010) distinguish four broad categories of political issues: welfare, international relations, civil rights, and cultural issues. These categories are constructed to have policy-relevant content. Still, they do not perfectly align with how the government is organized, limiting our ability to categorize agency rules by their conceptual scheme. Nevertheless, their findings regarding the issue structure of American politics have observable implications for the quantity and substance of federal rulemaking. I elaborate on these implications and then contrast them with rulemaking data in the following sections.

Claggett and Shafer (2010) find that National Security was a major issue in 1984 but then faded until it emerged as the dominant issue of the 2004 election. Regarding their relationship with partisan control of the government, opinions on Foreign Engagement reversed the direction of correlation with presidential vote choice, suggesting that the first Bush and Clinton administrations may be more similar in their attention to foreign policy than the second Bush administration.

Welfare was also a top issue in 1984 but continued to be salient and the dominant

issue in several subsequent elections. If politics affects the volume of policymaking, agency policymaking (e.g., the number of agency rules) should reflect this finding that social welfare is a major feature of American politics (Sundquist, 1973; Claggett and Shafer, 2010). Claggett and Shafer (2010) found civil rights to be mildly salient in 1988, 1992, and 2000 but not elsewhere.

In sum, if the issue structure of politics shapes policy, past scholarship suggests that social welfare should be the leading policy type over all periods and for both parties. Social welfare is identified as a dominant dimension of party alignment and issue structure in public opinion.

### 1.3 Data

To examine patterns in rulemaking across the federal government over multiple administrations, I compiled data from two sources published by the White House Office of Information and Regulatory Affairs (OIRA). Since the Reagan administration, agencies have been required to report their rulemaking activities for semi-annual publication in the Unified Agenda of Regulatory and Deregulatory Actions. Separately, OIRA issues annual reports from the Office of Management and Budget (OMB) regarding the rules it has reviewed. OMB only reviews significant rulemakings (generally those with significant economic impact or affecting other areas of government), but I use their data to correct reporting errors and gaps in the Unified Agenda, ensuring that at least significant rules are included and correctly dated. Together these sources yield a dataset of 61,971 unique rulemaking projects as identified by a Regulation Identification Number (RIN). RINs allow me to track a rule from the publication of a draft to the eventual publication of a final rule (or withdrawal).

Regulation Identification Numbers are allocated by the agency. I use this to dis-

aggregate the OIRA reports by policy area. I generally followed the policy areas identified by the Policy Agendas Project (Baumgartner and Jones, 1993). The first two numbers of a RIN generally signify the department, and the next two, the bureau within the department. Many issue areas, like welfare and foreign affairs, cross multiple entire departments while others, like civil rights, are the domain of only a few sub-bureaus.

These data reflect the magnitude of different types of policymaking but not the direction. As the name suggests, many rules may be reversing a previous rule. However, it does indicate that attention and resources are being devoted to the policy area and thus that it is a salient issue for policymakers. Whether these policy issues align with the issues that are salient to the mass public and political elites is the subject of the present investigation.

## 1.4 Methods

To assess the relationship between partisan control and rulemaking outcomes, I visually present a count of the number of proposed and rules alongside a plot of partisan control. The top part of Figure 1.1 shows the approximate number of rules proposed, published, and withdrawn each year by Regulation ID Number.<sup>2</sup> The number of Final Rules is greater than the number of proposed rules for several reasons. First, there is selection bias in what is reported to OIRA. Some rules are only deemed significant after the proposed rule has been revised. Finally, some rules are published without a draft being published—often as an Interim Final Rule. Interim Final Rules are counted as Final Rules because they similarly reflect an agency’s policy priorities and

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<sup>2</sup>Most rules spend several years as proposed rules and are thus counted more than once in this plot.

efforts. The bottom half shows partisan control of the presidency and each chamber of Congress over the same time period.

Figure 1.1 shows the level of rulemaking activity over time. Rules are tallied by year (the x-axis). The y-axis is the total number of published or withdrawn rules as reported in the Unified Agenda or by OIRA. There are between approximately 1500 and 4000 rulemaking projects across the federal government each year. While there is significant variation, the overall average is neither increasing nor decreasing dramatically. Several years are affected by data that is either missing (the 2004 data file is corrupted) or influenced by changes in reporting requirements (1994), but these figures still reveal broad trends in policymaking.

On net, there is little relationship with partisan control. However, there are notable spikes in rule withdrawal in 2001 and 2007 as new Republican presidents came in. Interestingly, there is no comparable spike in withdrawals when the Obama administration came in.

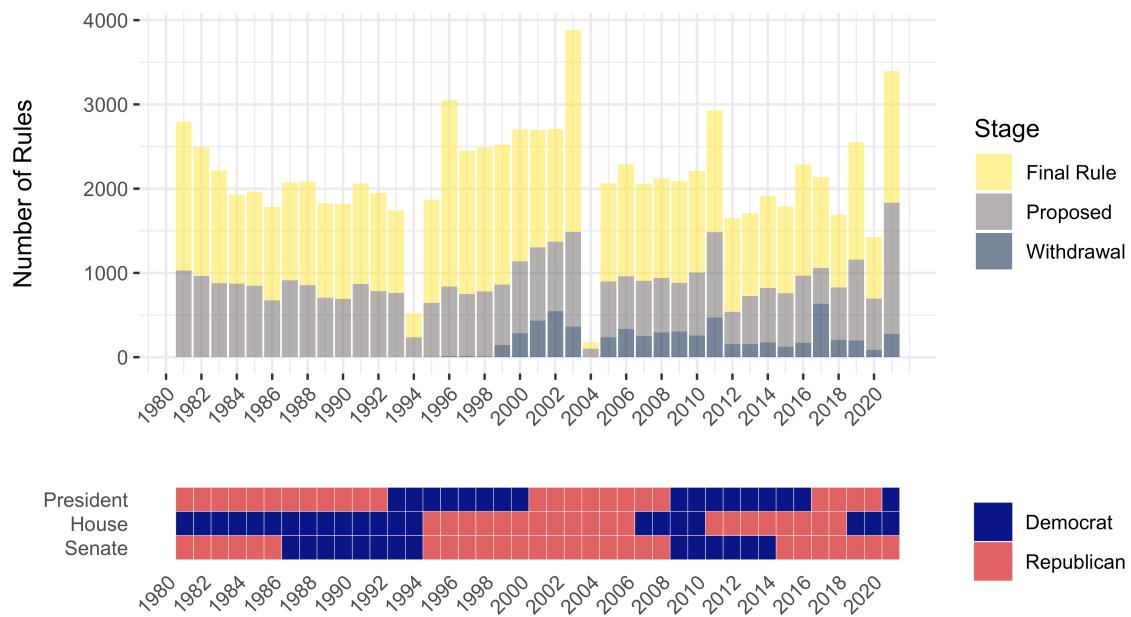


Figure 1.1: Number of Final Rules Published and Withdrawn per Year

There is a stark increase in the number of rules being withdrawn across policy areas, beginning with the election of George W. Bush and continuing into the Obama and Trump administrations. Withdrawals may indicate that the draft regulations started by the previous administration are being canceled, that new legislation is passed. In these data, however, this sudden change is simply the beginning of a more systematic practice of reporting withdrawals.

Two notes are important for interpreting these figures. First, in 1994, President Clinton issued an executive order making only significant rules subject to OIRA review. Unfortunately, this coincides with the dramatic 1994 election that broke Democratic control of Congress, so inferences about this time are limited. It may be safest to assume that any dip in policymaking around 1994 is an artifact of this executive order and the increase in rules omitted from OIRA data. Second, we should be especially cautious in making inferences from the first years that agencies were

required to report these data as they may have been inconsistent. Thus, it is safest to look at the period after 1985.

## 1.5 Policy Substance in Regulations

This section presents selected figures and commentary on the extent to which patterns observed in rulemaking fit or conflict with those observed elsewhere in the American political system.

### 1.5.1 Social Policy, Economic Policy, and Foreign Policy

I start with the broadest categorizations in the literature: social policy and economic policy. My social policy category (the upper plot in Figure 1.2) is not equivalent to “social issues,” as described by Carmines, Ensley and Wagner (2011). Social policy is also broader than welfare. I include not only Medicare, Medicaid, Social Security, and food and housing assistance but also public education, labor, and civil rights. More specifically, I combine the departments of Education, Health and Human Services, Labor, Veterans Affairs, and Justice, as well as the Social Security Administration, Centers for Medicare and Medicaid, and a variety of other departments dealing with health, poverty, and civil rights. My economic policy category (the lower plot in Figure 1.2) includes the Departments of Commerce, Treasury, Energy, Transportation, Agriculture, and Interior.

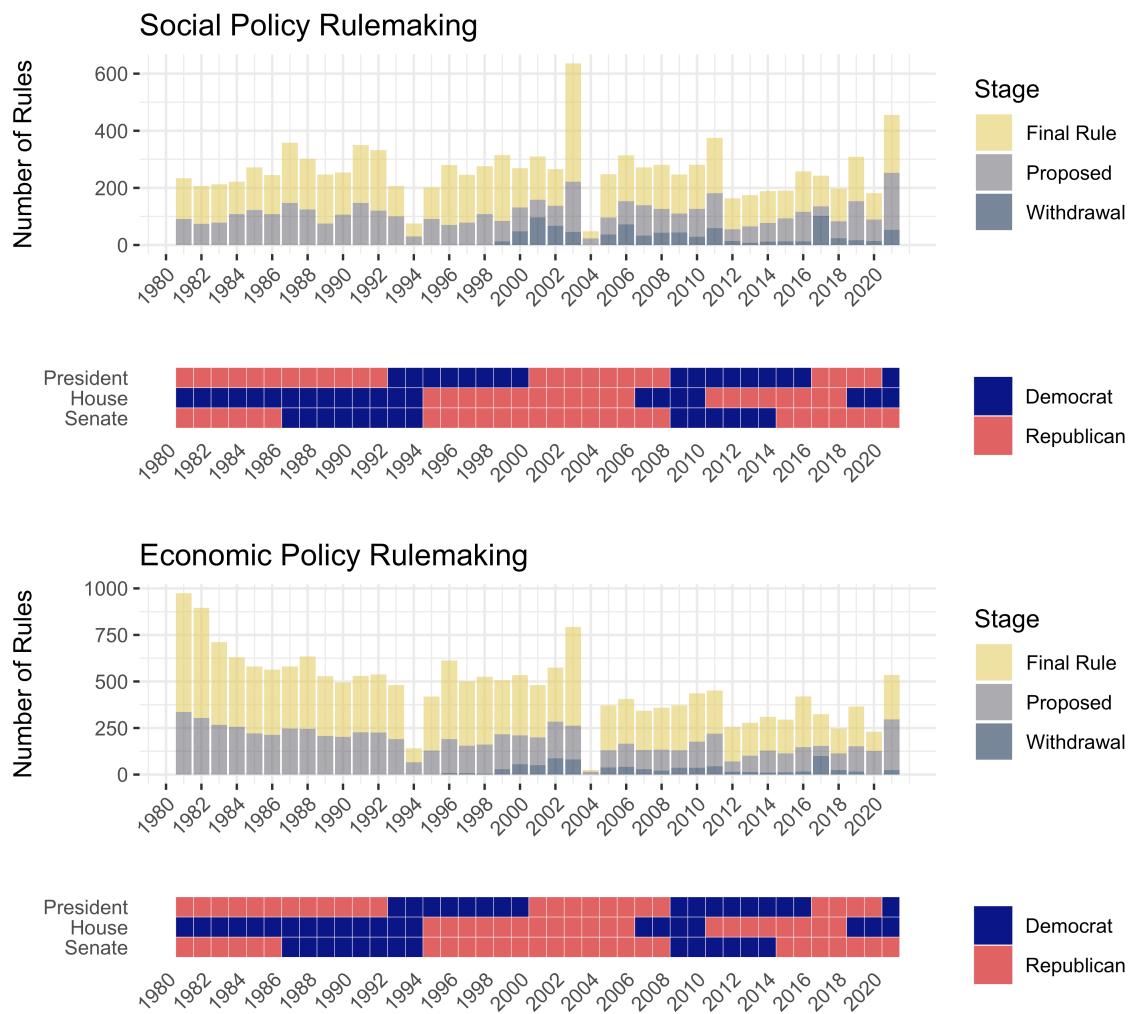


Figure 1.2: Social and Economic Policy Final Rules Published per Year 1981-2018

Figure 1.2 does not offer clear evidence that Democrats and Republicans differ in their relative emphasis on these two broad categories. The volume of economic policy has steadily declined with spikes in 2003 and 2021, while social policy has remained more level, with spikes in 2003, 2011, and 2021. Presidents Reagan, G.W. Bush, and Obama all appear to have made more economic policy in their first term than in their second.

Social policy will be disaggregated to more specifically consider welfare, labor, and civil rights policymaking in the subsections below.

### 1.5.2 Labor and Welfare

A connection between labor policy and the Democratic party (Schlozman, 2015) is not obvious in the volume of Department of Labor regulations in Figure ???. The most notable features are marked pulses of rule withdrawals in 2001 and 2017 when Republican Presidents took office. There are smaller bumps in rule withdrawals in 2009 and 2021 when democratic presidents took office.

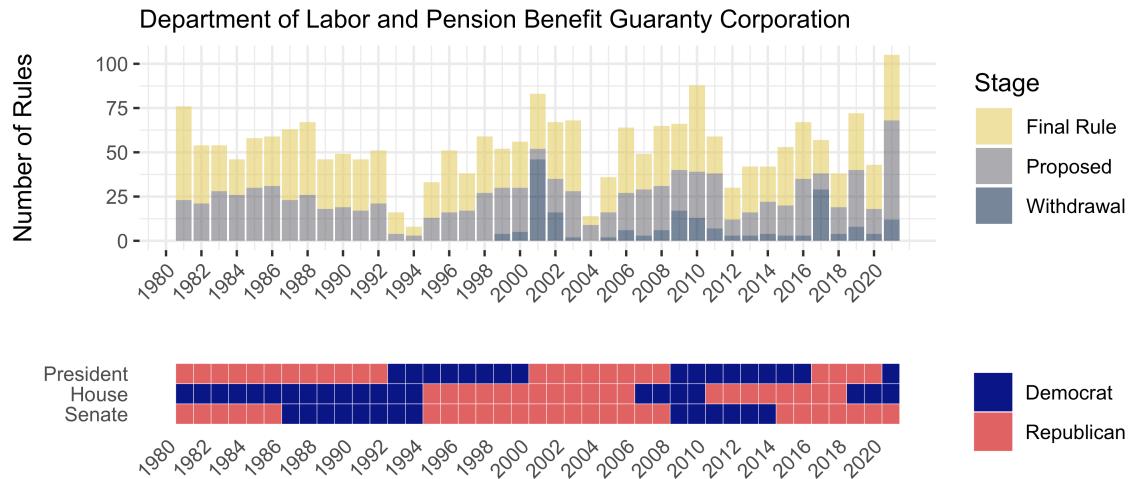


Figure 1.3: Labor Policy Final Rules Published per Year, 1981-2018

Clear peaks in welfare rulemaking (Led by Department of Health and Human Services agencies that administer Social Security, Medicare, and Medicaid) reflect the policymaking after the 2003 Medicare Modernization Act and the 2010 Affordable Care Act. The histogram in Figure 1.4 suggests that policymaking both increased and became more variable from 2003 onwards. This pattern is most consistent with Shafer's characterization of the Era of Partisan Volatility. We do not see clear pat-

terns of rulemaking associated with party balance, but this may be because we are looking at the amount of policy rather than its direction. Many of the rules in the departments included in 1.4 are reversing the previous president's policies. For example, this category includes the Obama and Trump administration's immigration policies.

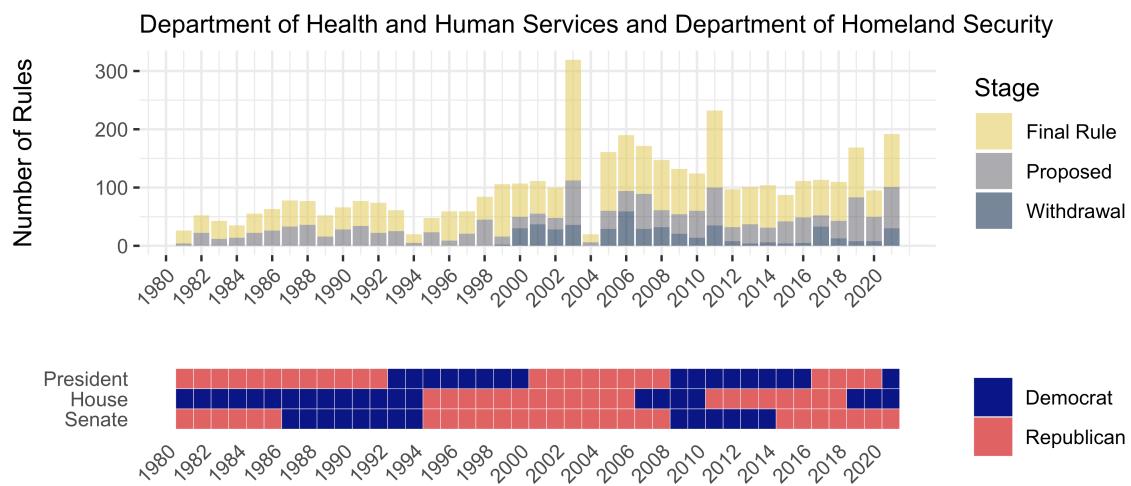


Figure 1.4: Welfare Policy (Social Security, Medicare, and Medicaid) Final Rules 1981-2018

### 1.5.3 Environment

The cleanest way to capture environmental issues is to focus only on the Environmental Protection Agency (EPA). However, environmental issues are also spread throughout the Departments of Agriculture, Energy, Defense, and, increasingly, the Department of State. Claggett and Shafer (2010), among others, identify environmental issues as anomalous or off-dimension issues that may not cluster well with other issues. Shafer (2016) identifies environmental issues as a major policy issue until the 1990s. The patterns of EPA in Figure 1.5 do not contradict these interpretations. More than any other policy area, the peak of environmental rules in this timeframe

is when Reagan took office in 1981. This peak may reflect Reagan's ambitious efforts to reshape the EPA and decline dramatically by the end of his term to a much lower level for the next three decades. The peak in EPA rulemaking may also reflect the tail end of the era of new landmark environmental legislation.

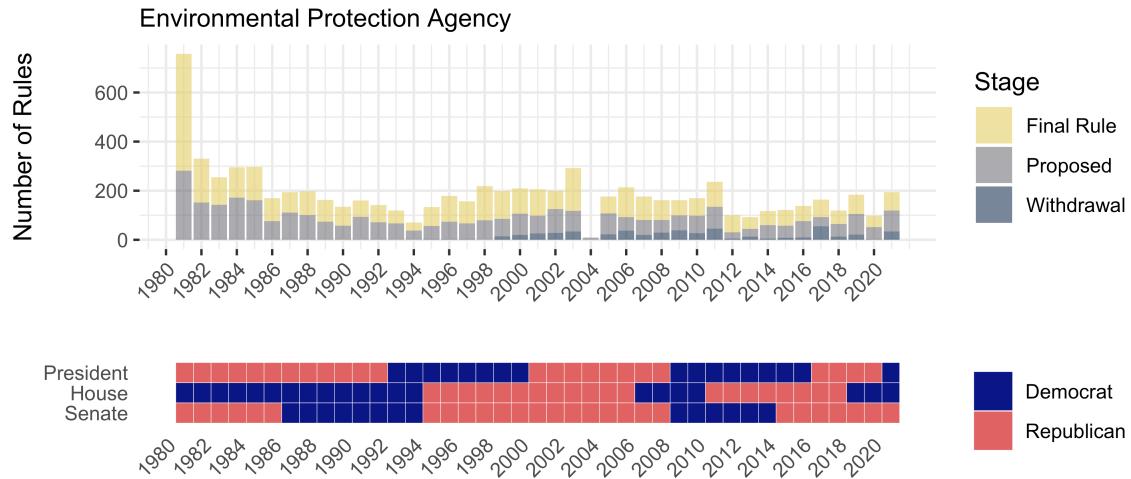


Figure 1.5: Environmental Policy Final Rules, 1981-2018

## 1.6 Conclusion

While this exercise did not reveal conclusive evidence regarding the patterns of U.S. policymaking, it does offer some insights. First, there is surprisingly little variation across presidents and periods of divided or unified government. While more robust research designs find effects (Farhang and Yaver, 2016, Potter and Shipan (2019)), they are not obvious from the volume of rulemaking alone.

There are some partisan differences. Presidents G.W. Bush and Trump withdrew many more of their predecessors' policies in their first year in office than President Obama did. While there were a large number of withdrawals at the Department of Justice, Department of Interior, and EPA, the largest scale reversal for both Republican

presidents was at the Department of Labor. Interestingly, the Obama Administration appears to have withdrawn very few of its predecessor's policies. Some policy areas also seem largely immune from the wave of withdrawals that come with a new president. The Departments of Education, Commerce, Treasury, and Energy, as well as the Federal Energy Regulatory Commission, barely registered an increase in withdrawals as new presidential administrations came in.

Events of the day also translate into rulemaking. There are observable bursts of rulemaking following several landmark pieces of legislation and government reorganization following the 9/11/2001 terrorist attacks.

There is also some evidence that political attention (or, perhaps, modes of policymaking) change systematically over time. The volume of policy at the Departments of State, Defense, and Energy increased fairly consistently while the volume of policy at the Departments of Agricultural and Education declined over the same period. In 1981, the EPA was one of the most prolific policymaking institutions before declining dramatically.

Future research could also augment these data on regulations with data on agency budgets, which may reveal different patterns and may better reflect the role of Congress in agencies' policy agendas (Judge-Lord, 2017). It should nevertheless be noted that a great deal of spending is directed by rulemaking. Furthermore, rule publication dates may capture the timing of policy decisions better than other measures of policy priorities (Potter, 2017b). Looking at budgets alone, as many scholars have done, risks attributing decisions made in the past to the politics of the present. In the end, the relationships between rulemaking and the nature of change in public opinion and party power over time demands more detailed study. Linking macro-level politics to the concrete substance of policy is not an easy task, but the fruits of such

research are critical to understanding which of American politics' many moving parts most affect the concrete laws that govern daily life and, in many cases, feedback to reshape the terrain of American politics.

The following chapters in this dissertation focus on one narrow piece of this broad project to better integrate bureaucratic policymaking into theories of American politics. They use similar data but approach the problem from the other side. I start with theories of bureaucratic policymaking and begin to incorporate theories of civic engagement, pressure politics, legislative behavior, and social movement power in order to explain and account for the occasional bursts of public attention and engagement in agency rulemaking. In these policy fights, the politics of agency rulemaking begins to look more like the American politics described above—dominated by durable yet shifting coalitions of social movements, organized interests, politicians, and the attentive public.

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## **Public Pressure: Why Do Agencies (sometimes) Get So Much Mail?**

### *Abstract*

I examine who participates in public pressure campaigns and why. Scholars of bureaucratic policymaking have focused on the sophisticated lobbying efforts of powerful interest groups. Yet agencies occasionally receive thousands, even millions of comments from ordinary people. How, if at all, should scholars incorporate mass participation into models of bureaucratic policymaking? Are public pressure campaigns, like other lobbying tactics, primarily used by well-resourced groups to create an impression of public support? Or are they better understood as conflict expansion tactics used by less-resourced groups? To answer these questions, I collect and analyze millions of public comments on draft agency rules. Using text analysis methods underlying plagiarism detection, I match individual public comments to pressure-group campaigns. Contrary to other forms of lobbying, I find that mass comment campaigns are almost always a conflict expansion tactic rather than well-resourced groups creating an impression of public support. Most public comments are mobilized by public interest

organizations, not by narrow private interests or “astroturf” campaigns. However, the resources and capacities required to launch a campaign do limit who can use public pressure tactics to a few larger policy advocacy organizations. Over 80% of public comments on proposed rules posted to regulations.gov were mobilized by just 100 organizations, most of which lobby in coalitions with each other. As a result, the public attention that pressure campaigns generate is concentrated on a small portion of policies on which these organizations focus. Contrary to other forms of political participation, I find no evidence of negativity bias in public comments. Instead, most commenters supported draft policies during the Obama administration but opposed those of the Trump administration, reflecting the asymmetry in mobilizing groups.

## 2.1 Introduction

Participatory processes like public comment periods on draft policies are said to provide democratic legitimacy (Croley, 2003; Rosenbloom, 2003), political oversight opportunities (Balla, 1998; McCubbins and Schwartz, 1984), and new technical information (Yackee, 2006; Nelson and Yackee, 2012). The extent to which participatory processes serve these democratic, accountability, or technocratic goals depends on who participates and why.

In civics classrooms and Norman Rockwell paintings, raising concerns to the government is an individual affair. Scholars, too, often focus on studying and improving the ability of individuals to participate in policymaking (Cuéllar, 2005; Zavestoski, Shulman and Schlosberg, 2006; Shane, 2009). But in practice, the capacities required to lobby effectively on matters of national policy are those of organized groups, not individual citizens.

Bureaucratic policymaking, in particular, is the ideal context for powerful orga-

nized interests to dominate. Policies made by specialized agencies are likely to have concentrated benefits or costs that lead interest groups, especially businesses, to dominate (Lowi, 1969, 1972, Wilson (1989)). Agency policymakers are often experts who are deeply embedded in the professional and epistemic networks of the industries they support and regulate (Gormley, 1986; Epstein, Heidt and Farina, 2014). Organizations with superior resources often flood policymakers with technical information that is valued both in the specific legal context of bureaucratic policymaking and in technocratic rationality more broadly (Wagner, 2010). Because agencies are generally framed as “implementers” rather than “makers” of policy, even the most value-laden policy documents are framed as derivative of (often decades-old) legislative statutes. The assumption that Congress makes political decisions, not agencies, persists even as agencies write and re-write policies that cite the same old statutes, advancing and reversing major policy programs under each subsequent president. All of these features empower legal and technical experts and thus the organizations with the resources to deploy them.

And yet, activists frequently target agency policymaking with letter-writing campaigns, petitions, protests, and mobilizing people to attend hearings—all classic examples of “civic engagement” (Verba and Nie, 1987). While recent scholarship on agency policymaking has shed light on sophisticated lobbying, especially by businesses, we know surprisingly little about the vast majority of public comments, which are submitted by ordinary people. The few studies to address the massive level of participation from the lay public tend to *compare* it (often unfavorably) to the participation of more sophisticated actors (Balla et al., 2020) or suggest ways to *improve* the “quality” of citizen input, that is, to make citizen comments more like the technical comments of professional policy influencers (Cuéllar, 2005; Farina et al., 2011, 2012;

Epstein, Heidt and Farina, 2014; Farina, 2018; Mendelson, 2011). I argue that contrasting the quality of input from citizens and lobbying organizations is misguided. Rather, to study public participation, we must *attribute* public engagement to its broader lobbying efforts it supports. Below, I show that most comments submitted to regulations.gov are part of organized campaigns, more akin to petition signatures than “deliberative” participation or sophisticated lobbying. Importantly, nearly all comments are mobilized to support more sophisticated lobbying efforts. Comments from the lay public are neither “diliberative” nor “spam.” They are a *mobilized* part of sophisticated lobbying efforts.

Without an accurate and systematic understanding of public participation—*group-mediated* participation—in rulemaking, it is impossible to answer normative questions about how participatory processes like public comment periods may enhance or undermine various democratic ideals. Surely, those who tend to engage are far from representative of the broader public (Verba and Nie, 1987). That said, even a fairly elite segment of the public is likely more representative than the handful of political insiders who usually participate in bureaucratic policymaking. If the usual participants have “an upper-class accent” (Schattschneider, 1942), does adding thousands more voices dilute this bias? The answer depends on how people are mobilized. If the “usual suspects” mobilize public participation to create a misleading impression of broad public support for their policy positions, it may merely legitimize the demands of the same group of powerful interest groups that would dominate without broader public participation. If, however, public pressure is mobilized by groups that are typically excluded or disadvantaged in the policy process, then public comment processes may democratize bureaucratic policymaking.

While practitioners and administrative law scholars have long pondered what to

make of letter-writing campaigns targeting the bureaucracy, political scientists have had surprisingly little to say about this kind of civic participation and the role of public pressure in bureaucratic policymaking. Scholars trained in law tend to focus on the normative and legal import of public participation and models of policymaking and pay less attention to how groups gain and wield power (notable exceptions include Coglianese, 2001; Wagner, 2010; Wagner, Barnes and Peters, 2011; Seifter, 2016). For most political science theories, bureaucratic policymaking is open empirical terrain. Much of our knowledge about civic participation beyond voting comes from surveys and qualitative studies of particular groups. Models of bureaucratic policymaking focus on the participation of sophisticated lobbying groups and neither explain nor account for public pressure campaigns. Civic engagement in general and organized public pressure in particular thus remain poorly understood in the context of bureaucratic policymaking.

Political scientists' neglect of public pressure campaigns that target the bureaucracy is surprising given that most people are only aware of bureaucratic policymaking when it is the target of a public pressure campaign.<sup>1</sup> While most policy processes receive little public attention, the ease of online mobilizing and commenting has, like other forms of participation (Boulianne, 2018), created exponential increases in the number of rules in which thousands and even millions of people engage.

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<sup>1</sup>Some of the most contentious recent public controversies involve bureaucratic policymaking. For example, along with 50 thousand protesters in Washington D.C., the State Department Received 1.2 million comments on the Environmental Impact Statement for the Keystone Pipeline. Similarly, along with the thousands of protesters supporting the Standing Rock Sioux protest to the Dakota Access Pipeline, the Army Corps of Engineers received hundreds of thousands of comments. Alongside protest actions that included shutting down many websites, the Federal Communications Commission's Open Internet Rule received 22 million comments. While some of these comments appear fake, the scale of public engagement is remarkable given how little attention political scientists have paid to it. Fake public comments also raise the question of why an organization would bother to generate fake public input if such comments did not matter, as its omission from theories of bureaucratic policymaking would seem to imply.

The general failure to explain and account for public pressure campaigns in models of bureaucratic policymaking is also striking in light of how agencies advertise public comment periods as an opportunity for a voice in government decisions. The Regulations.gov homepage solicits visitors to “Make a difference. Submit your comments and let your voice be heard” and “Participate today!” (Figure 2.1). A blue “Comment Now!” button accompanies a short description of each draft policy and pending agency action. Public comment periods on draft agency policies are described as “an important part of democracy” (WSJ 2017), “often held out as the purest example of participatory democracy in actual American governance” (Herz, 2016). Rossi (1997) finds that “courts, Congress, and scholars have elevated participation in rulemaking to a sacrosanct status...greater participation is generally viewed as contributing to democracy.” (pg. 2) And yet, political scientists have paid little empirical or theoretical attention to the role of public pressure in bureaucratic policymaking.<sup>7</sup> [While administrative law scholars have had much to say about public participation and mass comment campaigns (see, e.g., Golden, 1998; Noveck, 2004; Noveck, 2009; Cuéllar, 2005; Coglianese, 2006; Mendelson, 2011, Farina et al. (2012); Farina, Newhart and Heidt, 2014, , political science scholarship is limited to a few studies (Shapiro, 2008a; Balla et al., 2020), two unpublished dissertations (Moore, 2017; Cook, 2017), and a blog post (Potter, 2017a), which I discuss below.)



Figure 2.1: Regulations.gov Solicits Public Comments on Draft Agency Rules

To fill this gap, I bring theories of conflict expansion and pressure tactics into

theories of bureaucratic policymaking. Because theories of bureaucratic policymaking focus on the power of information and expertise in policymaking, I highlight how public pressure campaigns create new information about the political context (“political information”). Doing so reveals competing intuitions about the drivers of public participation, which I assess using a large new dataset of participation in federal agency rulemaking.

First, I develop and assess two theories of who should mobilize public pressure campaigns and why. Each theory has observable implications for which types of groups will run campaigns in different contexts. One stems from scholarship on bureaucratic decision-making and interest group lobbying. It predicts that groups with more resources will dominate all forms of lobbying, including public pressure campaigns. The other emerges from theories of democratic politics. It predicts that groups with fewer material resources but more popular support will more often use public pressure campaigns. To begin to make sense of public participation in bureaucratic policymaking, I develop a typology of different kinds of participation, with implications for the normative value of participatory institutions. Because political participation is often a collective affair, this includes a typology of public pressure campaigns.

To the extent that public pressure campaigns drive participation, the normative value of participatory processes like public comment periods depends on who organizes these campaigns.

Suppose public pressure campaigns follow the usual patterns of interest group lobbying, where the groups with the most resources dominate. In that case, the procedural legitimacy they provide is merely a veneer masking the influence of powerful political insiders. Instead of diversifying the available information, they would merely reinforce powerful insiders’ claims and issue frames. We would expect pressure campaigns to

push policy further in the direction desired by the most powerful insiders.

On the other hand, if the usual suspects do not dominate public pressure campaigns, participatory processes may yet improve the democratic credentials of American policymaking, expand political oversight, and diversify the information available to policymakers. To the extent that public pressure tactics empower groups who are usually left out of the policy process, pressure campaigns may blunt the influence of powerful insiders. Thus, to understand the empirical effects or normative value of participatory processes like public comment periods, we first need to know who participates and why. To the extent that public participation is mobilized by campaigns, we need to know who is behind them.

Second, I offer a theory about the conditions under which we should see private and public interest group campaigns. I argue that public interest groups more often have incentives to launch public pressure campaigns than private interests. Private interests have incentives to sponsor campaigns (including astroturf campaigns) under much more limited conditions. Campaigns from private interests should thus be less common than campaigns from public interest groups. However, the resources required to run a campaign will lead a few large public interest groups to dominate.

To assess these theories, I assemble a new dataset of thousands of public pressure campaigns that collectively mobilized millions of public comments across three administrations from 2005 to 2020. Using a mix of qualitative hand-coding and computational text analysis, I identify the coalitions of groups behind each campaign and the type of interest group they represent.

I find that mass participation in bureaucratic policymaking is better explained by theories of democratic institutions and conflict expansion rather than existing theories of bureaucratic policymaking. In other words, participation is overwhelming

organized by relatively broad public interest groups who aim to shift rather than reinforce the typical balance of power in the policy process.

While greater public participation means that broader interests are represented, the resources and capacity required to mobilize people constrains which type of organization can use these tactics. Participation is overwhelmingly driven by the policy advocacy efforts of a few public interest groups. Indeed, just 100 advocacy organizations mobilized over 80% of all public comments. Traditional membership organizations and unaffiliated individuals account for a smaller portion, and “astroturf” campaigns are rare, almost exclusively arising in opposition to a large public interest group campaign, as my theory anticipates.

I proceed in the following steps. Section 2.2 reviews the literature on civic engagement, democratic politics, and bureaucratic politics and then develops hypotheses about the causes of public engagement in bureaucratic policymaking. Section 2.3.1 introduces a novel dataset that systematically captures public participation in federal agency rulemaking. Section 2.3.2 outlines methods to assess my hypotheses using text analysis to leverage public comments as both content-rich texts and large-n observational data. Section 2.4 reviews the results of this analysis.

## 2.2 Theory: Interest Groups as Mobilizers and Influencers

Interest groups play a critical role in American politics. As Hacker et al. (2021) observe,

“[The United States’] institutional terrain advantages political actors with the capacity to work across multiple venues, over extended periods, and in a political environment where coordinated government action is difficult,

and strategies of evasion and exit from regulatory constraints are often successful. These capacities are characteristic of organized groups, not individual voters.”

Organized groups play at least two key functions in a large democracy: (1) organizing and mobilizing people around ideas and interests and (2) sophisticated lobbying to affect policy. The next two subsections address each in turn.

### **2.2.1 The Mobilization of Interest**

Mobilizing citizens and generating new political information (information about the distribution and intensity of policy preferences and demands) are key functions of interest groups in a democracy. In doing so, public interest groups provide countervailing forces to business interest groups (Mansbridge, 1992). Policy outcomes depend on the distribution of power among interest groups (Dür and De Bièvre, 2007). Engaging citizens to participate in the policy process is a common strategy for groups to gain and exercise power, and thus a major driver of civic engagement (Dür and De Bièvre, 2007; Mahoney, 2007b). Conflict among pressure groups, even those representing private interests, can lead to more majoritarian policy outcomes (Yackee, 2009). Indeed, pluralist theories of democracy rely on interest groups to represent segments of the population in policymaking (Dahl, 1958, N.d.), though they may do so poorly (McFarland, 2007; Seifter, 2016).

#### *2.2.1.1 Forms and Drivers of Civic Participation*

Classic examples of civic engagement include participation in letter-writing, signing petitions, protesting, or attending hearings (Verba and Nie, 1987). Importantly, Verba and Nie (1987) distinguish “citizen-initiated contacts” with government from

“cooperative activity” (pg. 54). Political behavior research tends to focus on the choices of individuals. For example, survey research on political participation often studies activities like letter-writing as if they are citizen-initiated contacts rather than a group activity. Administrative law scholarship often discusses individual participants in rulemaking in a similar light. Cuéllar (2005) finds that members of the “lay public” raise important new concerns beyond those raised by interest groups. He advocates for institutional reforms that would make it easier for individuals to participate and increase the sophistication of individual comments on proposed policies.

Cooperative activities are coordinated and mediated through an organization. By coordinating political action, public pressure campaigns expand civic participation in policymaking.<sup>2</sup>

Self-selection may not be ideal for representation, but opt-in forms of participation—including voting, attending a hearing, or commenting on proposed a policy—are often one of the few heuristics decisionmakers have about public preferences. As with public opinion on most specific policy issues, most members of the public may only learn about the issue and take a position as a result of a public pressure campaign. Likewise, elected officials may only learn about the issue and take a position as a result of a public pressure campaign (Hutchings, 2003). Campaigns inform agencies about the distribution and intensity of opinions that are often too nuanced to estimate a priori. Many questions that arise in rulemaking lack analogous public opinion polling questions, making mass commenting a unique

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<sup>2</sup>I follow Verba and Nie (1987) in defining “civic participation” as “acts aimed at influencing governmental decisions” (pg. 2). Some argue that participation only counts if it is deliberative, which mass comment campaigns are not, at least not at the individual level. Other criteria posed by normative theorists that participation should be “genuine,” “informed,” or “reasoned” are more difficult to assess. Normative theorists debate whether deliberation among a small number of people is preferable to a large number of people simply expressing their preferences. But empirically, public participation in bureaucratic policymaking is much more the latter (Shapiro, 2008a).

source of political information. However limited and slanted, this information is directed at policymakers who may often be unclear how the public and other political actors will react to their policy decisions.

Forms of civic participation beyond voting, such as protests and petitioning, offer unique opportunities for minority interests in particular. Protests can be an effective mechanism for minority interests to communicate preferences to policymakers when electoral mechanisms fail to do so. Policymakers learn and take informational cues from political behaviors like protests (Gillion, 2013). Carpenter (2021) finds similar potential for petitions to serve as a channel to raise “new claims” and influence policy beyond elections: “Petition democracy offers another model of aggregation, where numerical minorities could still make a case of quantitative relevance” (pg. 479). Numbers matter for protests and petitions, regardless of whether they represent a majority. These modes of preference aggregation often claim to represent a substantial segment of the public, perhaps a larger portion than those as passionately opposed to them.

#### *2.2.1.2 Pluralism and Group Conflict in Democratic Theory*

An organization and can reshape the political environment by expanding the scope of conflict (Schattschneider, 1975). Political actors bring new people into a political fight by using press releases, mass mailing, and phonebanking to drum up and channel public support. Conflict expansion strategies that attempt to engage the broader public are known as “going public” (Kollman, 1998). “Going public,” “outside lobbying,” or an “outside strategy” contrasts with insider lobbying. Political actors “go public” when they expand the scope of conflict beyond the usual cadre of political actors. This strategy is used by Presidents (Kernell, 2007), Members of Congress (Malecha

and Reagan, 2012), interest groups (Walker, 1991; Dür and Mateo, 2013), and even Lawyers and Judges (Davis, 2011; Krewson, 2019). For example, when presidents face difficult negotiations with Congress, they often use their bully pulpit to mobilize segments of the public to pressure elected representatives. Likewise, interest groups mobilize segments of the public to pressure policymakers as part of their lobbying strategy. The ability to mobilize a large number of people can thus be a valuable political resource.<sup>3</sup>

Organizations that mobilize people to engage in policy debates (e.g., through letter-writing campaigns) go by many names, each with slightly different connotations. These include pressure groups, policy advocacy groups (Potter, 2017a), citizen groups (Berry, 1999), and policy change organizations (McNutt and Boland, 2007).

#### *2.2.1.3 Public Pressure as a Resource*

An organization's ability to expand the scope of conflict by mobilizing a large number of people can be a valuable political resource (Schattschneider, 1975, Kollman (1998)). In contrast to scholars who focus on the deliberative potential of public comment processes, I focus on public engagement as a tactic aimed at gaining power. Scholars who understand mobilization as a tactic (Furlong, 1997; Kerwin and Furlong, 2011) have focused on how organizations mobilize their membership. I expand on this understanding of mobilization as a lobbying tactic to include the broader audiences that policy advocacy organizations and pressure groups often mobilize. The broader audiences mobilized through public pressure campaigns are more akin to the concept of an attentive public (Key, 1961) or issue public (Converse, 1964).

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<sup>3</sup>I use “mobilizing” rather than “organizing” because “organizing” often implies that people are organized in a way that is more enduring than signing a single petition or writing a single letter. Mobilizing implies an activation, but not necessarily enduring structure.

Here I build on two insights. First, Furlong (1997) and Kerwin and Furlong (2011) identify mobilization as a tactic. The organizations they surveyed reported that forming coalitions and mobilizing large numbers of people are among the most effective lobbying tactics. Studies of rulemaking stress the importance of issue networks (Gormley, 1986; Golden, 1998) and coalitions (Yackee and Yackee, 2006; Dwidar, 2019). Scholars have measured coalitions of organized groups but have yet to attribute citizen comments to the coalition that mobilized them.

Second, Nelson and Yackee (2012) identify political information as a potentially influential result of lobbying by different business coalitions. While they focus on mobilizing experts, I argue that Nelson and Yackee (2012) describe a dynamic that can be extended to public pressure campaigns:

“Strategic recruitment, we theorize, mobilizes new actors to participate in the policymaking process, bringing with them novel technical and political information. In other words, when an expanded strategy is employed, leaders activate individuals and organizations to participate in the policymaking process who, without the coordinating efforts of the leaders, would otherwise not lobby. This activation is important because it implies that coalition lobbying can generate new information and new actors—beyond simply the ‘usual suspects’ —relevant to policy decisionmakers.”

Regarding political information, I extend this logic to non-experts. The number and distribution of ordinary supporters may matter because it suggests a *public* consensus, at least among some segments of the attentive public. (By “ordinary” people, I simply mean people who are not professional policy influencers.) Instead of bolstering *scientific* claims, a perceived public consensus bolsters *political* claims. To understand why

groups organize public pressure campaigns, we must understand mass mobilization as a tactic aimed at producing political information.

#### *2.2.1.4 Second-order Representation*

Advocacy organizations often claim to represent a large number of “members and supporters” (e.g. FWS-HQ-ES-2018-0007-47165). For example, in its comment on proposed regulations on internet gambling, the Poker Players Alliance claimed to represent “more than 840,000 poker enthusiast members” (TREAS-DO-2007-0015-0118). Many of these people became “members” when they signed up to play a free online poker game. However, the organization did claim to have mobilized over 150,000 letters to members of Congress, which, if true, would indicate a somewhat active base of public support.

The potential for “cheap talk” in claims of representation is a problem for the ability of groups to communicate credible political information. When lobbying during rulemaking, groups often make dubious claims to represent broad segments of the public (Seifter, 2016). If agency staff do not trust an organizations’ representational claims, engaging actual people may be one of the few credible signals of a broad base of support. This is especially true when organizations claim to represent people beyond their official members.

Membership organizations often claim to represent more than their membership. While political science theories often assume that membership organizations advocate for the exclusive private interests of their members, many membership organizations also lobby for broader policy agendas. For example, healthcare worker unions frequently lead policy campaigns focused on public health and even issues like climate change. The link between an organizations’ policy agenda and the preferences of its

members is sometimes more plausible than others.

Mobilizing people to write or sign comments is one way—perhaps the best way—for organizations to provide evidence that they represent who they say they do. For example, the Natural Resources Defense Council (NRDC), a top mobilizer of public comments, often claims to represent “3 million members and online activists” (*About NRDC*, 2021)—a figure that presumably includes anyone who has donated to or participated in one of its campaigns. Mobilizing comments is one way that NRDC can demonstrate real support for their specific position on any given issue. To be sure, officials may better understand the true number and politics of people who support NRDC than those claimed by the Poker Players Alliance. Still, the scale and intensity with which the attentive public responds to a pressure campaign may provide information about the politics of the issue. A large showing for a campaign supporting a proposed policy may give bureaucrats a talking point with their political superiors. A surprising level of opposition may raise questions about political tactics.

Furthermore, if D.C. professionals primarily make advocacy group decisions, these advocates themselves may be unsure of how broadly their claims resonate until potentially attentive segments of the public are engaged. A large amount of support may encourage professional policy influences to push officials harder to accommodate their requests.

Theorists debate whether signing a petition of support without having a role in crafting the appeal is a meaningful voice and whether petitions effectively channel public interests, but, at a minimum, engaging a large number of supporters may help broader interests distinguish themselves from truly narrower ones. It suggests that the organization is not entirely “memberless” (Skocpol, 2003) in the sense that it can demonstrate some verifiable public support. An organization mobilizing its

members and supporters to take some action lends weight to representational claims that might otherwise be indistinguishable from cheap talk claims that groups often make to represent broad constituencies.

The credibility of the signal that mass engagement provides may be complicated by “astroturf” campaigns, where organizations aim to project the image of a larger base of support than they truly have (McNutt and Boland, 2007, Rashin (2017)). To the extent that support can be effectively faked or inflated using “astroturf” tactics, the political information that pressure campaigns provide will be less accurate and thus less valuable to decisionmakers.

Astroturf campaigns that utilize faked evidence of mass support (e.g., faked petition signatures) bypass the public pressure and mass engagement step entirely, manifesting false political information. However, in a model where political information complements technical information, supporting sophisticated lobbying efforts, providing fake political information is a risky strategy. Organizations lobbying in repeated interactions with agencies, and an organization’s reputation—critical to its ability to provide credible technical information—may be harmed if policymakers learn that an organization provided false political information. One observable implication is that astroturf campaigns will often be anonymous or led by organizations that do not also engage in sophisticated lobbying. This may provide sophisticated lobbying organizations plausible deniability. However, because policymakers may rationally discount petitions submitted anonymously or by groups perceived to lack credibility, fraudulent campaigns have little hope of influencing policy in this model and may thus be fairly rare compared to a model where political information is not mediated by groups that also engage in sophisticated lobbying.

### 2.2.2 Lobbying in Bureaucratic Policymaking

Theories of bureaucratic policymaking have focused more on sophisticated lobbying than the mobilizing functions of interest groups. Broadly, this scholarship has concluded that the key insight from this scholarship is that technical information is the currency of insider lobbying and that businesses are best positioned to influence bureaucratic policymaking.

Foundational scholarship on rulemaking (Furlong and Kerwin, 2005; Furlong, 1997, 1998; Kerwin and Furlong, 2011) focuses on interest group lobbying. Theoretical models and empirical scholarship has focused on how interest groups help agencies learn about policy problems (Yackee, 2012; Gordon and Rashin, 2018; Walters, 2019). Formal models of rulemaking (Gailmard and Patty (2017); Libgober (2018)] are information-based models where public comments reveal information to the agency. Technical information is so important that flooding policymakers with technical information is a highly effective lobbying strategy (Wagner, 2010).

Figure 2.2 illustrates the classic causal model of insider lobbying that describes most rulemakings and nearly all scholarship on lobbying in bureaucratic policymaking to date.

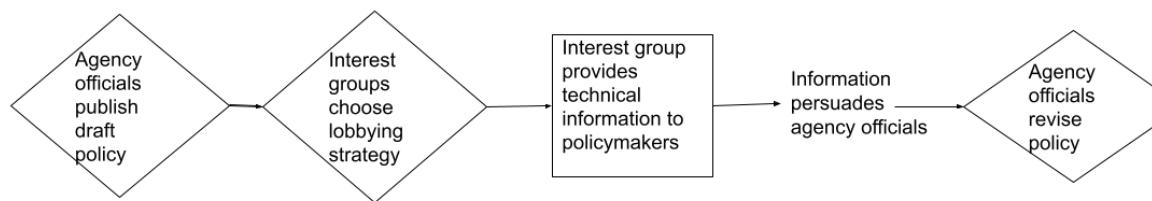


Figure 2.2: The ‘Classic Model’ of Interest Group Lobbying in Bureaucratic Policymaking

Empirical scholarship finds that economic elites and business groups dominate

American politics in general (Jacobs and Skocpol, 2005, Soss, Hacker and Mettler (2007), Hertel-Fernandez (2019), Hacker (2003), Gilens and Page (2014)) and rule-making in particular. While some are optimistic that requirements for agencies to solicit and respond to public comments on proposed rules allow “civil society” to provide public oversight (Michaels, 2015; Metzger, 2010), most studies find that participants in rulemaking often represent elites and business interests (Seifter, 2016; Crow, Albright and Koebele, 2015; Wagner, Barnes and Peters, 2011; West, 2009; Yackee and Yackee, 2006; Yackee, 2006; Golden, 1998; Haeder and Yackee, 2015; Cook, 2017; Libgober and Carpenter, 2018).

The contentious politics of mobilizing and countermobilizing that inspires most public engagement in policymaking have no place in leading models of bureaucratic policymaking and have largely been ignored by political scientists. To the extent that scholars of bureaucratic policymaking address the input of ordinary people and public pressure campaigns, both existing theory and empirical scholarship suggest skepticism that non-sophisticated actors merit scholarly attention.

#### *2.2.2.1 What We Know About Mass Comment Campaigns*

The concept of political information that I build upon comes from studies of lobbying coalitions and tactics (Furlong, 1997; Nelson and Yackee, 2012). However, this core scholarship on bureaucratic policymaking does not explicitly address mass comment campaigns. Indeed, nearly all scholarship on rulemaking excludes mass comments from both theory and data. Even studies that aim to assess the impact of the number of comments on each side exclude mass comments (e.g., McKay, 2007). To the extent that scholarship on the politics of rulemaking addresses the quantity rather than the quality of comments, most focus on the size of lobbying coalitions (i.e., the number

of organizations) rather than the scale of public attention or pressure (Yackee and Yackee, 2006; Nelson and Yackee, 2012).

Most theoretical and empirical work addressing mass comment campaigns to date has come from administrative law scholars. Golden (1998) examines eleven rules randomly selected from three agencies, finding “a dearth of citizen commenters.” Cuéllar (2005) examines three different rules and found many comments from the “lay public” raising issues relevant to agency mandates. However, comments from the lay public were much less sophisticated than the comments of organizations and thus less likely to be cited by agencies. Mendelson (2011) finds that agencies often discard non-technical comments but argues that they should be given more weight. While commenting and mobilizing others to comment has become easier, Coglianese (2006) finds that little else about the rulemaking process changed. Sunstein (2001) finds that the growth of the internet primarily facilitate more of the same kind of engagement among the like-minded (i.e. mass-commenting). Like most administrative law scholars, both Coglianese and Sunstein worry that mass commenting distracts agencies from good policy and the broader public interest. Farina et al. (2012, p. 112) claims that “[Mass] comments typically are neither factually informative nor reliable indicators of citizens’ informed value preferences.” Some even call them “spam” (Balla et al., 2018; Noveck, 2004).

Political science scholarship on mass comment campaigns is limited to a few published articles (Shapiro, 2008a; D., 2007; Balla et al., 2018, 2020), two unpublished dissertations (Moore, 2017; Cook, 2017)<sup>4</sup>, and a report (Potter, 2017a). Small adjacent literature in Information Technology and Public Administration journals document fraud in the public comment process (Rinfret et al., 2021) and the training that

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<sup>4</sup>The article published from Cook’s dissertation (J., 2018) contains less about mass comment campaigns.

bureaucrats receive (Rinfret and Cook, 2019). D. (2007) note that form letters differ from other comments. Shapiro (2008a) investigates whether the number of public comments relates to the time between the publication of a draft and final rule. With only nine observations, this study was unable to uncover general patterns but suggests that mass comments may be related to longer rulemaking processes. Moore (2017) finds that agencies that use high levels of expertise (as defined by Selin (2015)) receive fewer comments, possibly because mobilizing organizations perceive these rules to be less open to influence.

Cook (2017) examines three controversial Environmental Protection Agency (EPA) rules during the Obama administration. He found that high levels of public attention made it difficult for any one interest group to dominate. This finding suggests that lobbying rules with a lot of public attention may operate differently than lobbying on most rulemakings, where regulated business groups often dominate, often lobbying uncontested (Yackee and Yackee, 2006). Representatives of both environmental and industry groups reported that mass comment campaigns were important. And the EPA noted that the majority of comments supported the proposed rule in all three cases.

One of the most theoretically developed and systematic studies to date is a short Brookings Institution report (Potter, 2017a) that also focused on Obama-era EPA rules. Across 359 EPA rules, Potter (2017a) finds that 16% were subject to a mass comment campaign. She concludes that “advocacy groups and industry pursue different strategies with respect to comment campaigns.” In contrast to most forms of lobbying (which are dominated by industry groups), pressure campaigns are a tool mostly used by advocacy groups. Here, a “campaign” is form-letter comments associated with an organization (as identified by the EPA). On average, campaigns

by advocacy organizations generated twice as many comments as industry-sponsored campaigns. Industry-sponsored campaigns were smaller and less likely to identify the sponsoring organization. Industry groups were much less likely to lobbying unopposed than advocacy groups. That is, industry groups almost never sponsored campaigns on rules where environmental groups had not, but environmental groups sponsored campaigns even when industry groups did not. Potter (2017a) also finds that most mass comment campaigns supported EPA rules under Obama, with advocacy organizations in support and industry campaigns split between support and opposition.

In addition to extending Potter’s empirical work distinguishing the behavior of advocacy organizations and industry groups, I build on her theorizing about the possible reasons for sponsoring campaigns. Potter argues that public pressure campaigns can expand the scope of the conflict, help grow and maintain advocacy organizations, and give agency leaders political cover to pursue policies in the face of opposition. This chapter explicitly builds on these first two intuitions in this chapter and the third in Chapter 3.

Balla et al. (2018) also focuses on Obama-era EPA rules. They find campaigns occur across issue areas, including complex and economically significant actions. They find broad societal constituencies—such as environmentalists—to be more active in sponsoring campaigns than narrow interests. When industry-led campaigns occur, they divide along sectoral lines, with industries anticipating benefits arguing in favor of stringent regulations and industries forecast to bear the brunt of such actions sponsoring campaigns in opposition to the proposed rules.

Building on their previous work, Balla et al. (2020) study 22 EPA rules and identify 1,049 “campaigns” on these rules—here, a “campaign” means a batch of form-letter

comments associated with an organization, which they code as “regulated” (e.g., a power plant) or a “regulatory beneficiary” (e.g., environmental groups). They find that the agency was more likely to reference the more sophisticated comments that groups submit than form letters. They also find that several types of observed policy changes (e.g., changes in the number of regulated entities and date the rule goes into effect) better align with changes requested by sophisticated interest group comments than those found in form letters. They conclude that “legal imperatives trump political considerations in conditioning agency responsiveness, given that mass comment campaigns—relative to other comments—generally contain little ‘relevant matter’” (Balla et al., 2020, pg 1).

While Balla et al. (2020) recognize the political nature of public pressure campaigns, they follow many of the administrative law scholars in comparing form letters to sophisticated technical comments. For example, their model compares the number of times the agency references the lengthy comments drafted by the Sierra Club’s Legal Team to the number of times the agency references the short form letters drafted by the Sierra Club’s Digital Team. In contrast, I argue that we should understand form letters as a tactic aimed at gaining power for coalitions and organizations that also submit sophisticated technical comments. Public pressure is not an alternative to sophisticated lobbying efforts; it is a resource for the broader task of persuading officials to change their policy decisions.

### **2.2.3 Incorporating Political Information**

How, if at all, should scholars incorporate public pressure into models of bureaucratic policymaking? I argue that mass engagement produces potentially valuable political information about the coalition that mobilized it. To the extent that groups aim to

influence policy, public pressure campaigns support sophisticated lobbying. That is, public pressure should be studied as a potential complement, not an alternative to sophisticated lobbying. This means that the role that public pressure may play in policymaking depends on who mobilized it and why. The first step in understanding the potential impact of public pressure is to develop testable theories about the drivers of public participation.

In this section, I first develop two theories about the drivers of public participation in bureaucratic policymaking, one rooted in theories of group conflict and democratic politics and the other rooted in existing theories of interest-group lobbying in bureaucratic policymaking. I then offer a theory that specifies the conditions under which we should see different kinds of public pressure campaigns.

#### *2.2.3.1 “Usual Suspects” or “Underdogs”*

Existing scholarship suggests two possible reasons why agencies may receive millions of public comments. From a conflict expansion perspective, groups that are disadvantaged by the status quo ought to utilize public pressure campaigns. Existing theories of lobbying the bureaucracy suggest that well-resourced and concentrated interests will dominate. Political information may thus play two distinct roles in policymaking with opposite effects depending on who mobilized it. The normative and empirical import of public pressure campaigns thus turns on who is behind them.

To the extent that well-resourced groups (the “usual suspects”) use public pressure campaigns to create a misleading impression of public support (often called “astroturf”), they serve to strengthen and legitimize demands of the same powerful interests that usually dominate bureaucratic policymaking. Here, just as groups with superior resources use them to flood policymakers with technical information (Wagner,

2010), astroturf campaigns convert economic resources into political information—an impression of public support generated by signatures or form letters. Even groups with few members or a narrow or non-existent base of support among the public may create the appearance of public support by sponsoring an astroturf campaign. If the powerful business groups that dominate other forms of lobbying also dominate public pressure campaigns, these campaigns (and perhaps public comment periods themselves) are normatively suspect, merely providing a democratic veneer to economic power. Empirically, we would then expect public pressure campaigns to further advantage the most well-resourced interests.

The literature on conflict expansion suggests a different possible dynamic. To the extent that less-resourced groups (“underdogs”) use public pressure campaigns as a conflict expansion tactic, their role is the opposite: to push back against powerful interests that dominate bureaucratic policymaking. The political information created by conflict expansion can reveal existing and potential support among attentive segments of the public. Through public pressure campaigns, groups that lack financial resources can convert latent public support into concrete political information that may cause policymakers to update their beliefs and change their decisions.

If mass commenting is mainly a vehicle for public interest groups to convert a latent base of public support into influential political information supporting their representational claims or shining light on the policy process, public comment periods may yet serve some of the informing, balancing, and democratic functions that practitioners and normative theorists desire. Empirically, we would then expect public pressure campaigns to disadvantage well-resourced interests that dominate most policy processes.

### *2.2.3.2 The Conditions Under Which Public and Private Interests Mobilize*

This section draws on insights from interest group lobbying and conflict expansion intuitions to explain variation in mass engagement. First, I offer a framework for assessing the causes of mass engagement. Next, I argue that organizations may mobilize large numbers of people for several reasons with observable implications for observed patterns of public participation.

While most scholars have emphasized the lack of useful technical information in mass comments, a few have raised their role in creating political information. Cuéllar (2005) calls on agencies to pay more attention to ordinary peoples' expressions of preference. Rauch (2016) suggests that agencies reform the public comment process to include opinion polls. Raso and Kraus (N.d.) suggest a similar reform whereby people could “upvote” comments with which they agree.

I build from a similar intuition that public pressure campaigns currently function like a poll or, more accurately, a petition, capturing the intensity of preferences among the attentive public—i.e., how many people are willing to take the time to engage. Indeed, many campaigns use the language of public opinion and petitioning. For example, a campaign by the World Wildlife Federation provided language explicitly claiming to have public opinion on their side. Their model comment cited an opinion poll, stating that “Along with 80% of the American people, I strongly support ending commercial trade in elephant ivory in the U.S.” This suggests that public pressure campaigns aim to signal information about public opinion. A coalition led by another environmental group, Oceana, framed its mass mobilization effort to curb the Bureau of Ocean Energy Management’s 2017 Proposed Offshore Oil and Gas Leasing Program as a “petition signed by 67,275 self-proclaimed United States residents,” suggesting that organizations consider some mass-comment campaigns to effectively be petitions.

In the same statement, Oceana also claimed the support of “more than 110 East Coast municipalities, 100 Members of Congress, 750 state and local elected officials, and 1,100 business interests, all of whom oppose offshore drilling,” suggesting that claims of public and elected official support aim to provide similar kinds of political information.

Public pressure campaigns reveal the intensity of passions in attentive segments of the public. Pressure campaigns may presage or co-occur with other efforts like protests and lobbying Congress, thus offering information about other likely political developments.

Building on theories of group conflict in democratic politics, I consider public demands to be a latent factor in my model of interest group lobbying during bureaucratic policymaking (Figure 2.3). Public demands shape the decisions of organizations that lobby. If they believe the attentive public could be rallied to their cause, an organization may attempt to reveal this political information to policymakers by launching a public pressure campaign. That is, the extent to which latent public demands align with a group’s demands will affect its lobbying strategy, specifically whether it decides to launch a public pressure campaign.

Figure 2.3 amends the “Classic Model” of interest group lobbying from Figure 2.2 to incorporate public pressure campaigns and political information about the attentive public. *In addition to* providing technical information through sophisticated comments, an organization may mobilize supporters to produce political information. This is a key feature of the model: political information is mobilized *to support* a lobbying coalition’s sophisticated legal or technical lobbying effort, not as an alternative to sophisticated lobbying.

The more latent public support a group has, the more successful this mobilization

effort will be. The public response to the campaign (observed as the scale of public engagement in the policy process) depends on the extent to which the attentive public is passionate about the issue. A broader and more passionate attentive public will yield a larger scale of mass engagement than a narrower, less passionate base of public support. Thus the observed scale of mass engagement on a given side of a conflict can reveal political information about segments of the public. Large-scale engagement may produce several types of relevant political information. The most direct is the expressed “public opinion” that policymakers observe. I address other types of political information that mass engagement may create in 3.2.

The causal process visualized in Figure 2.3 may only operate under certain conditions. Policymaking institutions have different mechanisms for processing and incorporating technical and political information (the arrows between “Organization provides technical information” or “Organization provides political information” and “Agency officials revise policy”).

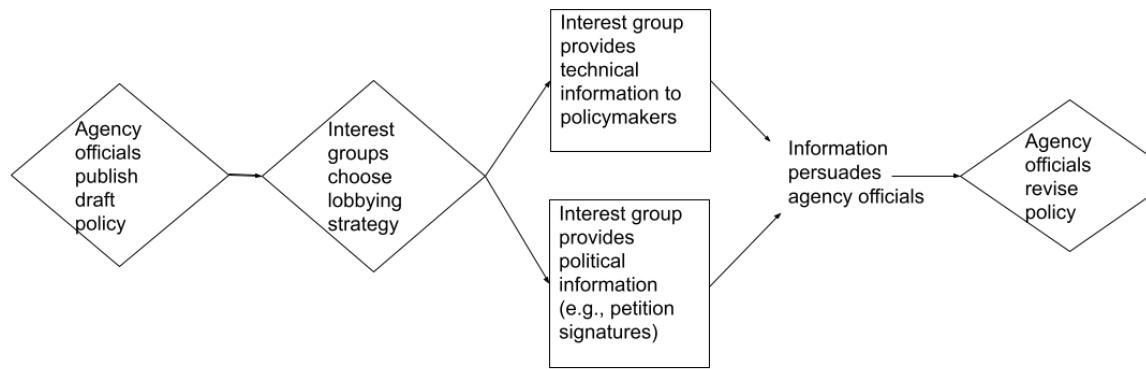


Figure 2.3: Incorporating Political Information into Models of Interest Group Lobbying in Bureaucratic Policymaking

Because lobbying organizations likely have some idea of the level of public support for their positions, one observable implication of this model is that lobbying orga-

nizations will be more likely to launch a public pressure campaign when they have more public support (i.e., where latent public support is a resource).

Instead of a public pressure campaign aimed at mobilizing supporters, a lobby organization may attempt to bypass mass engagement by producing fake evidence of public support. However, as I describe below, this is a risky strategy.

#### 2.2.4 Types of Pressure Campaign Motivations

The potential effects of public pressure campaigns depend, in part, on the aims of a campaign. Campaigns may pursue three distinct aims: (1) to win concessions by *going public*, (2) to *disrupt a perceived consensus*, or (3) to satisfy some audience other than policymakers by *going down fighting* when they anticipate losing or by *credit claiming* when they anticipate winning. Going public and disrupting a perceived consensus are, respectively, forms of proactive and reactive outside lobbying. Going down fighting and credit claiming to describe situations where the organization mobilizes for reasons other than influencing policy, like engaging or recruiting members. In many cases, “going public” as a lobbying strategy is simultaneously an opportunity to engage and recruit members, so organizations **going public** to influence policy and engage in power-building tactics, especially *credit claiming*. For example, Sierra club organized several campaigns thanking the Obama EPA for new draft environmental policies and the agency to not back down, thus simultaneously engaging members, implying that the Sierra Club had advanced its policy agenda, and pressure policymakers to hold course or strengthen policy rather than bend to industry pressures.

**Going public.** Coalitions “go public” when they believe that expanding the scope of conflict gives them an advantage. As coalitions that “go public” should believe they have more intense public support, mass engagement is likely to skew heavily

toward this side.

Going public is likely to be used by those who would be disadvantaged (those Schattschneider (1975) calls the ‘losers’) in a policy process with less public attention. More people may also be inspired indirectly (e.g., through news stories) or to engage with more effort (e.g., writing longer public comments) than people mobilized by the side with less public support. This is important because political information may be especially influential if decisionmakers perceive a consensus. The level of consensus among interest groups (Golden, 1998; Yackee, 2006), especially business unity (Yackee and Yackee, 2006; Haeder and Yackee, 2015), predicts policy change.<sup>5</sup>

**Disrupting a perceived consensus.** I theorize that when coalitions with less public support mobilize, it is a reaction to their opponents. Because the impression of consensus is potentially powerful, when a coalition goes public, an opposing coalition may countermobilize. Because these are coalitions with less intense public support, I expect such campaigns to engage fewer people, less effort per person, and yield a smaller portion of indirect engagement. In the extreme, these campaigns may rely on various forms of deception to compensate for their lack of genuine public support (i.e., astroturf campaigns).

**Credit claiming and going down fighting.** Finally, campaigns may target audiences other than policymakers. When they expect to win, organizations may launch a campaign to draw attention to and associate their organization with a positive policy development. When they expect to lose, organizations may “go down fighting” to fulfill supporters’ expectations. These more “performative” reasons for organizing a campaign may help engage existing supporters and recruit new members. For exam-

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<sup>5</sup>It is not clear if the power of coalition unity is a result of strategic calculation by policymakers, a perceived obligation due to the normative power of consensus (e.g., following a majoritarian logic (Dahl, 1989; Mendelson, 2011)), or simply that unified demands are easier to process than opposing demands.

ple, Carpenter (2021) finds that many anti-slavery petitions were this type of campaign, where “the most important readers of a petition are its signatories” rather than the policymakers to whom they are addressed. “Credit claiming” and “going down fighting” campaigns are rooted in logics that are internal to the organization, including member retention or recruitment, fundraising, or satisfying a board of directors. For example, as Figure 2.4 shows, the Sierra Club uses campaigns to collect contact information of supporters and potential members. Given the executive-branch transition between 2010, when the rule was initiated, and 2017 when it was delayed, the Sierra Club may have had little hope of protecting methane pollution standards. Still, for members of the public who wanted to voice their opinion, the Sierra Club created an easy way to do so, as long as users consented to “receive periodic communication from the Sierra Club.”

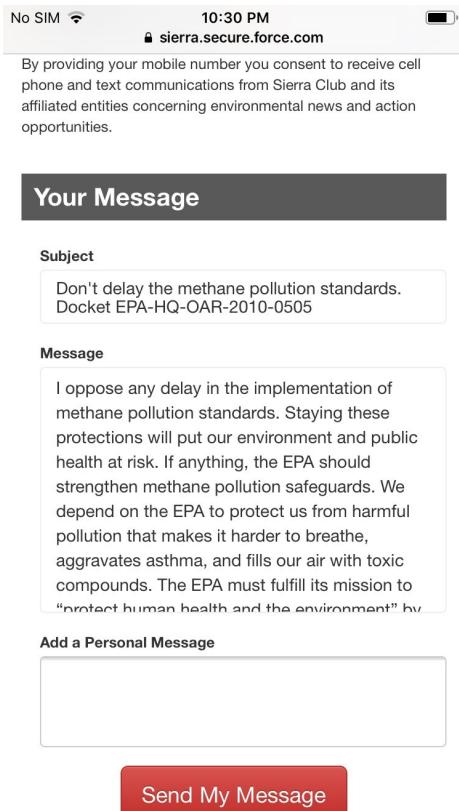


Figure 2.4: The Sierra Club Builds Contact Lists Through Public Pressure Campaigns

While more performative campaigns may engage many people, they are unlikely to inspire countermobilization. To the extent that an organization mobilizes for reasons other than influencing policy, opposing organizations with less public support have little reason to countermobilize. The reverse is not true. Private interest groups ought to only launch campaigns when the policy is in play, and when they do, public interest groups also have incentives to mobilize. Thus, member-funded public interest groups should be more common than campaigns sponsored by narrow private interests, simply because they have more occasions where mobilizing has benefits. Campaigns sponsored by narrow private interest should occur in opposition to another campaign, but public interest groups have reasons to launch a campaign even

when policy is unlikely to move.

The extent to which a campaign genuinely aims to influence policy or is pursuing other logics may be difficult to distinguish in the observed public response. Indeed, multiple motivations may drive most campaigns, and members of the public may poorly understand the different chances of success in each case. However, lobbying organizations likely know their chances of success and should thus invest less in providing technical information when they see little opportunity to affect policy. By identifying cases where coalitions engage in large public campaigns without corresponding investment in technical information, we may be able to assess whether countermobilization is indeed less likely in these cases.

### **2.2.5 Hypotheses About the Drivers of Mass Mobilization**

The observable implications of the theory described above suggest several testable hypotheses.

The solicitation on regulations.gov—“Let your voice be heard”—suggests that individuals are expressing themselves directly. Indeed, anyone can write a letter or type a comment in the text box on regulations.gov, and many people do. Individuals acting on their own submit content ranging from obscenities and memes to detailed personal accounts of how a policy would affect them and even poetry aimed at changing officials’ hearts and minds. Comments submitted by individuals acting along should not have a large share of text copied from elsewhere. They should not reference an organization or be mailed or uploaded in bulk by an organization.

In contrast, to the extent that participation is mediated through public pressure campaigns, as my theory suggests, we should consider public commenting to be a “cooperative activity.” While observers frequently talk about ordinary people engag-

ing in policymaking as individuals, political science theory suggests that an organized group will almost always mediate the participation of individuals who are not professional policy influencers. Political science has shown that national politics in the United States is the terrain of organized groups. Given the technocratic nature of bureaucratic policymaking, “citizen-initiated contacts” should be especially rare.

**Hypothesis 2.1.** Most people engage in national policy processes as a result of organized public pressure campaigns.

Stated another way, Hypothesis 2.1 posits that people engage in behaviors like letter-writing and petition-signing as part of a coordinated and cooperative activity—“citizen-initiated contacts” on matters of national policy are relatively rare.

Comments from people mobilized as part of a campaign differ from those of individuals acting on their own in two observable ways: they often mention the name of the organization that mobilized them, and the text is often similar or identical to other comments in the campaign, reflecting coordination through form or template letters. These features eliminate the novel informational value that Cuéllar (2005) and others seek to locate in individual comments. If comments reference an organization that mobilized them, they likely have little to offer than that the more sophisticated organization has not already provided. If comments are identical, they certainly provide no new technical information.

I argue that public pressure tactics are a compliment, not a substitute for sophisticated technical lobbying. Whereas previous studies compare mass comment campaigns to technical lobbying efforts, I argue that the relevant unit of analysis is the lobbying coalition. Coalitions may use both sophisticated technical lobbying and public pressure tactics.

**Hypothesis 2.2.** Public pressure campaigns are organized by *coalitions* that include groups that engage in sophisticated technical lobbying.

While lobbying coalitions may form around various material and ideological conflicts, those most likely to be advantaged by going public, credit claiming, or going down fighting are public interest groups—organizations primarily serving a broad idea of the public good rather than the narrow material interests of their members. And indeed, Potter (2017a) finds that advocacy group-driven campaigns mobilize far more people on average than industry-driven campaigns.

Building on Lowi and Wilson, I theorize that mass mobilization is most likely to occur in conflicts of public versus private interests or public versus public interests (i.e., between coalitions led by groups with distinct cultural ideals or desired public goods), provided they have sufficient resources to run a campaign. If true, one implication is that mass mobilization will systematically run counter to concentrated business interests where they conflict with the values of public interest groups with sufficient resources to mobilize.

When policy fight pits broad public interests against narrower private interests, the public interest groups more often incentives to launch public pressure campaigns, both for policy and organizational reasons. Because outside lobbying can alter the decision environment, those who have the advantage in the usual rulemaking process (where a more limited set of actors participate) have little incentive to expand the scope of the conflict. Additionally, I argue, public interest groups have greater incentives than businesses to launch public pressure campaigns for reasons other than influencing policy. Both policy and non-policy reasons to launch a campaign suggest that public interest groups will use outside strategies more often.

**Hypothesis 2.3.** Public interest group coalitions mobilize *more often* than private interest group (e.g., business-led) coalitions.

Hypothesis 2.3 may be evaluated in absolute terms—whether most public pressure campaigns are launched by public interest groups—or relative terms—whether public interest groups are more likely to use public pressure campaigns when they lobby than private interests are.

The converse could also be true. Business groups that are already advantaged in the policy process may leverage their superior resources to further mobilize support or bolster claims that they represent more than their private interest. If mobilization most often takes this form, this would be evidence against 2.3 and Schattschneider's argument that it is the disadvantaged who seek to expand the scope of the conflict.

If the success of a mobilization effort is moderated by latent public support, as my theory asserts, broader public interest group coalitions ought to mobilize more people, more effort per person, and more people indirectly for the same amount of mobilization effort (e.g., spending or solicitations). That is, the scale and the intensity of public engagement depend on preexisting support for the proposition that people are being asked to support.

**Hypothesis 2.4.** Public interest group coalitions mobilize *more successfully* than private interest group (e.g., business-led) coalitions.

Notwithstanding the incentive structure that should lead coalitions advancing broad public interests to mobilize public support more often and more successfully than narrow private interests, resources and capacity are still necessary conditions to run a campaign. Most organizations that are disadvantaged in the policy process also lack

resources to launch mass mobilization campaigns. This means that public pressure tactics are only an option for a small subset of large public interest organizations.

Mobilizing people just for a particular policy fight requires a significant organizing capacity. McNutt and Boland (2007) calls these formations “policy change organizations.” In contrast to membership organizations, they exist more to organize public pressure toward a set of policy goals than to serve a defined membership.

**Hypothesis 2.5.** Public pressure campaigns targeting national policy are most often run by large national policy advocacy organizations.

If instead, lay commenters are mobilized through their membership organizations, as Kerwin and Furlong (2011) suggest, a large campaign of, say, one million people would generally require a large collection of membership organizations. Very few organizations have a million members. Those who do are unlikely to mobilize all of them, so mobilizing many people through membership organizations would likely require a large coalition of membership organizations. We would expect commenters to identify themselves as members of these many organizations.

If conflict expansion theory is correct, narrow private interests only have incentives to mobilize public support to counteract an opposing campaign. If private interest groups like businesses primarily use public pressure campaigns to counter a message of public consensus advanced by an opposing lobbying coalition, we should rarely see private interest groups lobbying unopposed.

**Hypothesis 2.6.** If narrow private interest groups (e.g., businesses) launch public pressure campaigns, it is a response to an opposing campaign.

Hypothesis 2.6 would be supported by evidence that public interest group coalitions more often lobby unopposed than private interest groups.

## 2.3 Testing the Theory

To assess my theory about which groups should mobilize public participation in bureaucratic policymaking, I use public comments in federal agency rulemaking. However, my theories and methods should also apply to other kinds of political engagement such as through social media or protests as well as to other political decisions, including state-level rulemaking.

### 2.3.1 Data

I collected a corpus of over 80 million public comments via the regulations.gov API. 59 million of these comments are on rulemaking dockets. I then linked these comments to other data on the rules from the Unified Agenda and Office of Information and Regulatory Affairs Reports. Summary statistics for these data are available in the Appendix.

From 2005 to 2020, agencies posted 130,135 rulemaking dockets to regulations.gov. and solicited public comments on 127,824. Only 2,096 of these rulemaking dockets received more than 100 comments, but this small share of rules garnered 99.72% (59,008,040) of the comments. The top 10 rulemaking dockets account for 33.29% (19,695,536), of the comments. Nearly all of these are form letters.

Figure 2.5 shows the relative number of comments received on a sample of rules matched to data from the Office of Information and Regulatory Affairs (OIRA). OIRA mostly reports on “significant” rules and classifies them as “major” and “non-major” rules. The top part of Figure 2.5 shows the distribution of proposed rules over the number of comments they received (the x-axis). The lower part of Figure 2.5 shows a scatterplot of the number of rules with a given number of comments. The key takeaway is that there is a great deal of diversity in commenting, with most rules

receiving very few comments. Indeed, overall (including non-significant proposed rules), the majority (309,643 of 358,885) of proposed rules that are open for public comment received no comments. Nearly 8,000 of the 20,000 (37%) of the non-major rules reviewed by OIRA received no comments. Even a quarter of “major” receive no comments. The modal number of comments for all types of rules, including major and economically significant rules, is less than ten.

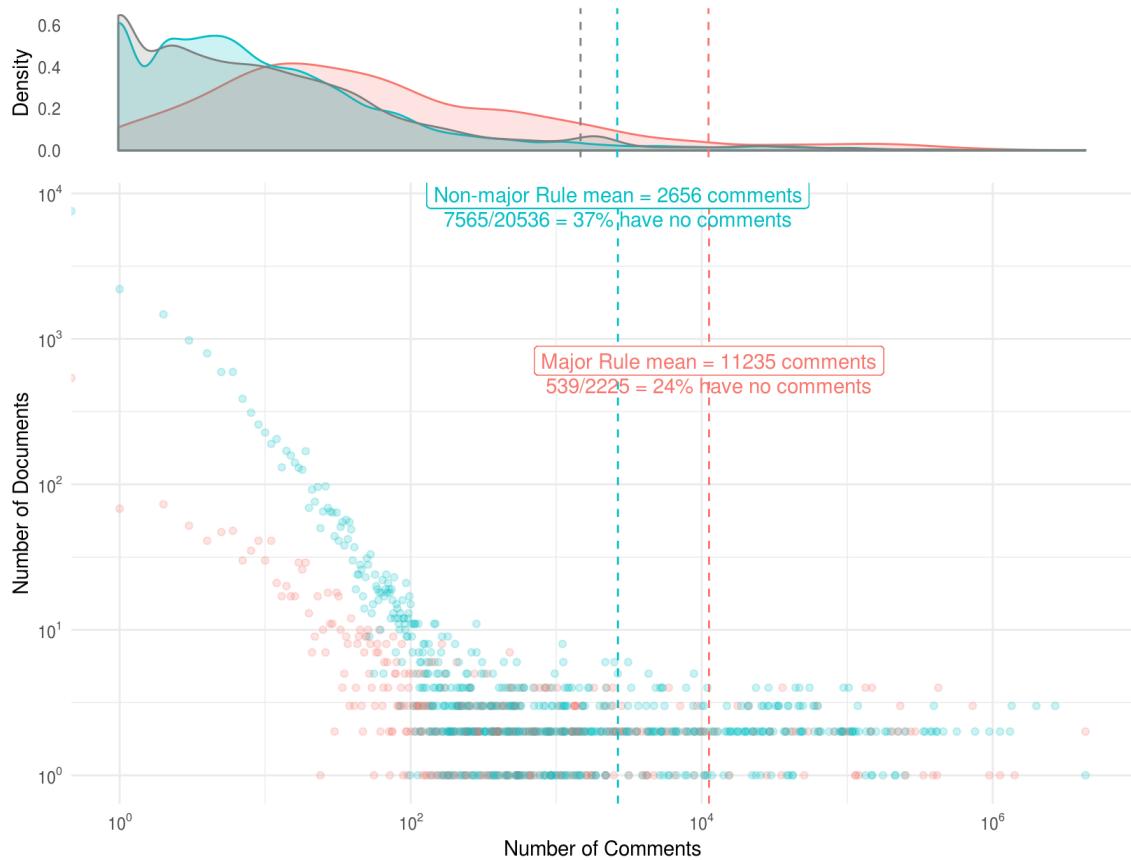


Figure 2.5: Comments Posted to Regulations.gov on Rules Reviewed by OIRA 2005-2020

Table 2.1 shows the rules that received the most comments on regulations.gov. Proposed rules that have attracted the most public attention have been published by the Environmental Protection Agency (EPA), the Department of Interior (DOI), the

Table 2.1: Rulemaking Dockets by Number of Comments on regulations.gov, 2005-2020

Docket ID	Docket Title	Comments
EPA-HQ-OAR-2013-0602	Standards of Performance for Greenhouse Gas Emissi...	4383713
DOI-2017-0002	Review of Certain National Monuments Established S...	2839046
EPA-HQ-OAR-2011-0660	Greenhouse Gas New Source Performance Standard for...	2683228
EPA-HQ-OAR-2013-0495	Review of Standards of Performance for Greenhouse	2178478
EPA-HQ-OAR-2017-0355	Repeal of Carbon Dioxide Emission Guidelines for E...	1853582
BOEM-2016-0003	Request for Comments on the Proposed 2017-2022 OCS...	1828517
EPA-HQ-OAR-2010-0505	Oil and Natural Gas Sector – New Source Performan...	1761990
FWS-HQ-ES-2013-0073	Removing the Gray Wolf from the List of Endangered...	1611111
CFPB-2016-0025	Payday, Vehicle, Title and Certain High-Cost Insta...	1413787
BLM-2013-0002	Oil and Gas; Hydraulic Fracturing on Federal and I...	1348563

Bureau of Ocean Energy Management (BOEM), the Consumer Financial Protection Bureau (CFPB), and Fish and Wildlife Service (FWS). The most commented-on rule was the 2013 “Clean Power Plan”—the Obama administration’s flagship climate policy.

Figure 2.6 shows an exponential increase in the number of rules receiving a large number of comments from 2005 to 2013. Note that comments per rule (the y-axis) are on a logarithmic scale. Increasingly, a large number of people are paying attention to agency policymaking.

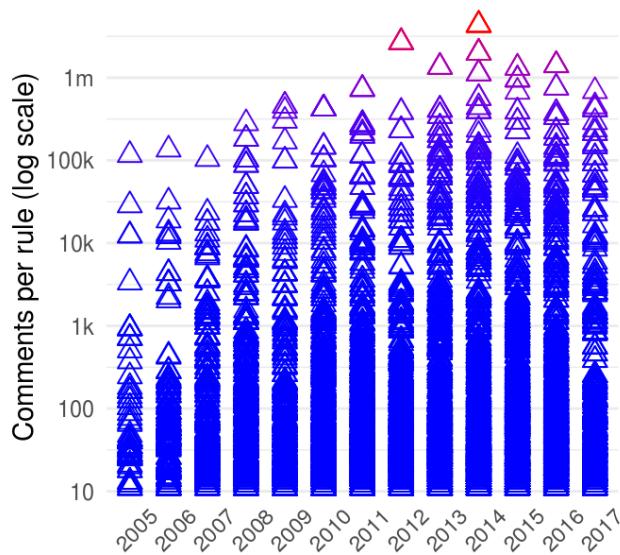


Figure 2.6: Number of Comments (log scale) per Proposed Rule 2005-2020

### 2.3.1.1 Policy Advocacy Organizations: From Grassroots to Astroturf

Testing my hypotheses requires that I classify campaigns as driven primarily by public or private interest groups. This is a challenge because appeals to the government are almost always couched in the language of public interest, even when true motivations are private (Schattschneider, 1975). Public pressure campaigns are no exception, and mobilizing organizations almost always evoke some version of the public interest. Classifying thus involves judgment calls. I describe my classification methods in section @ref{classify-public-private}. To provide empirical context, this subsection sketches out the range of public and private campaigns with some concrete examples of “public” pressure campaigns that primarily advance private interests.

There is a spectrum of organizing the unorganized. The poles might be labeled “grassroots” and “astroturf.” On the grassroots end, engagement is driven by a combination of passionate volunteerism and a supportive, attentive segment of the public.

In practice, most campaigns on the grassroots end of the spectrum in federal rule-making are not pure volunteerism but are organized by policy change organizations like MoveOn and Organizing For American on the left and Americans for Prosperity on the right. These organizations have large mailing lists and media operations, providing the capacity to mobilize large numbers of people for a particular policy fight. Both public and private interest groups pay for mobilizing services and software. Some providers are nonprofits (e.g., Care2); others are for-profit lobbying and campaign consultants (e.g., Nationbuilder, SoftEdge, Mandate Media). Most of these services have strong partisan ties, as is generally the case with lobbying firms (Furnas, Heaney and LaPira, 2017). Membership organizations like the Sierra Club often mobilize “members and supporters” beyond their official membership base, thereby taking the form of a policy change organization as well.

Like people mobilized through their membership organizations, people mobilized by policy change organizations will often cite the mobilizing organization. Unlike those mobilized through membership organizations, mobilization by policy change organizations is more likely to be concentrated in a few large organizations with the specific resources for running campaigns that engage passionate or interested but unaffiliated or loosely affiliated segments of the public.

Toward the astroturf end of the spectrum, well-funded efforts gather signatures from a much less passionate and attentive population. Where grassroots organizing relies on existing underlying interests that merely need to be given an opportunity to engage, people engaged by astroturf campaigns are generally disinterested in the policy and engage merely because of paid ads or petition gathering, often involving some deception (e.g., intentionally misled about the policy or its likely effects) to get people to take action on an issue that they would not take if the issue were

presented more clearly. Likewise, the organizations collecting the signatures would have no interest in doing so if they were not paid. The aim is to give an appearance of support. To the extent they mobilize real people, astroturf campaigns are thus a form of outside lobbying intended to create a deceptive appearance of public support. In the extreme, astroturf campaigns may use the names of fake or non-consenting individuals—inside lobbying discussed as outside lobbying.

For example, in 2016, the Bureau of Ocean Energy Management received several USB drives with hundreds of thousands of comments on its National Outer Continental Shelf Oil and Gas Leasing Program from Joe Jansen. Jansen did not disclose who he worked for. These form letters, each identical except for the signature, resembled press releases from the American Petroleum Institute (API), the main industry association for oil and gas companies. According to a LinkedIn profile and Congressional Directory, Joe Jansen was a former legislative director for a Republican member of Congress who now worked in Government Relations. Unlike more “grassroots” campaigns, no information was provided about who the signatories were or why they cared about oil and gas leasing. Joe Jansen, however, is also associated with other campaigns targeting the EPA and Department of State, several of which identified themselves as organized by the groups “Energy Citizens” and “Energy Nation.” These organization’s websites are paid for by the American Petroleum Institute. The photos they post on social media almost exclusively show employees handing out shirts, hats, and water at fairs, bars, and conferences in exchange for signatures.<sup>6</sup> Though Energy Citizens and Energy Nation submitted slightly different comments as separate organizations, most of the individual signatories were the same on both sets of comments, and many were submitted twice in order to inflate the number of pro-API comments on the rule. Energy Citizens has attracted media attention for bussing

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<sup>6</sup><https://www.flickr.com/photos/energycitizens/18274218500/in/photostream/>

in paid protesters and attendees at town halls,<sup>7</sup> paying actors to pose as concerned citizens, and skirting Facebook's policy against deceptive advertising.<sup>8</sup>

In a more complex example, Axcess Financial and other payday lending companies sponsored several campaigns targeting a regulation proposed by Consumer Financial Protection Bureau in 2016. First, Axcess Financial had storefront employees solicit comments from customers, which Axcess then uploaded to regulations.gov. The customer comments suggest that they had not been told much about the rule, which limited interest rates, fees, and the number of times short-term loans could be compounded. Most customers wrote some version of "Do not close this store" or "I have been told that payday loans would not exist in my community if the government's proposed regulations went into effect"—a few even complained about exactly the issues that CFPB's regulation aimed to address. One customer wrote, "Although some of the fees are a bit high, it should be my choice whether to get a loan or not" (Access Financial Comment 91130). Another wrote, "I need to keep receiving my Check'n'Go loans so I can have the time to start paying them back in the next 1 1/2 to 2 years" (Axcess Financial Comment 91130), indicating that Check'n'Go (a subsidiary of Axcess Financial) was engaged in serial re-lending that put this customer deeper in debt. In their own comments, Axcess claimed that it did not do this kind of serial re-lending. To the extent that this campaign relied on deception and not the customer's genuine interests (even as the customers understood them), this would count as astroturf. Second, Axcess sponsored an effort to gather signatures at churches. Finally, Axcess and other payday loan companies uploaded supportive notes from community organizations to which they had given money. These people had no reason to comment except that they had received money from the regulated

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<sup>7</sup><https://www.nytimes.com/2009/08/19/business/energy-environment/19climate.html>

<sup>8</sup><https://www.propublica.org/article/how-big-oil-dodges-facebooks-new-ad-transparency-rules>

companies.

As the American Petroleum Institute and Axcess Financial examples demonstrate, spotting astroturf in the wild can be difficult by design and involve complex judgment calls about the level of deception involved. However, the clear observable result is often a large number of comments advocating on behalf of narrow private interests. Large businesses or industry associations are the organizations with the resources and incentives to sponsor astroturf campaigns, and they do (Lyon and Maxwell, 2004).

Not all campaigns on behalf of private interests fall decisively on the astroturf side of the spectrum. In a cover letter to a batch of comments opposing the regulation of glyphosate herbicides, major glyphosate manufacturer, Monsanto, described how they collected the letters:

“These letters were collected during the 2016 Farm Progress Show from US farmers, agriculture professionals, and general consumers who use glyphosate and value its benefits. We think it is important that these voices be heard as part of EPA’s review of glyphosate.” (EPA-HQ-OPP-2009-0361-0891)

Monsanto may have, like Energy Citizens, given out shirts in exchange for many of these signers, but the context and transparency make it more plausible that the signators genuinely opposed regulation on glyphosate. Similarly, Shell Oil sponsored a campaign to open the Arctic Outer Continental Shelf to oil and gas drilling and provided a template letter with a place to insert a company or group:

“On behalf of [enter company or constituents], I am writing to demonstrate my strong support of oil and gas development in the Arctic Outer

Continental Shelf (OCS)...I support Shell's plan to explore its leases in the Chukchi Sea in 2015. The company has invested significant time and resources in the advancement of safe and prudent Arctic exploration. Shell should be allowed to realize the promise of the leases it purchased, and I encourage the BOEM to expeditiously approve its Exploration Plan.”<sup>9</sup>

Though Shell's private interests stood to benefit from the rule, the signers of this form letter were mostly companies and workers in the oil and gas sector. Several elected officials also used Shell's form letter (e.g. BSEE-2013-0011-0033 and BSEE-2013-0011-0094). I found no evidence of deception or payments from Shell. These companies and workers plausibly had a genuine interest in Shell's access to offshore oil. The form letter's transparency about who stood to benefit further increases the plausibility that signers genuinely supported Shell's lobbying effort.

### **2.3.2 Methods: Measuring Public Pressure and Political Information**

In this section, I develop methods to identify public pressure campaigns and measure the kinds of political information they create. These measures capture similar statistics to questions posed by Verba and Nie (1987, p. 9): “How much participation is there, what kind is it, and from what segments of society does it come?” Specifically, I assess the extent to which public comments are mobilized by pressure campaigns, which organizations are behind these campaigns, which campaigns are more successful in mobilizing, and which campaigns go unopposed.

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<sup>9</sup>Some of Shell's supporters neglected to fill in the blanks in the template letter (BSEE-2013-0011-0033).

### *2.3.2.1 Identifying Organizations and Coalitions using Text Reuse*

The primary unit of analysis is a lobbying coalition—a group of organizations advocating for the same policy changes in their comments on a draft rule. Advocacy organizations work together on campaigns. For example, “Save our Environment” submitted both sophisticated comments and collected signatures from hundreds of thousands of people on several rulemaking dockets. Save our Environment is a small nonprofit with a simple WordPress website almost entirely dedicated to mobilizing public comments. It is run by The Partnership Project, a coalition of 20 of the largest environmental advocacy organizations in the US, including the Sierra Club, Natural Resources Defense Council, Greenpeace, and the World Wildlife Fund, with the aim of “harnessing the power of the internet to increase public awareness and activism on today’s most important environmental issues” ([SaveOurEnvironment.org](http://SaveOurEnvironment.org)). Several Partnership Project members, including the Sierra Club, EarthJustice, and NRDC, also submitted technical comments and mobilized hundreds of thousands of their own supporters to comment separately on the same rules. These lobbying and mobilizing activities are not independent campaigns. These organizations and the people they mobilize are a coalition.

To mobilize broader support, advocacy organizations often engage smaller organizations to mobilize their members as well. For example, in a campaign targeting fishing regulations, in addition to mobilizing thousands of individuals, the Pew Charitable Trusts mobilized members of the New York Underwater Photography Society and hundreds of restaurants that serve sustainable seafood. These smaller organizations did not identify themselves as part of Pew’s campaign, but their letters used almost identical language.

Identifying which people and organizations belong to which coalition is thus a cru-

cial first task for any study of public pressure campaigns. To identify whether a pressure campaign mobilizes a given comment, I use several strategies. I first use textual similarity to identify clusters of similar comments, reflecting formal and informal coalitions. Comments with identical text indicate a coordinated campaign.

To link individual comments and public pressure campaigns to the more sophisticated lobbying efforts that they support (if any), I identify the lobbying coalition(s) (if any) to which each comment belongs. Some individual commenters and organizations are unaffiliated with a broader lobbying coalition, but, as I show below, most people and organizations lobbying in broader coalitions.

Importantly, even campaigns that achieve very low public response rates appear in these data. Because campaigns aim to collect thousands of comments, it is implausible that even the most unpopular position would achieve no supportive responses. For example, Potter (2017a) found Poultry Producers averaging only 319 comments per campaign. While this is far from the Sierra Club’s average of 17,325 comments per campaign, it is also far from zero.<sup>10</sup>

For each comment on a rulemaking docket<sup>11</sup>, I identify the percent of words it shares with other comments using a 10-word (or “10-gram”) moving window function, looping over each possible pair of texts to identify matches.<sup>12</sup> When actors sign onto the same comment, it is clear that they are lobbying together. However, various

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<sup>10</sup>These numbers are from Potter’s sample; the Sierra Club’s average is even larger in my sample; see Table 2.2.

<sup>11</sup>Where a new presidential administration used the same docket number to solicit comments on a proposed rule that a previous administration used, I count these as separate rulemaking dockets. I do so because the second policy is usually reversing or going in the opposite direction as the policy on which the previous administration solicited comments. The same organizations often comment but with the opposition positions. Support becomes opposition and vice versa.

<sup>12</sup>For more about n-gram window functions and comparisons with related partial matching methods such as the Smith-Waterman algorithm, see Casas, Denny and Wilkerson (2017) and Judge-Lord (2017).

businesses, advocacy groups, and citizens often comment separately, even when they are aligned. Text-reuse (using the same ten-word phrases) captures this alignment.

Figure 2.7 shows the percent of shared text for a sample of 50 comments on the Consumer Financial Protection Bureau’s 2016 Rule regulating Payday Loans. Comments are arranged by the document identifier assigned by regulations.gov on both axes. The black on the diagonal indicates that each document has a perfect overlap with itself. Black squares off the diagonal indicate additional pairs of identical documents. For example, 100% of the words from Comment 95976 are part of some tigram that also appears in 95977 because the exact same comment was uploaded twice. The cluster of grey tiles indicates a coalition of commenters using some identical text. Comments 91130 through 91156 are all partial or exact matches. All are part of a mass comment campaign by Access Financial. The percent of the identical text is lower than many mass-comment campaigns because these are hand-written comments, but the n-gram method still picks up overlap in the OCRed text in the header and footer. Tigrams that appear in 100 or more comments indicate a mass comment campaign. Some agencies use similar “de-duping” software (Rinfret et al., 2021) and only provide a representative sample comment. In these cases, my linking method assumes that the example comment is representative, and I link these comments to others based on the text of the sample comment provided.

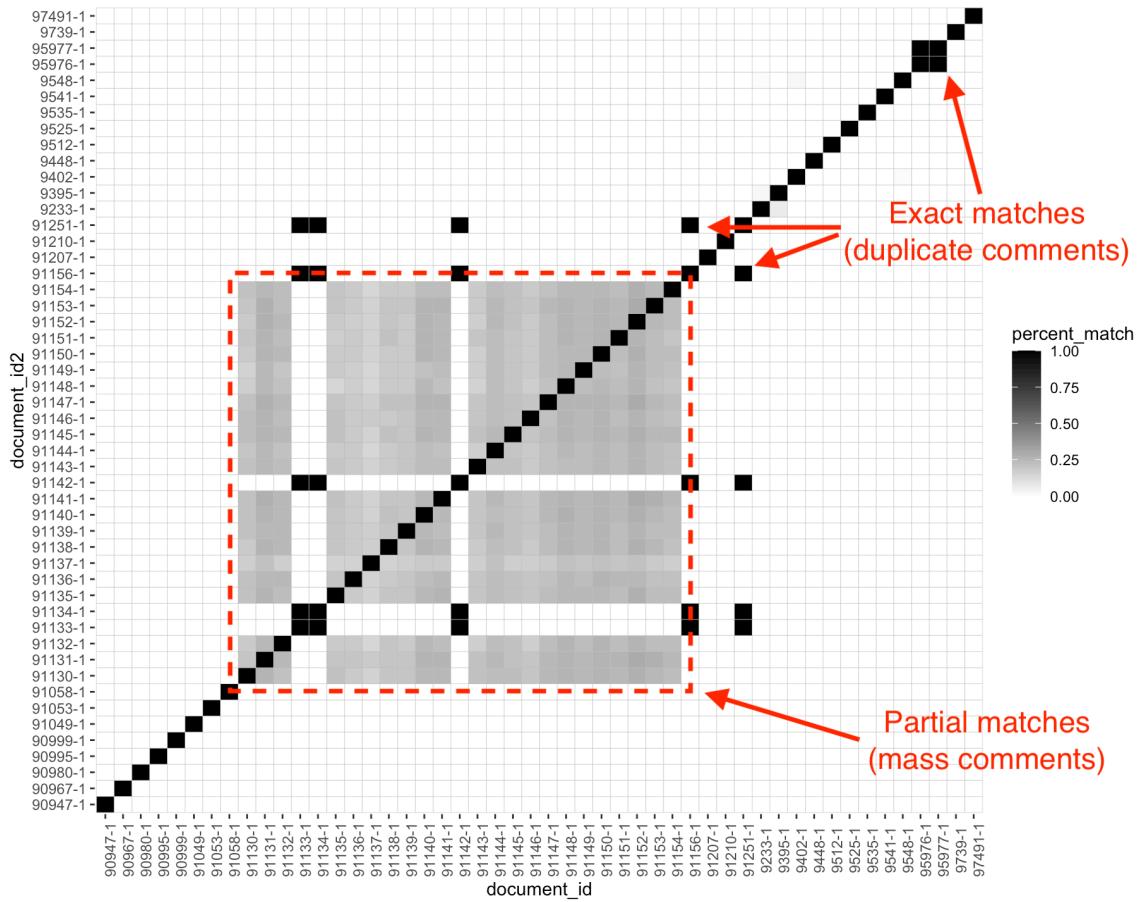


Figure 2.7: Example: Identifying Coalitions by the Percent of Matching Text in a Sample of Public Comments

### 2.3.2.2 Hand-coded Organizations and Coalitions

Second, I hand-code several samples of comments. One sample contains at least one comment from each cluster (coalition) of 100 or more similar comments. This census of form-letter comments allows me to make valid observations about public pressure campaigns across agencies and over time. A second sample includes nearly all comments on a random sample of rules. A third sample includes nearly all comments on another random sample of rules, weighted by the number of comments they received. These last two samples allow me to make inferences about lobbying coalitions that

do and do not use public pressure campaigns.

Through an iterative process of hand-coding and computational methods, I then identify the organization submitting or responsible for mobilizing each comment (if any) in all three samples of comments. This process involves using regular expressions to search comment texts and metadata for possible names. With a team of research assistants, I inspect a sample and link it or add it to a growing list of organizations known to comment. This corpus of known organizations is then included in the next text search.

With this approach, I identify the organizations responsible for over 40 million comments, including all organizations responsible for mobilizing 100 or more comments with repeated text—either identical text or partially unique texts that contain shared language.

I classify all organizations that appear in the hand-coded samples as businesses, industry associations, other nonprofits, governments, or individual elected officials and a range of sub-types within these broader categories.

#### *2.3.2.3 Classifying Public and Private Interests*

Classifying coalitions as primarily driven by private or public interest provides analytic leverage, but scholars have not converged on an approach to do so. Potter (2017a) distinguishes “advocacy groups” from “industry groups.” Berry (1999) calls these groups “citizen groups” and emphasizes conflict over cultural issues. Some public interest groups focus on conservative or progressive cultural issues, like religious education, immigration, or endangered species. Others are more focused on the public provision or protection of public goods such as national parks, consumer product safety standards, air quality, drinking water, and public safety. Types of member-

ship organizations that are both broad and focused on material outcomes for their members (such as labor unions) are especially difficult to classify. Potter (2017a) puts unions in the “Industry” category. I take a different approach based on the coalition with whom such groups lobby. If a union lobbies alongside businesses (see Mildenberger, 2020), I classify this as a private interest-driven coalition. If a union lobbies with public interest groups on public health or safety issues, I classify this as a public interest group coalition.

I code each coalition as primarily advancing an idea of the public interest or more narrow private interests. Public interest coalitions are almost always entirely nonprofits and governments, and private interest coalitions tend to be companies and industry associations. Still, some nonprofits lobby on behalf of companies, and some companies join forces with public interest groups. These can create “hard” cases. For example, a coalition of environmental groups mobilized recreational fishing businesses (NOAA-NMFS-2012-0059-0185) and sustainable seafood restaurants to help push for stricter commercial fishing regulations. We know environmental groups mobilized the restaurants because they used a form letter from a nonprofit called the Gulf Restoration Network. I coded this as a public interest coalition. If instead, the businesses had led this lobbying effort and enlisted a few nonprofits to help protect their business interests, I would have coded this as a private interest coalition. The vast majority of coalitions were much more straightforward to code as public or private.

#### *2.3.2.4 Coding Policy Positions*

To assess whether organizations and their broader coalitions lobby in opposition to other interests or unopposed, I code the position of each organization on each proposed policy given the direction of change from the current policy. In Figure 2.8,  $x_1$  is the

current policy  $x_2$  is the new proposed policy. Let  $p_i$  be commenter  $i$ 's ideal policy. In spatial models, whether an organization supports or opposes a proposed policy change often depends on whether it is moving closer or further from its ideal policy. For example, if the ideal point of the commenter  $i$  is the current policy ( $p_i = x_1$ ) or close to it, they will oppose any change. If the ideal point of commenter  $i$  is the new proposed policy ( $p_i = x_1$ ) or closer to it, they likely support the proposal. While incompatible with an assumption of single-peaked preferences assumed by most models, commenters do occasionally oppose a policy change for moving insufficiently in their preferred direction (e.g., describing the proposal as “too little” or “insufficient” to gain their support). For example, if a commenter's prefers a more extreme change ( $p_i = x_1$ ), they may oppose  $x_2$  as “insufficient.” This is likely a result of the repeated game nature of policymaking, where commenters believe that rejecting a small change in their preferred direction ( $x_2$ ) now is likely to result in a more extreme change ( $x_3$ ) later.

Coding the Position ( $p$ ) of Commenter  $i$  on Proposed Policy  $x_2$  Given Existing Policy  $x_1$

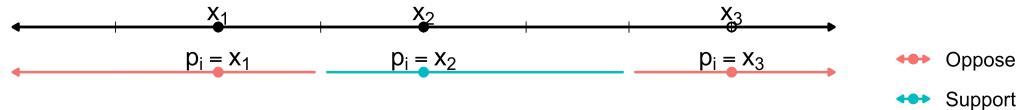


Figure 2.8: Coding the Spatial Position of Comments on Proposed Policy Changes

Having identified the coalition lobbying on each proposed rule and the position of each organization, I assign the position of each coalition as the position of the lead organization. For robustness, I also calculate the coalition's average position as the average position of its members. Coalition members usually have nearly identical positions, but occasionally, some take more extreme positions than others. For example, while all coalition members may have the same policy demands, some may ask for additional changes. I consider diverging interests to be one coalition only if

the asks are entirely compatible with the position of organizations that did not ask for them. Incompatible policy demands indicate different coalitions.

#### *2.3.2.5 Differences with Prior Studies*

This approach is significantly different than that employed in previous studies of mass comment campaigns in at least two ways. First, my methods allow me to identify coalitions consisting of multiple organizations. Previous studies measure mass comment campaigns at the organization level. For example, Balla et al. (2020) analyzes “1,049 mass comment campaigns that occurred during 22 EPA rulemakings”—an average of nearly 50 “campaigns” per rule. By “campaign,” Balla et al. (2020) mean an organization’s campaign rather than a coalition’s campaign. Especially on EPA rules, there are rarely more than two or three coalitions engaging in public pressure campaigns—one of the environmental advocacy groups and their allies, another of regulated industry groups and their allies.

This is important because many comments nominally submitted by a small business, nonprofit, or membership organization are part of a campaign sponsored by a larger coalition led by industry associations or public interest groups. It would be inaccurate to credit a small organization with little capacity for organizing a campaign when they merely allowed their name and mailing list to be used by a larger group. For example, campaigns by industry associations are often officially submitted by much smaller nonprofit coalition partners. Using organizations as the unit of analysis means that observations are far from independent. An analysis that counts one coalition’s campaign as 40 smaller “campaigns” with the same policy demands would count this one campaign as 40 observations. My methods allow me to measure levels of public pressure per organization *and* per coalition.

The second major difference between my approach and previous research is that I do not compare sophisticated comments to mass comments. Rather, I *attribute* mass comments to organizations and coalitions that also submit sophisticated technical comments. By measuring comments per coalition, both through hand-coding and text reuse, I capture different levels of public pressure than we would see if we were to look only at comments per organization.

## 2.4 Results: Patterns of Public Engagement in Rulemaking

### 2.4.1 Most Comments Result from Public Pressure Campaigns

In line with Hypothesis 2.1, most people engage in the policy process due to organized public pressure campaigns. Figure 2.9 shows that every year since 2007, the vast majority of comments on draft regulations posted to regulations.gov were a result of a public pressure campaign.<sup>13</sup>

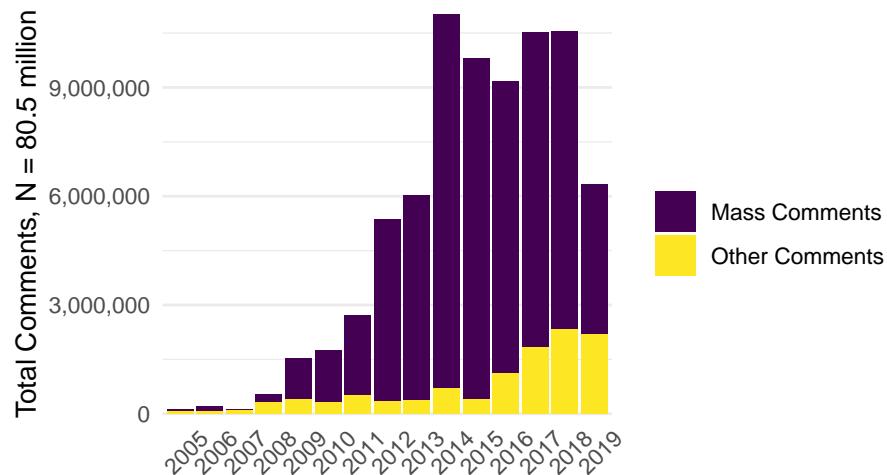


Figure 2.9: Public Comments 2005-2020

<sup>13</sup>See Section 2.3.2 and the online appendix for my definition and methods for identifying mass comments.

## 2.4.2 Most Comments and Campaigns are Mobilized by Public Interest Coalitions

In line with Hypothesis 2.2, public pressure campaigns are almost exclusively organized by coalitions that include groups that engage in sophisticated technical lobbying. Just 100 organizations mobilized over 80% of comments on proposed rules posted to regulations.gov.

Table 2.2 shows the top organizers of comments posted to regulations.gov. In line with Hypothesis 2.3, nearly all of these top mobilizing organizations lobby together in public interest coalitions, especially on environmental issues. These coalitions include organizations that engage in sophisticated lobbying. Indeed, many of the most prolific organizers of public pressure campaigns also engage in sophisticated lobbying themselves. Public pressure is a compliment, not an alternative to sophisticated technical lobbying.

The percent of rules on which each organization lobbies with a pressure campaign rather than without one (the “Percent” column in Table 2.2) shows only a few organizations using pressure campaigns the majority of the time they lobby. Most lobbying organizations use pressure campaigns a small percentage of the time they lobby in rulemaking. The most extreme example is the American Petroleum Institute (API), which lobbied on hundreds of rules between 2005 and 2020, more than most of the other top mobilizing organizations. Yet it almost never uses public pressure campaigns (at least in its own name). While API does frequently sponsor astroturf campaigns, it does so relatively rarely. Almost all of these top mobilizing organizations usually rely on their legal and policy teams alone. The fact that so many of the top mobilizers are also highly sophisticated lobbying organizations like the Sierra Club and API lends support to my argument that public pressure campaigns are one

Table 2.2: Organizations Mobilizing the Most Public Comments 2005-2020

Organization	Comments	Rules	Campaigns	Percent	Average
Center For Biological Diversity	2160804	522	79	15.1%	27352
World Wildlife Fund	1511290	64	5	7.8%	302258
Sierra Club	1371978	498	34	6.8%	40352
Natural Resources Defense Council	1191110	362	19	5.2%	62690
Credo Action	520828	28	8	28.6%	65104
Defenders Of Wildlife	505725	174	11	6.3%	45975
Friends Of The Earth	467526	88	11	12.5%	42502
Earthjustice	448052	194	11	5.7%	40732
Humane Society	432783	268	13	4.9%	33291
Endangered Species Coalition	258436	20	4	20.0%	64609
Greenpeace	255010	61	4	6.6%	63752
Environmental Action	247962	17	10	58.8%	24796
Consumer Energy Alliance	242434	48	7	14.6%	34633
Wildlife Conservation Society	238085	41	4	9.8%	59521
Humane Society International	227328	28	3	10.7%	75776
Mandate Media	186544	1	1	100.0%	186544
Preventobesity.net	181675	2	2	100.0%	90838
American Petroleum Institute	177490	396	1	0.3%	177490
Environment America	173418	22	7	31.8%	24774
Oceana	171788	186	4	2.2%	42947

tool that advocacy organizations may use in addition to more insider tactics.

In line with Hypothesis 2.3, 66% percent of public pressure campaigns are led by public interest coalitions, with only 34% led by private interest coalitions.

In line with Hypothesis 2.4, public interest mass comment campaigns, on average, garner a larger response. The average number of comments for a public interest campaign is 325,297. In contrast, the average number of comments for a private interest campaign is 121,591. On rules where both public and private interest coalitions ran campaigns, the average response to the public interest campaign was 417,856. The private interest campaigns were only 129,190.

In line with Hypothesis 2.5, large national policy advocacy organizations are responsible for most pressure campaigns targeting national policy. These organizations have the incentive as well as the resources and organizational capacity to launch campaigns.

#### **2.4.3 Private Interests Rarely Use Public Pressure**

Only a few of the top mobilizing organizations lobby in coalitions that focus on narrow material interests. The most prolific is a coalition of oil and gas companies led by the American Petroleum Institute (API). This coalition includes national policy advocacy organizations funded by the oil and gas industry, including Consumer Energy Alliance, Energy Citizens, and Energy Nation. It also includes industry associations in adjacent sectors, such as the Interstate Natural Gas Association of America and Association of Oil Pipe Lines, and state-level industry associations, such as The Alaska Oil and Gas Association (AOGA). API lobbied on over 400 rulemaking dockets, but it only launched public pressure comment campaigns on a few rules. In line with Hypothesis 2.6, environmental groups ran much larger campaigns on these same dockets. API

only attached their name to one of these campaigns.

The only other private-interest coalition leader among the top 100 mobilizing organizations is Axcess Financial. Axcess led only one campaign in opposition to the CFPB's Payday Loans rule.

In line with Hypothesis 2.6, private interest coalitions are less likely than public interest coalitions to lobby unopposed, suggesting that they often launch pressure campaigns in response to an opposing campaign. Of 78 coalition-scale pressure campaigns in the hand-coded sample, only 1 private interest coalition ran a pressure campaign when they were not up against a public interest group's campaign. Yet 26 public interest coalitions ran a pressure campaign when they were not up against a private interest group's campaign.

Table 2.2 shows the most commented-on dockets. The most prolific mobilizers are national environmental organizations. A coalition of environmental organizations and their allies mobilized a majority of public comments five out of the top ten dockets (Figure 2.10). In part, this is because the Environmental Protection Agency produces a large share of the substantive rules posted to regulations.gov. However, it is notable that nearly all of the top mobilizers generally lobby together.

The top private-interest mobilizer on these ten dockets was America's Energy Cooperatives (AEC). AEC mobilized significantly on the Clean Power Plan but not on the subsequent Clean Power Plan repeal. If public interest group mobilizing on the Clean Power Plan was an example of “going public” to pressure the Obama administration and then “going down fighting” in the face of the Trump administration’s repeal, industry counter-mobilization responding to the first, but not the second aligns with Hypothesis 2.6. If AEC found their policy goals in the Clean Power Plan rulemaking threatened by the political information being generated by environmental groups, it

would make sense to devote resources to their own public pressure campaign to disrupt any perceived consensus. If AEC were not concerned that environmental group mobilizing would affect the Clean Power Plan repeal, sponsoring a public pressure campaign would be a poor investment. Thus, while public interest groups had incentives to mobilize public comments in both cases, the private interests only had incentives to mobilize to in one. This mirrors the broader trend.

Is civic engagement resulting from public pressure campaigns better understood as “astroturf” or “grassroots” participation? In short, I find more grassroots participation than astroturf.

#### **2.4.4 Most Comments Occur on a Small Number of Salient Rules**

One consequence of the dominance of a few national policy advocacy organizations is that public pressure campaigns target a narrow subset of the wide range of issues addressed by agency rulemaking. Public engagement in rulemaking is highly clustered on a few rules made salient by these campaigns. Just ten rulemaking dockets account for 33.29% of comments (19,695,536). Figure 2.10 shows these ten dockets and the share of comments from each of the top twenty mobilizing organizations (see the legend on the right). The first pane is mass comments (99 or more form letters or copied text). The vast majority of the total comments come from this category (notice the x-axis is scaled to each pane). Partially unique and small batches of form letters (less than 99) are a tiny fraction of the total and concentrated on a few rules where different audiences were engaged. Because public pressure requires resources and capacity, policy issues of interest to organizations with the resources and capacity to launch a campaign receive disproportionate amounts of public attention.

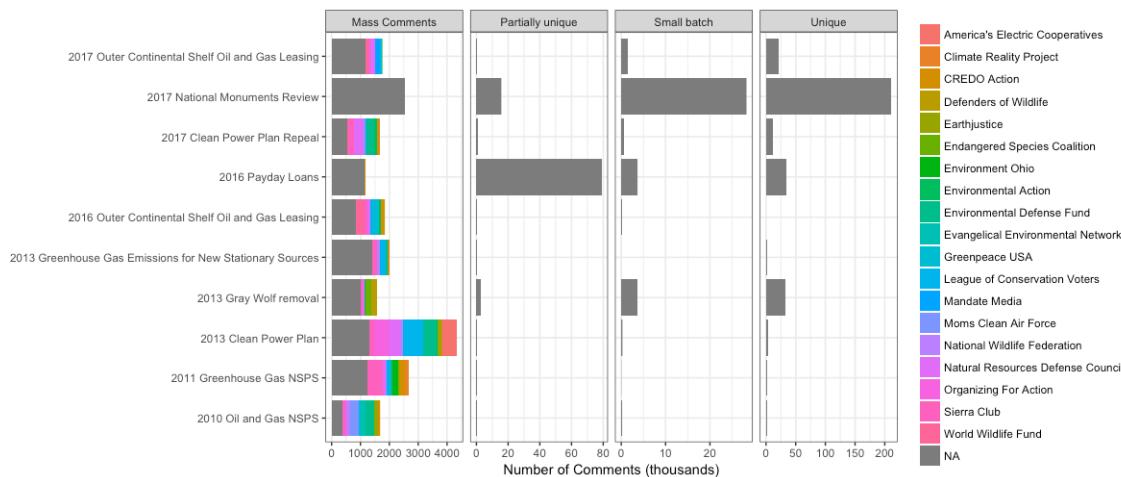


Figure 2.10: Dockets Receiving the Most Comments on Regulations.gov and the top Mobilizing Organizations

#### 2.4.5 Partisan Asymmetry

Of the top 100 mobilizing organizations, 97 lobby in public interest coalitions. Only one of these organizations, the National Association for Gun Rights, is aligned with the political right.

Figure 2.11 shows that many more comments mention support, until 2018 when there is a fairly dramatic reversal in the share of comments mentioning “support” compared to those mentioning “oppose.” Whether the comment text includes “support” or “oppose” is a noisy signal. These words are not used in all comments and do not always indicate support for or opposition to a rule. Still, given the partisan asymmetry in the mobilizing groups, it is plausible that this pattern is a result of the changing regulatory agenda due to the change in the presidential administration.

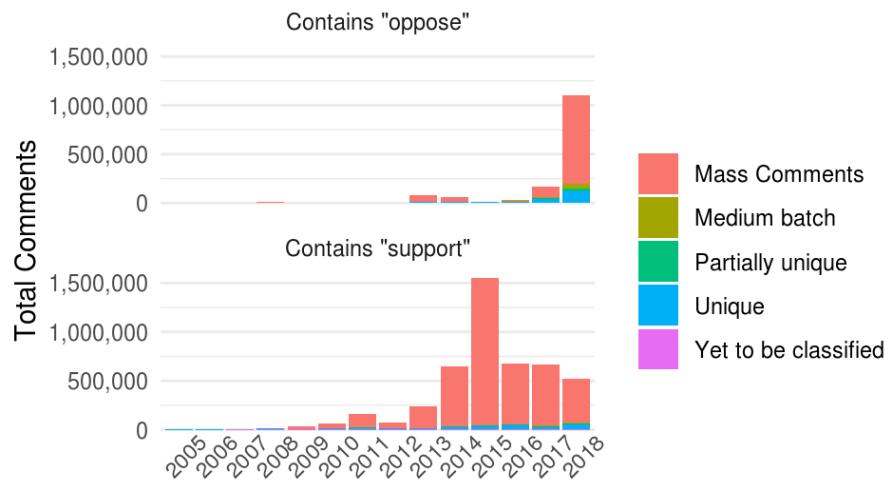


Figure 2.11: Comments Containing “Support” or “Oppose” on Draft Rules Posted to Regulations.gov, 2006-2018

## 2.5 Conclusion

Most comments are ordinary people voicing opinions on a proposed policy. They do not provide useful technical information or suggest specific edits to policy texts like the interest group comments that have thus far captured the attention of political scientists. If they add information to rulemaking, it is a different, more political flavor of information.

The political information generated by public pressure campaigns is not a substitute for sophisticated with technical information; public pressure campaigns almost always explicitly support a more sophisticated lobbying effort.

A few public interest organizations mobilize the vast majority of civic engagement in bureaucratic policymaking. Few campaigns push for narrow private interests. Even fewer are astroturf campaigns, which are often anonymous, making it more difficult

for them to support lobbying efforts. Compared to the usual suspects found lobbying, especially in rulemaking, both the participants and organizations that mobilized them represent broader segments of the public. However, astroturf campaigns are most likely to occur precisely when public pressure is most decisive, so they may still present a normative concern.

When private interest coalitions use public pressure tactics, it is almost always in response to a much larger effort by public interest groups. They are never unopposed. I argue that this is because narrow private interests do not generally have incentives to expand the scope of conflict; their campaigns merely aim to disrupt any potential perceptions of a public consensus. In contrast, public interest group campaigns often go unopposed. I argue that this is because public interest groups often have incentives to mobilize supporters, even when their opponents do not.

Because public pressure campaigns require resources and specialized capacities, they shine a light on a fairly narrow set of policy issues that interest the few large national policy advocacy groups with the capacity to mobilize large numbers of people.

Public pressure campaigns targeting the bureaucracy are primarily a tool used by left-aligned lobbying coalitions. The constituencies utilizing public pressure do not alternate under different presidents, as some theories would predict. Instead, organizations with the capacity to mobilize public pressure do so under both Democrat and Republican administrations, generally supporting the policies of the former and opposing the policies of the latter.

In the end, public participation in bureaucratic policymaking is better explained by theories of democratic politics that focus on the dynamics of public conflicts than theories of bureaucratic policymaking that focus on technical information and expertise. Hope remains that public commenters may advance normative values that depend on

diversifying voices in the policy process, resisting concentrated interests, and providing new information to policymakers. More research is required. Specifically, we need to know the extent to which campaigns aim to influence policy or build organizational capacity (e.g., by recruiting members) for future policy fights. The extent to which campaigns aim to affect policy determines the likely effects of any particular campaign and campaigns in general. Second, it matters whether campaigns affect policy. Finally, because public participation is mediated through organizations, it matters how well these organizations represent the constituents they claim to represent.

— 3 —

## **Policy Influence: Do Public Pressure Campaigns Influence Bureaucratic Policymaking?**

### *Abstract*

I ask whether public pressure campaigns increase lobbying success in agency rulemaking using a mix of hand-coding and computational text analysis methods. To measure lobbying success, I develop computational methods to identify lobbying coalitions and hand-code a random sample of rules for whether each coalition got the policy outcome they sought. I then assess potential mechanisms by which mass public engagement may affect policy. Each mechanism involves a distinct type of information revealed to decisionmakers. Of primary interest is the extent to which public pressure campaigns affect agency decisionmakers directly or indirectly through their effects on elected officials' oversight behaviors. I find that members of Congress are more likely to engage in rulemaking when advocacy groups mobilize public pressure. However, I find little evidence that public pressure campaigns increase lobbying success. Lobbying coalitions are more successful when they mobilize more members of Congress, but legislators disproportionately align with private interest (e.g., business-led) coalitions,

not the public interest coalitions that run most public pressure campaigns.

### 3.1 Introduction

There is little overlap between scholarship on interest group influence in bureaucratic policymaking and scholarship on mass public pressure campaigns. Studies and models of interest group lobbying in the bureaucracy rarely include public pressure as a lobbying tactic (see Yackee, 2019, for a recent review).

Conversely, studies of organized public pressure and contentious politics rarely include specific policy outcomes as their dependent variable (Burnstein, 2019). When they do, they tend to focus on landmark legislation (e.g., Gillion, 2013) or a few illustrative cases (Mansbridge, 1992; Rochon and Mazmanian, 1993; Yackee, 2009).

It is plausible that thousands of people engaging may alter the politics of bureaucratic policymaking (Coglianese, 2001), but this hypothesis remains largely untested. The limited prior work on public participation in bureaucratic policymaking has focused more on the quality than the impact of public input. Studies on small samples of policies offer suggestive evidence that large-scale public participation may prolong the policy process (Shapiro, 2008b) but that form letters are less influential than sophisticated comments (Balla et al., 2020).

To address this gap, I assess the relationship between the number of people mobilized by each campaign and whether the campaign achieved its policy goals. To do so, I argue that the unit of analysis must be the lobbying coalition. Rather than *comparing* the quality and impact of form letters to technical comments written by lawyers, I argue that we must *attribute* both to the broader lobbying efforts they support. Lobbying, I argue, is about both the technical details and politics. Technical information and political information may both affect policy.

I theorize and test several mechanisms by which public input may affect bureaucratic policymaking. Each mechanism involves a distinct type of information that pressure campaigns may relay to policymakers: technical information, information about the likelihood of political consequences, information about the preferences of elected officials, or information about the preferences of the attentive public. Because scholarship on bureaucratic policymaking has focused on the power of technical information, where insider lobbying is most likely to matter and where outside strategies are least likely to matter, political scientists have largely overlooked public pressure campaigns as a lobbying tactic.

To test whether public pressure campaigns increase lobbying success in agency rulemaking, I use a mix of hand-coding and computational text analysis methods. I develop computational methods to identify lobbying coalitions and hand-code a random sample of rules for whether each coalition got the policy outcome they sought. I then assess potential mechanisms by which mass public engagement may affect policy. Of primary interest is the extent to which public pressure campaigns affect agency decisionmakers directly or indirectly through their effects on elected officials' oversight behaviors. I test whether legislators are more likely to engage in rulemaking when advocacy groups mobilize public pressure. I then examine congressional oversight as a mediator for the policy effects of public pressure campaigns.

I find little evidence that public pressure campaigns increase lobbying success. Lobbying coalitions are more successful when they mobilize more members of Congress, but legislators disproportionately align with private interest (e.g., business-led) coalitions, not the public interest coalitions that run most public pressure campaigns.

Following this introduction, Section 3.2 reviews past work and builds a theory of how public pressure may affect policy outcomes. Section 3.3.1 introduces a novel

dataset developed through an iterative process of computational methods and hand-coding. Section 3.3.2 develops models that use these data to assess the relationship between public pressure, both directly and indirectly, through mobilizing elected officials. Section 3.4 presents the results and Section 3.5 concludes.

## 3.2 Theory

### 3.2.1 Interest Group Influence and Bureaucratic Policymaking

Interest groups—particularly the distinction between those that represent broad and narrow interests—foundational scholarship on both American politics (Lowi, 1969) and bureaucracy (Wilson, 1989). Wilson’s famous typology of government agencies is fundamentally linked to the kinds of interest group pressures agencies may face. For example, a “client-agency”— formed to support a sector or activity—will deal with narrow groups.

“A client-agency will have to struggle mightily to avoid having its work influenced by the single, organized group with which it must deal on a daily basis. Many do not succeed; a few do not even try.” (Wilson, 1989, pg.79)

An entrepreneurial agency may struggle to persist if the broad-based public interest groups that support it loses power.

“An agency created as the result of entrepreneurial politics is in a precarious position: since it was born out of an attack on the interests it is now supposed to regulate, its employees must worry that the social movements that created their tasks may desert the fledgling agency because

of shifting interests or waning passions, leaving it to confront a hostile interest group alone and unprotected.”

Whether representing broad or narrow interests, many interest groups exist primarily to influence policy. With renewed attention to the role of policy advocacy groups policymaking, the dichotomy between accountability to political principals and “capture” is being replaced by studies that focus on numerous mechanisms of interest group influence in policymaking. Measuring lobbying success is a major challenge for studies attempting to study interest group influence (Mahoney, 2007a; Yackee and Yackee, 2006; Rashin, 2017). As Potter (2017a) put it “discerning influence from any kind of lobbying is a notoriously elusive exercise because of the difficulty in knowing the counterfactual scenario.”

Scholars of bureaucratic policymaking have focused either on the sophisticated lobbying efforts of powerful interest groups such as business coalitions or principal-agent dynamics, especially with respect to Congress. This section first discusses the “classic model” of interest group influence. I then amend this model to incorporate public pressure campaigns. Specifically, I allow policymakers to be persuaded by both technical and political information. Thus, lobbying organizations may have incentives to adopt both tactics to influence policy. Next, I incorporate public pressure campaigns into a simple principal-agent model. The result is one model of interest group influence that includes interactions among sophisticated lobbying strategies, political principals, and public pressure campaigns.

A key insight from scholarship on interest group lobbying in bureaucratic policymaking is that technical information is the currency of insider lobbying. Figure 3.1 illustrates the classic causal model of insider lobbying that describes most rulemakings and nearly all scholarship on lobbying in bureaucratic policymaking to date.

Diamonds indicate observable choices, and rectangles indicate information—the mechanism of influence in this model.

The first broadly observable step in the rulemaking process is usually an agency publishing a draft rule in the Federal Register.<sup>1</sup> While organized groups certainly shape the content of draft policies (West, 2004), the public portion of the policy process begins when the draft is officially published. When an agency finalizes a proposed rule, organized groups' latent policy preferences take the form of concrete demands for changes to the draft policy document. These demands lead to a lobbying strategy that research may, in theory, observe.

One lobbying strategy (often the only strategy in models of lobbying the bureaucracy) is for an organization to provide technical or legal information such as data, analyses, or legal arguments. There are many reasons to believe that this is a powerful strategy for organized groups to affect policymaking, especially in the bureaucracy. Bureaucrats may be particularly likely to be persuaded by technical information that leads them to update their beliefs about the policy language that would best achieve desired policy outcomes.

Finally, we observe the resulting policy. Inferences about the extent to which lobbying caused any changes (or lack of changes) between the draft and final rule are challenging, but studies of policy generally use observational data and thus require some assumptions linking policy success (a lobbying group getting their desired result) and policy influence (causing a policy outcome). Groups invest in providing information “relevant” to technocratic policymakers, and the policy response is assumed to be a function of this information.

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<sup>1</sup>As agency rulemaking is my empirical case of policymaking, I use “rule” and “policy” interchangeably.

Public pressure campaigns have no place in this model. I aim to fill this gap.

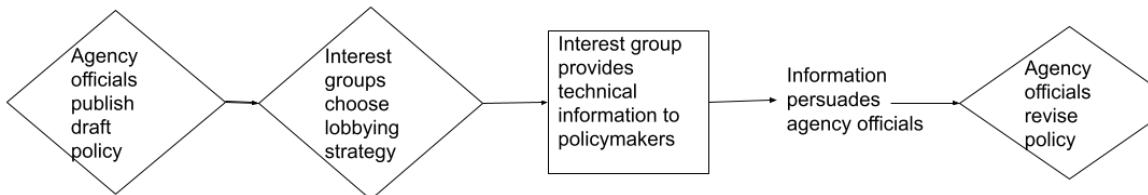


Figure 3.1: The 'Classic Model' of Interest Group Lobbying in Bureaucratic Policy-making

### 3.2.2 Public Support: a Political Resource

One reason that scholars have ignored public pressure campaigns targeting the bureaucracy is the strong normative belief among legal scholars that bureaucratic policymaking should rest on rational analysis rather than politics. Epstein, Heidt and Farina (2014, p. 4) dismiss mass comments as “effectively, votes rather than informational or analytical contributions. Rulemaking agencies are legally required to make policy decisions based on fact-based, reasoned analysis rather than majority sentiment; hence, even hundreds of thousands of such comments have little value in the rulemaking process.” Notably, the ACUS draft recommendations on “Mass and Fake Comments in Agency Rulemaking” suggests that “effective comments” give “reasons rather than just reactions” (ACUS, 2018, p. 33). If true, most public reactions to proposed rules such as those expressed in mass comments would have no effect in rulemaking.

Skepticism about bureaucratic policymaking as a venue for collective action has led most scholars to dismiss public pressure campaigns as epiphenomenal to technocratic rationality and bargaining among agency officials, their political principals, and interest groups. Indeed, almost all empirical studies of rulemaking discard unsophis-

ticated comments from ordinary people. A comprehensive review of scholarship on The Politics of Rulemaking (Yackee, 2019) finds skepticism about the influence of citizen comments, but no studies analyzing public pressure campaigns as a lobbying tactic:

“Kerwin and Furlong (2011) point out that a citizen must know not only that a regulation is being formulated but also how and when to participate. This is a high bar for most Americans. Second, to be influential during rulemaking, commenters may require resources and technical expertise. As Epstein, Heidt and Farina (2014) suggest, agency rule-writers—who are often chosen because of their technical or policy-specific expertise—privilege the type of data-driven arguments and reasoning that are not common to citizen comments.” (p. 10)

For any particular lay commenter, this conclusion seems inescapable; individuals acting alone are unlikely to affect policy. While “ordinary” members of the public may occasionally provide novel and useful technical information to expert bureaucrats, such sophisticated means of influencing policy are out of reach for the vast majority of people. Thus, to investigate the potential role of ordinary people in bureaucratic politics I look elsewhere—not because ordinary people never provide novel and useful technical information, but because this is not how most people attempt to influence policy, nor, I argue, how we should expect ordinary people to have influence.

Most public comments do not provide useful technical information or suggest specific edits to policy texts like the interest group comments that have thus far captured the attention of political scientists. If they add information to rulemaking, it is a dif-

ferent, more political flavor of information. Thus, I investigate the value of ordinary people's comments not individually but as a result of public pressure campaigns.

Two published studies have looked at the relationship between public pressure campaigns and policy outcomes in agency rulemaking. Shapiro (2008a) investigates whether the number of public comments relates to the time between the draft and final rule. With only nine observations, this study was unable to uncover general patterns. Balla et al. (2020) study 22 Environmental Protection Agency Rules and identify 1,049 “campaigns” on these rules—here, a “campaign” means a batch of form-letter comments associated with an organization, which they code as “regulated” (e.g., a power plant) or a “regulatory beneficiary” (e.g., environmental groups). They find that the agency was more likely to reference the more sophisticated comments that groups submit than form letters. They also find that several types of observed policy changes (e.g., changes in the number of regulated entities and date the rule goes into effect) better align with changes requested by sophisticated interest group comments than those found in form letters. They conclude:

These patterns suggest that legal imperatives trump political considerations in conditioning agency responsiveness, given that mass comment campaigns – relative to other comments – generally contain little “relevant matter.” (Balla et al., 2020, pg. 1)

While Balla et al. (2020) recognize the political nature of public pressure campaigns, they follow many of the administrative law scholars in comparing form letters to sophisticated technical comments. For example, their model compares the number of times the agency references the lengthy comments drafted by the Sierra Club’s Legal Team to the number of times the agency references the short form letters drafted by

the Sierra Club’s Digital Team. In contrast, I argue that we should understand the form letters as a tactic aimed at gaining power for coalitions and organizations that also submit sophisticated technical comments. Public pressure is not an alternative to sophisticated lobbying efforts; it is a resource.

An organization’s ability to expand the scope of conflict by mobilizing a large number of people can be a valuable political resource (Schattschneider, 1975), and public pressure campaigns expand the scope of conflict (Potter, 2017a). Public engagement and mobilization can thus be a tactic to gain power. Scholars who understand mobilization as a lobbying tactic (Furlong, 1997; Kerwin and Furlong, 2011) have focused on how organizations mobilize their membership. I expand on this understanding of mobilization as a lobbying tactic to include the mobilizing of broader audiences—the “attentive public” (Key, 1961) or “issue public” (Converse, 1964).

Here I build on three insights. First, Furlong (1997) and Kerwin and Furlong (2011) identify mobilization as a tactic. The organizations that they surveyed reported that forming coalitions and mobilizing large numbers of people are among the most effective lobbying tactics. The theory and empirical strategies below build on work showing that the size lobbying coalitions (the number of organizations lobbying together) predicts lobbying success (Yackee and Yackee, 2006, McKay (2007), Nelson and Yackee (2012)).

Second, I argue that the same mechanism by which scholars understand coalition size to matter should apply to public pressure campaigns as well. As a tactic, public pressure campaigns generate political support and information about the coalition that mobilized it. Nelson and Yackee (2012) identify political information as a potentially influential result of lobbying by different business coalitions. While they focus on mobilizing experts, I argue that Nelson and Yackee (2012) describe a dynamic

that can be extended to mass commenting:

“strategic recruitment, we theorize, mobilizes new actors to participate in the policymaking process, bringing with them novel technical and political information. In other words, when an expanded strategy is employed, leaders activate individuals and organizations to participate in the policymaking process who, without the coordinating efforts of the leaders, would otherwise not lobby. This activation is important because it implies that coalition lobbying can generate new information and new actors—beyond simply the ‘usual suspects’—relevant to policy decisionmakers. Thus, we theorize consensus, coalition size, and composition matter to policy change.”

Concerning political information, this logic extends to non-experts. The number and distribution of ordinary supporters may matter because it suggests a *public* consensus. Instead of bolstering *scientific* claims, a perceived public consensus bolsters *political* claims.

Third, Furlong (1998), Yackee (2006), and others distinguish between *direct* and *indirect* forms of interest-group influence in rulemaking. This distinction is especially important for political information, which may be most influential through indirect channels (e.g., by mobilizing elected officials to contact the agency). In short, to understand how groups lobby in rulemaking, we must understand mass mobilization as a tactic aimed at producing political information that may have direct and indirect impacts on policymaking.

The direct path to influence involves persuading agency officials. While most scholars have emphasized mass comments’ lack of useful technical information, a few schol-

ars have raised the role of mass comment campaigns in creating political information. Cuéllar (2005) calls on agency officials to pay more attention to ordinary peoples' expressions of preference and Rauch (2016) suggests reforms to the public comment process to include opinion polls. I build from a similar intuition that mass comment campaigns currently function like a poll or petition, capturing the intensity of preferences among the attentive public—i.e., how many people are willing to take the time to engage.<sup>2</sup> Self-selection may not be ideal for representation, but opt-in participation—whether voting, attending a hearing, or writing a comment—may often be one of the few heuristics decisionmakers have about public preferences.

The indirect pathway involves affecting the behavior of elected officials, which may then affect the agency's policy responses. Campaigns inform agency officials about the distribution and intensity of opinions that are often too nuanced to estimate a priori. Many questions that arise in rulemaking lack analogous public opinion polling questions, making mass commenting a unique source of political information. As with public opinion on any specific policy issue, most members of the public and their elected representatives may only learn about the issue and take a position as a result of a public pressure campaign (Hutchings, 2003). If a lobbying strategist believes the attentive public is on their side, they may attempt to reveal this political information to policymakers by launching a public pressure campaign.

Whereas Potter (2017a) identifies the power of mass comment campaigns “expand the scope of conflict” and “give leaders the cover they need to pursue policies that face political opposition” as two distinct mechanisms by which campaigns may affect policy outcomes, I consider expanding the scope of conflict to be a broader category

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<sup>2</sup>For example, a campaign by the World Wildlife Federation provided language explicitly claiming to have public opinion on their side. Their model comment stated, “Along with 80% of the American people, I strongly support ending commercial trade in elephant ivory in the US.” This suggests that mass comment campaigns aim to signal information about public opinion.

that encompasses the second. Expanding the scope of conflict may both directly persuade agency officials and indirectly affect policy decisions by reshaping the strategic policymaking environment (e.g., giving cover from political opposition in Congress).

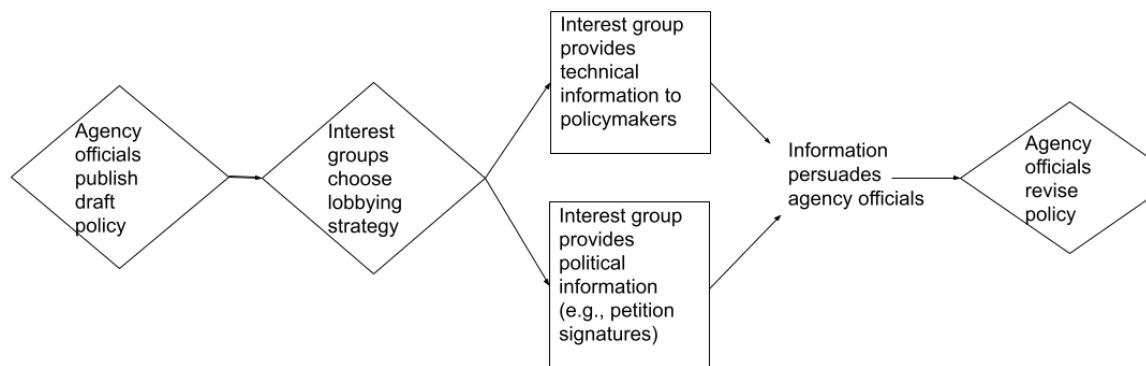


Figure 3.2: Incorporating Political Information into Models of Bureaucratic Policy-making

Figure 3.2 amends the “Classic Model” of interest group lobbying (Figure 3.1) to incorporate political information about the attentive public. In addition to providing technical information through sophisticated comments, an organization or coalition of organizations may provide political information by mobilizing supporters. Large-scale public engagement may produce several types of relevant political information. For simplicity, 3.2 focuses on the most direct and obvious is the expressed “public opinion” that policymakers observe. I address other types of political information that mass engagement may create below (see Figures 3.3).

The causal process visualized in Figure 3.2 may only operate under certain conditions. The influence of political information on policy (the arrow between “Interest group provides political information” and “Agency officials revise policy”) depends on the institutional processes by which agency officials receive and interpret information. That is, agency contexts may condition the extent to which officials may be

persuaded. Agency officials often reject the notion that public pressure should inform their decisions. For example, in response to several public pressure campaigns, the Consumer Financial Protection Bureau wrote:

“A rough estimate of pro and con submissions by individuals may provide insight as to public interest in a topic and to individual consumer experiences. However, under both the Administrative Procedure Act (APA) and the Dodd-Frank Act, the Bureau must base its determinations in rulemaking on the facts and the law in the rulemaking record as a whole.”

(CFPB-2020-14935

We may expect to observe mass mobilization influencing a particular policy only if the mobilization effort was aimed at influencing that policy, rather than using the public comment period to build organizational membership or power more generally (Carpenter, 2021).

### **3.2.3 Hypotheses about the Relationship Between Mass Engagement and Lobbying Success**

Hypothesis 3.1 sets out the most direct implication of my theory. If public pressure campaigns generate political information that affects policy, lobbying coalitions that use pressure campaigns should more win more often. Rather than compare form letters to technical comments, I attributed form letter to the broader lobbying efforts they support. Thus, assessing Hypothesis 3.1 requires comparing lobbying success when coalitions do and do not opt to use a pressure campaign to support their more technical lobbying effort. The power of a pressure campaign in my theory rests in its ability to make a coalition more successful in achieving its policy goals that are

more precisely articulated in technical comments. Lobbying success is thus the extent to which the coalition got the specific policy changes it sought.

**Hypothesis 3.1.** Lobbying coalitions are more likely to succeed when they use public pressure campaigns compared to when they do not.

If Hypothesis 3.1 is correct lobbying coalitions with public pressure campaigns should have higher average levels of lobbying success than coalitions that do not.

Building on the intuitions about the reasons that organizations launch pressure campaigns set out in 2.2, the effect of pressure campaigns may depend on the reason for mobilizing. Public interest groups more often have incentives to mobilize for reasons other than influencing policy than private interest groups. As I show in 2.4, this means that campaigns are overwhelmingly dominated by public interest groups. In contrast, private interest groups such as businesses only have incentives to mobilize public pressure when they expect it to affect policy. This dynamic creates a selection effect whereby pressure campaigns by private interest groups should be more likely to influence policy because they are more concentrated on policies that can be influenced.

**Hypothesis 3.2.** On average, public pressure campaigns are more highly correlated with lobbying success for private interests than public interest groups.

Finally, we can think about lobbying success at the organizational level.

**Hypothesis 3.3.** Organizations are more likely to succeed when they lobbying in a coalition that uses a public pressure campaign.

If Hypothesis 3.3 is correct pressure campaigns should be positively correlated with lobbying success *within* organizations. That is, organizations ought to be more likely

to have their policy demands met when they lobbying in a coalition that uses a public pressure campaign.

Understanding civic participation in rulemaking as a mediated process aimed at generating political information posits a different role for mass comment campaigns than that posited by existing (albeit limited) literature on this topic. While the hypotheses address a similar question—do mass comments matter, my theory implies a different way of answering that question. Rather than an alternative to lobbying strategies that rely on more “sophisticated”—e.g., technical—information, my framework posits mass comment campaigns (at least those aimed at influencing policy) as a part of a broader strategy that includes providing both technical and political information to decisionmakers.

The next subsection restates the theory in the language of formal models of rulemaking.

### **3.2.4 Incorporating Political Information into Formal Models of Rulemaking**

Formally, my argument that lobbying strategies like pressure campaigns aim to create political information requires several crucial amendments to existing information-based models of rulemaking. Specifically, I argue that information about the political context in which policymakers operate can persuade them to make policy changes. Allowing policymakers to be persuaded in such a way allows public pressure campaigns to be incorporated into these models. Doing so also resolves some puzzling results of models that assume “fixed” political preferences. Allowing policymakers’ political priorities to be affected by political pressure from commenters creates both uncertainties about policymakers’ political positions and incentives for lobbying or-

ganizations to attempt to affect them by providing political information.

It is not the aim of this chapter to test the implications of formal models. Rather I briefly review the necessary modifications to one leading formal model in order to illustrate the importance of political information to theories of policymaking. The statistical tests of my theory that I propose in section 3.3.2 require that policymakers can be persuaded by political information. My aim in this subsection is to illustrate the implications of my argument and results for formal theory.

In the most sophisticated model of notice-and-comment rulemaking to date, Libgober (2018) posits a utility function for policymaker  $G$  as shown in Equation 3.1

$$u_G(x_f) = \alpha_0 x_f^2 + \sum_{i=1}^N \alpha_i u_i(x_f) \quad (3.1)$$

where  $x_f$  is the spatial location of the final policy,  $u_i$  is the preference of “potential commenter”  $i$ , and  $\alpha$  is a vector of “allocational bias”—i.e. how much the agency decisionmakers care about their own preferences  $\alpha_0$  relative to accommodating the preferences of others  $\alpha_{i=1:N}$ . Bureaucrats balance their own idea of their mission against their desire to be responsive. In Libgober’s model,  $\alpha_{1:N}$  is a fixed “taste” for responsiveness to each member of society (i.e., each potential commenter), so policy decisions simply depend on their answer to the question “what do people want?”

Incorporating insight about the power of technical information, we might consider  $\alpha_0$  (the policymakers’ understanding of their own preferences) to be affected by technical information. Including political information requires two additional parameters related to a second question “why would agency officials care?”

First, like other lobbying strategies, public attention and pressure may shift the strategic environment, leading policymakers to strategically shift their allocation in

favor of some groups and away from others. Let this strategic shift in allocation be a vector  $\alpha_s$ . For example, interest groups may mobilize elected officials to support their lobbying efforts. If these elected officials can sanction or reward agency officials or veto the agency's policy, their involvement may reshape agency officials' strategic calculations. Agency officials may then strategically adjust their policy.

Second, campaigns may directly persuade agency officials to adjust their allocational bias, for example by supporting claims about the number of people an organization represents or the intensity or legitimacy of their policy demands. Let this direct shift in allocations be  $\alpha_d$ . This parameter captures persuasion on normative grounds and beliefs about which segments of society (i.e., which potential commenters) deserve the benefits of government policy or should be responsible for bearing the costs. Policies allocate costs and benefits across groups. If a group makes a persuasive argument for distributional justice or if an organization shows that they represent a large segment of the public, officials may update their beliefs and biases about how to allocate costs and benefits.

Let policymakers' original, immutable taste now be  $\alpha_t$ . Having decomposed the policymaker's allocative bias into three parts (its fixed tastes  $\alpha_t$ , shifting strategic environment  $\alpha_s$ , and potential to be convinced  $\alpha_d$ ), the policymaker's utility function is now Equation 3.2.

$$u_G(x_f) = (\alpha_{t0} + \alpha_{s0} + \alpha_{d0})x_f^2 + \sum_{i=1}^N (\alpha_{ti} + \alpha_{si} + \alpha_{di})u_i(x_f) \quad (3.2)$$

If, after the comment period, the strategic environment is unchanged and officials remain unpersuaded to change their beliefs about which segments of society deserve favor,  $\alpha_s$  and  $\alpha_d$  are 0, and the model collapses to the original information game based

on fixed tastes. This outcome is less plausible when groups go public and expand the scope of conflict.

Adding these parameters resolves a puzzling result of Libgober's model. Empirically, rules that receive comments do not always change. This result is impossible in a model where bureaucrats only have known fixed tastes and potential commenters only seek changes in policy. For policy seeking organizations to lobby but fail to influence policy requires that they are either wrong about an agency's allocative bias or their ability to shift it. Incorporating political information allows change and uncertainty in an agency's biases.

Thus far, I have mostly focused on more direct ways that pressure campaigns may inform and persuade bureaucratic policymakers. However, interest groups and the public attention they mobilize also affect an agency's strategic environment indirectly by affecting elected officials' behavior. The remainder of this section focuses on how public pressure campaigns may affect one key part of a bureaucrat's strategic environment: attention from members of Congress.

### **3.2.5 Congressional Oversight as a Mediator of Interest-group Influence**

When George W. Bush replaced Bill Clinton as president, career bureaucrats at the Federal Trade Commission (FTC) knew that this meant a change in policy priorities. Many rulemaking projects initiated under the Clinton administration were likely to be withdrawn or put on hold. They also knew that the new administration wanted to be perceived as advancing a new policy agenda, not merely reversing Clinton-era policies. Policy entrepreneurs within the agency saw a political window of opportunity to initiate a new regulatory agenda to curb a growing volume of telemarketing calls. This initiative seemed likely to be popular with voters but, even with a supportive

president, would be difficult to advance over the objections of the telemarketing industry, whose campaign donations had earned them many powerful allies in Congress. Agency officials report being pessimistic about the FTC's telemarketing effort overcoming opposition from Congress.

When the draft "Telemarketing Sales Rule" (also known as the "Do Not Call" rule) was published, however, public support and engagement were overwhelming. The rule received thousands of supportive comments from frustrated members of the public who were encouraged to comment by advocacy groups like the Consumer Federation of America. Agency officials reported that the volume of public response not only encouraged the agency and the administration but, more importantly, "scared off" members of Congress who the industry was relying on to kill or reverse the rule (personal communication, 2018). Once it became clear that the public was paying attention and sufficiently mobilized to act on the issue, elected officials became much less willing to take unpopular positions to support industry donors. Instead, Congress ended up codifying the agency's authority to implement the Do Not Call regulations with legislation the following year.

The story of the Do Not Call rule suggests that public engagement in rulemaking may occasionally be influential because it affects the behavior of elected officials who have the power to provide key support or opposition to a proposed rule. Public attention and support gave agency officials the "political cover" (personal communication, 2018) to advance their policy agenda. Public pressure campaigns demobilized political opposition, changing the agency's political environment and policy outcomes.

James Q. Wilson notes a similar pattern with the FTC's Funeral Industry Practice Rule and Used Car Rule:

“Undertakers and used-car dealers were outraged by these proposed rules. Very quickly, members of Congress discovered just how many undertakers and car dealers they had in their districts and how well-connected they were. The FTC suddenly had activated large, hostile interests who were successful in getting Congress to force the agency to back down.” (Wilson, 1989, pg. 83)

Members of Congress often learn about and are often spurred to act by public pressure campaigns. Legislators often submit comments from their constituents, either on their own or attached to their own comments. For example, several members of Congress attached to their comments on CFPB’s Payday Loan rule (CFPB-2016-0025) mass mail or petitions from their constituents.

Public pressure campaigns often seek to influence policy by informing elected officials of their constituents’ demands. Many campaigns collect the zip code of letter-signers so that they can forward constituent comments to their representatives. Some form letters include a line for signers to “CC” (carbon copy) their member of Congress (see, for example EPA-HQ-OAR-2005-0161-2624).

Congressional attention is not just “fire alarm” oversight. Like interest groups, the comments of members of Congress often support proposed rules. For example, in 2016, a group of Democratic legislators wrote encouraging words to Obama’s Treasury Department: “We urge you not to yield to the intense lobbying against these regulations, directed both at Treasury and the Congress, but multinational business and its trade associations.”

Lobbying campaigns increase the salience of the rulemakings they target. In addition to attracting allies in Congress, increased public attention may capture the

attention of members of Congress on the opposite side of the issue. For example, when the Department of the Treasury published draft rules implementing the Unlawful Internet Gambling Act of 2006, the proposal generated unusually high levels of public attention. As a result, two bipartisan groups of legislators submitted comments on the rule. One, led by the chair of the House Judiciary Subcommittee on Commercial and Administrative Law, raised concerns about the Department's implementation of the Administrative Procedures Act. The other group of legislators, led by Senator Mike Pence, pushed back against interest-group opposition to the rule and urged the Department to implement the rules.

Public pressure campaigns may increase increase the likelihood that legislatures on both sides of the issue engage.

### *3.2.5.1 Principal-agent Relationships During Rulemaking*

Political oversight of bureaucracies has long concerned both practitioners and theorists. Political scientists often model the relationship between elected officials and bureaucrats as a principal-agent problem. For example, an agency may have a preferred policy but may change the rule or delay its publication upon observing its principals' preferences. Agencies may do this to avoid political consequences such as having their policies reversed (Potter, 2017b) or because they perceive elected officials as representing public demands (Cuéllar, 2005).

While it is widely accepted that agency officials take their principals' positions into account, the mechanisms by which this occurs, and the empirical conditions for political influence are debated. Agencies may be more influenced by unified congressional opposition or support (M., 1998).

I focus on lobbying influence in the period between the publication of draft and final

rules and thus on information about principals' preferences revealed to the agency in this period. In principal-agent terms, this means I am focusing on "agency policymaking" where the agency makes the first move and members of Congress react, perhaps threatening future sanctions (Ferejohn and Shipan (1990)). Oversight during rulemaking is a form of ex-post control (Epstein and O'Halloran, 1994), in this case, after the proposed rule is published. Upon learning the content of a draft rule, an official with power over the agency may choose to signal their demands to the agency. Elected officials may also engage in procedural oversight, but these procedural demands almost always accompany substantive policy demands (Lowande and Potter, 2021).

There is an ongoing debate among scholars over how political oversight operates—i.e., how the behaviors of elected officials inform agency decisions. McCubbins, Noll and Weingast (1987) suggest two oversight mechanisms. Principals may proactively attend to agency activities, like a "police patrol," or they may rely on bureaucrats' fear of sanction when attentive interest groups alert principals about agency activities, like a "fire alarm." Administrative procedures like mandatory public comment periods thus offer opportunities for both proactive oversight and to be alerted to oversight opportunities (Balla, 1998).

### **3.2.6 Incorporating Political Information into Models of Political Oversight**

In addition to interest groups directly alerting elected officials to oversight opportunities as in the "fire alarm" model, the political information signaled by public pressure campaigns may alert elected officials to political risks (like a "warning sign") or, conversely, to encourage the agency to hold course (like a "beacon") attracting

positive attention and credit claiming opportunities for their oversight work. In the case of the FTC’s “Do Not Call” rule and subsequent legislation, mass engagement functioned more as a “warning” for would-be opponents and a “beacon” for potential allies, effectively enabling and empowering rather than restraining the agency as the classic “police patrol” and “fire alarm” concept suggests.

The fire alarm, beacon, and warning sight mechanisms have a common thread; political oversight is affected by interest group’s public pressure campaigns. To the extent that this is strategic, pressure campaigns aim to influence policy indirectly by affecting the behavior of elected officials.

Figure 3.3 incorporates these insights to the model set out in 3.2. Specifically, it considers how elected officials’ decisions to engage in agency rulemaking are affected by political information created by public pressure campaigns *and* create new, additional political information. Figure 3.3 shows two pathways by which lobbying organizations may cause elected officials to contact agency officials. The upper pathway represents the classic “fire alarm” role that interest groups may play in altering elected officials to oversight opportunities. It also captures the related dynamic where interest groups alert elected officials to opportunities to support agency actions.

The lower causal pathway represents the additional role that I suggest interest groups play in political oversight by generating political information through public pressure campaigns. When lobbying organizations use a public pressure strategy, the political information they create (e.g., about the scale and intensity of public support) may affect agency policymakers directly, as shown in 3.2. Additionally, levels of public support may also affect policy indirectly if it affects the behavior of an agency’s political principles. When political principals contact agency officials, they create at least two additional kinds of political information. First, they express

their opinion on what they think the agency should do, which may have normative power for bureaucrats. Second, principles signal political consequences that agencies may want to avoid (Potter, 2017a). Both types of information may persuade agency officials to revise policy documents to address their principals' comments.

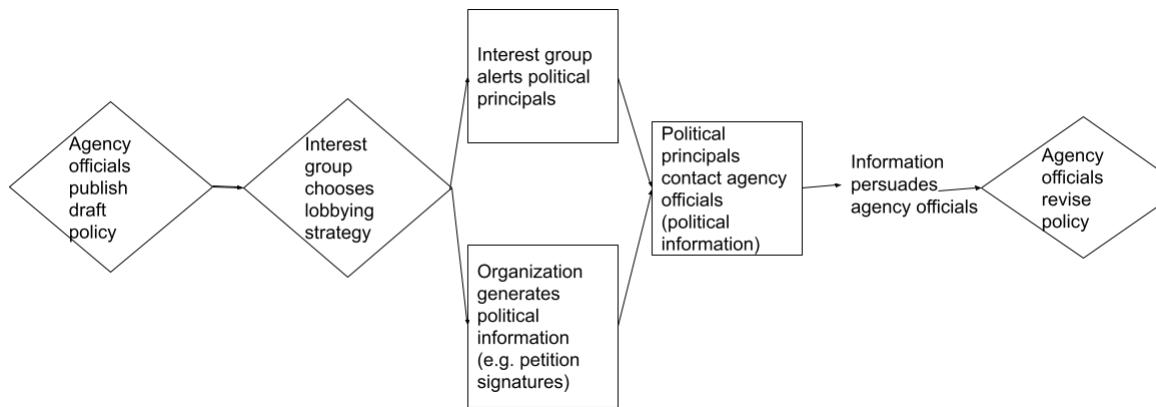


Figure 3.3: Integrating Public Pressure and Congressional Oversight into a Model of Lobbying in Bureaucratic Policymaking

Public pressure campaigns in bureaucratic policymaking may affect the behavior of an agency's principals because the shadow of public sanction hangs over elected officials (Arnold, 1979; Mayhew, 2000). Moore (2018) finds that agencies that receive more comments per rule are also subject to more congressional hearings. When the public is more attentive, it is more important for officials to take popular positions and avoid unpopular ones. Thus, when a coalition goes public, especially if it generates a perceived consensus in expressed public sentiments, elected officials may be more likely to intervene on their behalf and less likely to intervene against them. Hypotheses 3.5 and 3.6 reflect these intuitions.

### 3.2.7 Hypotheses about the relationship between mass engagement and oversight

**Hypothesis 3.4.** The scale of public engagement moderates elected officials' engagement in agency rulemaking engagement.

If Hypothesis 3.4 is correct, we should observe more members of Congress engaging in policy processes with larger public pressure campaigns. This hypothesis is difficult to test because legislators being mobilized directly by interest groups is often observationally equivalent to legislators being mobilized indirectly due to the response to a public pressure campaign. Above, I offer anecdotal evidence that legislators are aware of and pressure campaigns and see comments from their constituents as important. Still, evidence of correlation is not strong evidence of a causal effect. If, however, we can reject Hypothesis 3.4, this is strong evidence that rulemaking comments from members of Congress are not affected by the scale of public attention.

**Hypothesis 3.5.** Public pressure campaigns attract oversight from allies. The more comments supporting a position, the more likely principals holding that position are to engage.

**Hypothesis 3.6.** Public pressure campaigns reduce oversight from opponents. The more comments opposing a position, the less likely principals holding that position are to engage.

If Hypothesis 3.5 is correct, it would suggest a supplement to Hall and Miler's (2008) finding that legislators are more likely to engage in rulemaking when a like-minded interest group has lobbied them: When interest groups lobby elected officials to engage in rulemaking, they may also be more likely to engage when aligned with the majority of commenters than when opposed to them. If elected officials learn

from political information, they will be even more likely to engage when lobbied by a coalition that includes public interest groups running a mass-comment campaign, and less likely to engage when opposed by a large mass comment campaign.<sup>3</sup>

Alternatively, the effect of mass engagement on legislators may be asymmetric. Mass engagement may only mobilize or only demobilize. For example, if legislators are risk-averse, they may avoid engaging in contentious rulemaking processes regardless of the balance of comments. Or, elected officials may be attracted to oversight opportunities but not dissuaded by mobilization on the other side because they assume their voters share their position. These results would be evidence against Hypothesis 3.5 and Hypothesis 3.6, respectively.

I thus build on the classic model of political oversight in two ways. First, I suggest that such oversight behaviors maybe affected by public pressure campaigns because of the impressions of public opinion (i.e., the political information) they create. This is represented by the arrow between “Organization generates political information” and “Political principals contact agency officials” in Figure 3.3.

Second, I suggest that elected officials’ comments during rulemaking are a particularly relevant oversight behavior and a mechanism by which bureaucrats learn and update beliefs about their principals’ demands. This is represented by the arrow between “Political principals contact agency officials” and “Agency officials revise policy” in Figure 3.3. The mechanism is labeled “Information persuades agency officials,” which includes information about principal opinions and perceived political consequences.

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<sup>3</sup>Of course, if Members of Congress receive signals about the distribution of comments from their districts, the distribution of opinions in their district constituency may be more important. Figure 2.4 shows that the Sierra Club requires a zip code information from commenters. Mass-mobilizers may often send such information to elected officials.

### 3.3 Testing the Theory

#### 3.3.1 Data: A Census of Public Comments

To examine the relationship between public pressure campaigns and lobbying success, I use an original dataset (introduced in 2.3.1) that combines several data sources on U.S. federal agency rulemaking.

The core data for this analysis are the texts of draft and final rules and public comments on these proposed rules published from 2005 to 2020. This includes all proposed rules from 161 agencies that were open for comment on regulations.gov between 2005 and 2020, received at least one comment from an organization, and saw a final agency action between 2005 and 2020. These 44,778 rulemaking dockets received a total of 75,619,873 comments.

I collected draft and final rule texts from federalregister.gov and comments submitted as digital files or by mail from regulations.gov. I also retrieve comments submitted directly on regulations.gov and metadata on rules and comments (such as the dates that the proposed rule was open for comment and whether the agency identified the organization submitting the comment) from the regulations.gov API. I add additional metadata on rules (such as whether the rule was considered “significant”) from the Unified Agenda published by the Office of Information and Regulatory Affairs (reginfo.gov).

Where a new presidential administration used the same docket number to solicit comments on a proposed rule that a previous administration used, I count these as separate rulemaking dockets. I do so because the second policy usually reverses or moves policy in the opposite direction of the previous administration. The same organizations often comment on both policies but with the opposition positions. Support

becomes opposition and vice versa.

### *3.3.1.1 Clustering with text reuse*

My theoretical approach requires that I *attribute* form letter comments to the organizations, campaigns, and broader coalitions that mobilized them. To do so, I identify comments that share text. I find that a 10-word phrase repeated across more than a few comments is always either text copied from the proposed policy or a form letter provided by a campaign. Thus, for the text of each comment, I first remove all 10-word phrases that appear in the proposed rule (including the preamble and call for comments). Then, I identify all comments that share ten-word phrases with 99 or more other comments. Finally, I collapse these form letter comments to one representative document for hand-coding.

I attempt to identify the organization(s) that submitted or mobilized each comment by extracting all organization names from the comment text. For comments that do not reference an organization, I can often identify organizations with an internet search using portions of the comment's text. I then identify lobbying coalitions both by hand and by textual similarity. Co-signed comments are always assigned to the same coalition. Likewise, form-letter comments are always assigned to the same coalition.<sup>4</sup>

Through the iterative combination of automated search methods and hand-coding described in 2.3.2, I attribute each comment to the organization behind it (its author if submitted by the organization or the mobilizing organization for form letters). I also identify comments submitted by elected officials, with special attention to members of the U.S. Congress.

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<sup>4</sup>For more on how I identify organizations and coalitions, see 2.3.2.

Because my hypotheses are about the influence of organizations and coalitions, I collapse these data to one observation per organization or coalition per proposed rule for analysis. I then identify the main substantive comment submitted by each organization's staff or lawyers, which are usually much longer than supporting comments like form letters.

### *3.3.1.2 Hand-coded sample*

To estimate the influence of public comments on policy, I code almost all comments on a random sample of rules, recording the type of organization, the lobbying coalition to which each belongs, the type of coalition (primarily public or private interests), their policy demands, and the extent to which the change between draft and final rule aligned with their demands. This level of alignment between policy asks and policy outcomes is my measure of lobbying success. It does not identify a causal relationship—true policy influence, but it is the standard approach for assessing lobbying success with these kinds of observational data (see Yackee and Yackee, 2006).

I first select a random sample of 44 proposed rules with both a mass-comment campaign and a final rule. I then selected all comments that were likely to be from organizations.<sup>5</sup> The hand-coding process included identifying the organization responsible for each comment submitted by an organization (e.g., a business, nonprofit, or government).

I then select a sample of 43 proposed rules on which the same organizations commented without a mass comment campaign.

For each rule, I code all comments submitted as file attachments or emails, but

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<sup>5</sup>Through an iterative process described in 2.3.2, I developed software and methods to select comments that were most likely submitted by organizations rather than by individuals. For example, I include all comments submitted as file attachments rather than typed into the textbox.

only some comments typed in a text box. Sophisticated lobbying organizations almost always submit comments as file attachments. I include comments typed in a text box if they share text with other comments, indicating they are part of a pressure campaign. This includes nearly all comments on most rules. I exclude entirely unique textbox contents and comments shorter than ten words. Almost all text-box comments and extremely short comments are trivial (e.g. “This sucks”). While form letters are often short, they are very unlikely to be less than 10 words. For comments sharing text, I code one sample document for all versions of the form letter.

My approach to measuring lobbying success starts with policy demands raised in comments. I code the general regulatory/deregulatory direction of the policy change, but the dimensions of conflict on which I judge lobbying success are those identified by commenters. They do not emerge from a reading of the policy or not any a priori concept. Instead, I read the change between draft and final rule with an eye for alignment with commenters’ requests (including requests that specific parts of the draft policy do not change.)

Using commenter requests to identify the dimensions of the conflict has advantages and disadvantages. Compared to other potential measures of success, it is more likely to focus on things that commenters care about and miss policy issues that other, non-commenting segments of the public might care about.

Other approaches to identifying the commenter’s relationship with policy changes have different strengths and weaknesses. For example, one could measure success by the number of times a comment is mentioned in the agency’s response to comments. However, this measure may be affected by strategic responsiveness by agencies choosing to discuss some issues more than others. It also counts explicit rejections toward the measure of responsiveness. One could also measure success by focusing on a-

priory potential aspects of the policy. Balla et al. (2020) count five factors: (1) the number of regulated entities, (2) number of activities or substances being regulated, (3) the level of pollution standards, (4) the compliance and effective deadlines of the regulation, and (5) the monitoring and reporting requirements. Each takes one value (increasing or decreasing), and each is weighted equally in the analysis. In contrast, starting with comments allows commenters to highlight the issues they care most about.

The hand-coded sample includes 6,541 hand-coded documents representing over 21.34105 million comments on 65 rules from 41 agencies, several times larger than leading studies using hand-coding. Unlike previous research, my sampling approach includes rules with very large and small numbers of comments that previous studies exclude. Table 3.1 shows a sample of the hand-coded data. Table 3.2 shows the organizations that commented on the most rules in this sample. 363 organizations lobbied on more than one rule in the hand-coded data, some on as many as 10 rulemaking dockets.

Table 3.3 shows the number of hand-coded rules, documents, the coalitions and organizations to which those documents belong, and the total number of comments they represent for a sample of agencies. As expected with a random sample, the agencies with most rules in the sample are also those with the most final rules posted to regulations.gov. The Environmental Protection Agency (EPA), Fish and Wildlife Service (FWS), and National Oceanic and Atmospheric Agency (NOAA), Department of Transportation (DOT), and Internal Revenue Service (IRS) are all in top ten agencies by number of rulemaking dockets on regulations.gov. The Bureau of Safety and Environmental Enforcement, Consumer Financial Protection Bureau (CFPB), and Wage and Hour Division (WHD) of the Department of Labor are all above av-

Table 3.1: A Sample of Organization-Level Hand-Coded Public Comment Data

Docket ID	Comment type	Organization	Position	Success	Coalition
DOT-OST-2018-0068	Org	Finnair Plc	Supports Rule	-2	AAAE
FEMA-2016-0003	Org	Aasa. Aesa	Opposes Rule	2	AASA
FEMA-2016-0003	Org	Sam Walton	Opposes Rule	2	AASA
NPS-2018-0007	Elected	Grace Meng	Opposes Rule	2	ACLU
NPS-2018-0007	Org	Justice First	Opposes Rule	2	ACLU
ICEB-2015-0002	Org	Kelly Services	Supports Rule	1	AFL-CIO
ICEB-2015-0002	Org	Arete Systems	Supports Rule	1	AFL-CIO
WHD-2019-0001	Org	Easterseals	Supports Rule	-1	ANCOR
WHD-2019-0001	Org	Leadingage	Supports Rule	-1	ANCOR
USCBP-2007-0064	Individual	John Eberly	NA	2	BBP
USCBP-2007-0064	Elected	Ed Perlmutter	Opposes Rule	-2	BBP
USCG-2010-0990	Org	Boatus.	Opposes Rule	-1	BOATUS
USCG-2010-0990	Org	Boatus.	Supports Rule	-1	BOATUS
CFPB-2019-0006	Elected	Nolan Mettetal	Supports Rule	2	CFSA
CFPB-2019-0006	Elected	Mike Osburn	Supports Rule	2	CFSA
IRS-2019-0039	Elected	Steve Bullock	Opposes Rule	-2	CLC
BSEE-2018-0002	Mass	Sierra Club	Opposes Rule	2	EARTHJUSTICE
BSEE-2018-0002	Org	Sierra Club	Opposes Rule	-2	EARTHJUSTICE
WHD-2019-0001	Org	Afl-Cio	Opposes Rule	-1	EPI
WHD-2019-0001	Org	Network Lobby	Opposes Rule	-1	EPI

Table 3.2: Organizations by Number of Rules on which they Commented

Organization	Rules
National Audubon Society	10
Natural Resources Defense Council	10
Earthjustice	9
Sierra Club	9
Center For Biological Diversity	7
Chamber Of Commerce	7
Pew Charitable Trusts	7
American Petroleum Institute	6
Farm Bureau	6
National Association Of Home Builders	6
National Mining Association	6
National Wildlife Federation	6
Oceana	6
American Bankers Association	5
Associated Builders And Contractors	5
Edison Electric Institute	5
International Association Of Drilling Contractors	5
International Bancshares Corporation	5
Materion Brush Inc.	5
National Employment Law Project	5

erage and have a disproportionate number of rules with a large number of comments, making these agencies more likely to be selected into the weighted sample. This figure also illustrates how my method of collapsing documents with repeated text to one representative document allows me to reduce the number of documents requiring hand-coding by several orders of magnitude (compare the “Documents” and “Comments” columns).

Figure 3.4 shows hand-coded support and opposition to proposed rules by different types of commenters and presidential administration. Support and opposition coding come from the spatial position regarding the draft and final rule, as shown in Figure 2.8. Elected officials write in more often in opposition than in support of a proposed rule across administrations. In contrast, individuals, organizations, and the mass comments these organizations mobilize overwhelmingly supported rules under Presi-

Table 3.3: Hand-coded Data By Agency

Agency	Rules	Documents	Coalitions	Organizations	Comments
EPA	12	1208	24	424	14501103
FWS	7	780	21	492	3028915
NOAA	7	128	18	91	144925
BSEE	5	161	12	125	132673
CFPB	3	1787	18	823	1096570
WHD	3	262	10	217	262
DOT	2	132	8	100	132
IRS	2	29	4	26	29873
USCIS	2	34	4	18	43
BLM	1	178	2	33	1342966
CEQ	1	315	5	287	22523
DEA	1	15	4	15	15
DOI	1	41	6	35	41
ED	1	132	14	126	132
FEMA	1	380	9	349	3139
ICEB	1	254	4	65	254
MSHA	1	52	3	43	52
NPS	1	98	3	67	98
OCC	1	96	3	93	241
OFCCP	1	32	4	30	7017

dent Obama, but mass and individual comments overwhelmingly opposed rules under President Trump. This reflects the partisan asymmetry in mobilizing organizations; the individuals (unique comments) and mass comments (form letters) mobilized by left-leaning public interest groups' campaigns overwhelmingly supported Obama-era policies and opposed Trump-era policies.

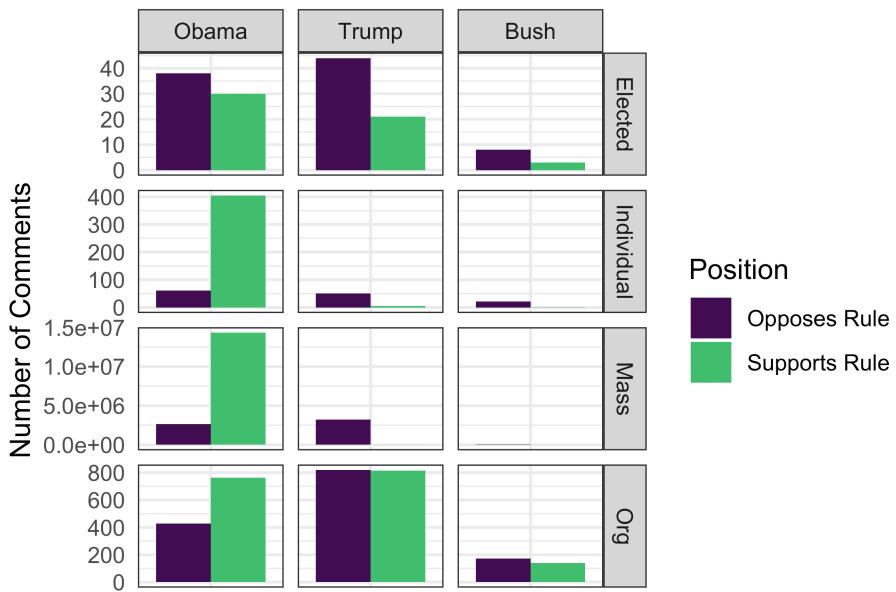


Figure 3.4: Hand-coded Comments By Type and Position on Proposed Rule

Most of these comments belong to lobbying coalitions and are thus not independent observations. When Friends of Earth and the Sierra Club lobbying together on a rule, the success of each depends on the other. Thus, I group comments into coalitions. The hand-coded sample includes 302 “coalitions,” 150 of which are single-organization “coalitions” (not coalitions), leaving 152 true coalitions of multiple organizations lobbying together.

Lobbying coalitions range in size from 2 to 217 organizations. Table 3.4 shows a sample of coded data, summarized at the coalition level. Even though the same organization may lead coalitions in multiple rulemakings, each rule’s lobbying coalitions are different, so I consider them separate observations. For example, the American Civil Liberties Union (ACLU) led a coalition in 2014 with a small number of organizations and a medium-size pressure campaign in support of a rule requiring additional Equal Employment Opportunity reporting from the Department of Labor’s Office of

Federal Contract Compliance Programs (OFCCP). The ACLU also led a very different coalition in 2020 with a large number of organizations and a very small public pressure campaign against a rule rolling back regulations on banks published by Office of the Comptroller of the Currency (OCC). Figure 3.7 shows that this sample is fairly balanced between coalitions that succeed and fail to get the changes they seek in the final rule.

Table 3.5 shows the number of coalitions coded as “public interest” and “private interest” by whether the majority of organizations in the coalition are for-profit businesses and trade associations or non-businesses (governments and nonprofits). 27% are majority business coalitions. 64% are public-interest coalitions. As Table 3.5 shows, the hand-coded “public interest” vs “private interest” distinction is highly correlated with the share of businesses in the coalition but not perfectly. These two measures diverge in cases where public interest coalitions mobilize a large number of business allies or where private interest coalitions mobilize a large number of non-business allies. Thus, while the share of businesses and trade associations is more objective, the public-private distinction is likely a better measure of coalition type. I estimate alternative models in 3.4 with each measure.

Several coalitions may lobby on the same rule. One coalition’s lobbying success is correlated with another coalition’s lobbying success to the extent that they are asking for the same or contradicting policy changes. However, by grouping organizations into coalitions, I account for many of the causally-related policy requests (those organizations lobbying on an issue *because* another organization is lobbying on that issue).

Table 3.4: A Sample of Hand-Coded Data Summarized by Coalition

Docket ID	Coalition	Coalition_Pos	Size	Businesses	Business	Type	Mass comments	Unopposed
OCC-2020-0026	ACLU	Opposes Rule	74	0	Non-Business	Public	148	FALSE
OFCCP-2014-0004	ACLU	Supports Rule	10	0	Non-Business	Public	6986	FALSE
CFPB-2016-0025	ADVANCE AMER-ICA	Opposes Rule	57	262	Business	Private	333906	FALSE
ICEB-2015-0002	AFL-CIO	Supports Rule	5	2	Non-Business	Public	0	FALSE
ED-2016-OESE-0032	AFT	Opposes Rule	1	0	Non-Business	Public	0	FALSE
TREAS-DO-2007-0015	AHC	Supports Rule	1	0	Non-Business	Private	0	FALSE
DEA-2018-0005	AMA	Supports Rule	2	2	Business	Public	0	FALSE
CEQ-2019-0003	AMWA	Opposes Rule	1	0	Non-Business	Public	0	FALSE
CEQ-2019-0003	ASARCO LLC	Supports Rule	1	1	Business	Private	0	FALSE
CFPB-2019-0022	BLITT AND GAINES	Supports Rule	1	1	Business	Private	0	FALSE
OCC-2020-0026	CHAMBER OF COM-MERCE	Supports Rule	1	1	Business	Private	0	FALSE
TREAS-DO-2007-0015	CHAMBER OF COM-MERCE	Opposes Rule	3	3	Business	Private	0	FALSE
TREAS-DO-2007-0015	COMPASS BANK	Opposes Rule	1	1	Business	Private	0	FALSE
TREAS-DO-2007-0015	CONGRESS SUPPLIERS	Opposes Rule	1	0	Non-Business	Public	0	FALSE
FWS-R9-ES-2008-0093	CONOCO SUPPLIERS	Opposes Rule	1	1	Business	Private	0	FALSE
CFPB-2019-0022	CONSUMER PORTS	Supports Rule	1	0	Non-Business	Public	0	FALSE
TREAS-DO-2007-0015	CREDIT UNIONS	Opposes Rule	2	0	Non-Business	Private	0	FALSE

Table 3.5: Types of Coalitions in Hand-Coded Data

Coalition Type	Business	Non-Business
Private	72	17
Public	11	147

### 3.3.1.3 *Comments from Legislators*

One mechanism by which campaigns may influence policy is by mobilizing members of Congress. Thus, I identify comments submitted by members of Congress and count the number of legislators in each lobbying coalition. Figure 3.5 shows the number of comments from members of Congress received during rulemaking by a sample of federal agencies. There is massive variation in the level of attention that members of Congress pay to different agencies and rules. The spikes in attention to each agency correspond with public pressure campaigns targeting rules from that agency. Oversight letters are frequently co-signed by multiple members from the Senate, House, or both chambers. Some of the rules on which members of Congress commented appear in the hand-coded sample. Table 3.6 shows the number of comments from the most common types of elected officials in the hand-coded data. Members of the U.S. House and Senate are the most common.

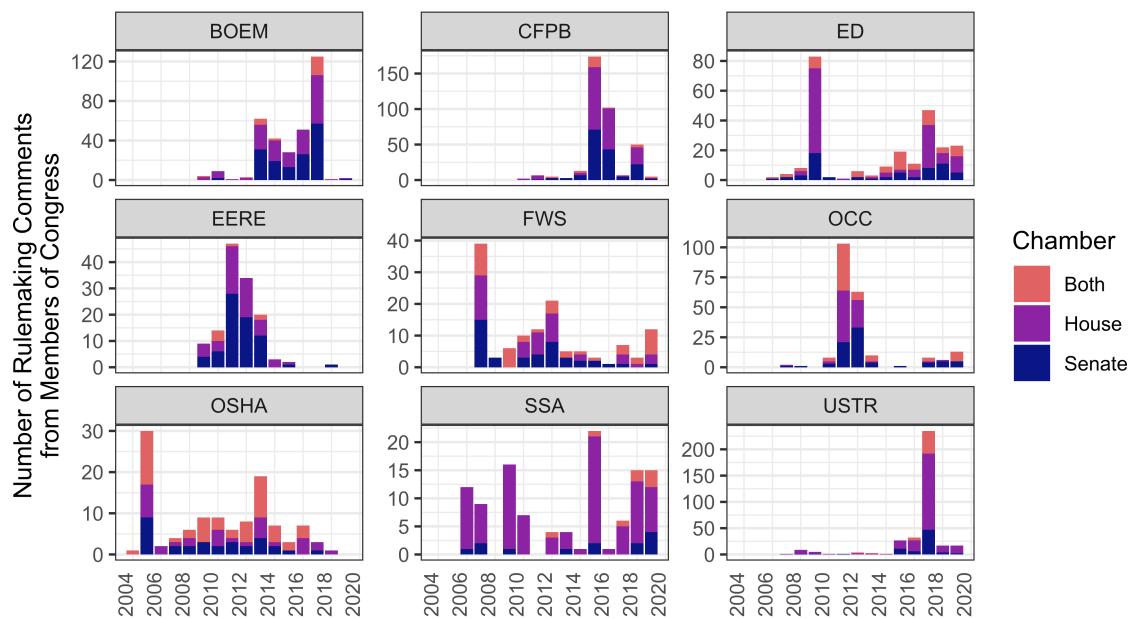


Figure 3.5: Number of Rulemaking Comments from Members of Congress per Year, 2005-2020 to the Bureau of Ocean Energy Management (BOEM), Consumer Financial Protection Bureau (CFPB), Department of Education (ED), Office of Energy Efficiency and Renewable Energy (EERE), Federal Aviation Administration (FAA), Fish and Wildlife Service (FWS), Office of the Comptroller of the Currency (OCC), Occupational Safety and Health Administration (OSHA), Social Security Administration (SSA), US Trade Representative (USTR)

### 3.3.1.4 The Dependent Variable: Lobbying Success

The dependent variable is the extent to which a lobbying coalition got the policy outcome they sought, which I measure in several ways.

First, on a sample of rules, I hand-code lobbying success for each organization or elected official, comparing the change between the draft and final rule to each organization's demands on a five-point scale from "mostly as requested" to "significantly different/opposite than requested." For each organization, I identify the main overall demand, the top three specific demands, and the corresponding parts of the draft and

Table 3.6: Comments from Elected Officials in the Hand-Coded Data

Elected Official Type	n
House	34
Senate	26
Gov	23
Florida	4
Maryland	4
Mayor	4
Mississippi	4
Alaska	3
City	3
Illinois	3
Texas	3
California	2
Governor	2
Ohio	2
Oklahoma	2

final rule texts. This does not capture rule changes on which an organization did not comment.

I then code overall lobbying success and lobbying success on each specific demand for each organization and coalition. Both the overall score and average score across specific demands both fall on the interval from -2 (“significantly different”) to 2 (“mostly as requested”). A team of undergraduate research assistants then applied the codebook to all comments likely to be from organizations or elected officials on a random sample of rules. Several rules were double-coded by the whole team.

In the models below, *coalition lobbying success* is the mean of hand-coded lobbying success on a five-point scale,  $\{-2, -1, 0, 1, 2\}$ .

The average hand-coded success per organizational comment is 0 ( $N = 6,541$ ). The average success for organizational comments with a mass comment campaign is -1.714 ( $N = 1,932$ ).

### 3.3.1.5 The Main Predictor Variable

The number of supportive comments generated by a public pressure campaign (the main variable of interest) is a tally of all comments mobilized by each organization or coalition that ran a mass-comment campaign on a proposed rule. Because the marginal impact of additional comments likely diminishes, models typically include either the logged number of comments or an exponential term to account for non-linear effects. If a coalition mobilizes more than 99 form-letter comments on a proposed rule, I code that coalition as having a mass comment campaign (*campaign* = 1). Where a coalition only submits technical comments from lawyers and does not mobilize public support, the binary measure, *campaign*, and the numeric measure, *mass comments*, are 0.

Figure 3.6 shows a scatterplot of the dependent variable (*lobbying success*) and main predictor (*mass comments*) by coalition. Coalition lobbying success ranges from total success to total loss (2 to -2). The number of mass comments ranges from 0 to 3,009,922. The size of each point represents the size of each coalition (the number of organizations and elected officials), and the color indicates whether the coalition is led by private or public interest groups. This view of the data does not show a clear relationship between public pressure and lobbying success. There were relatively more (and more successful) public interest campaigns in the Obama years. Likewise, there were more (and more successful) private interest campaigns in the Trump years. As predicted in 2.2, the largest campaigns are public interest campaigns, and public interest campaigns are more frequent than private interest campaigns overall.

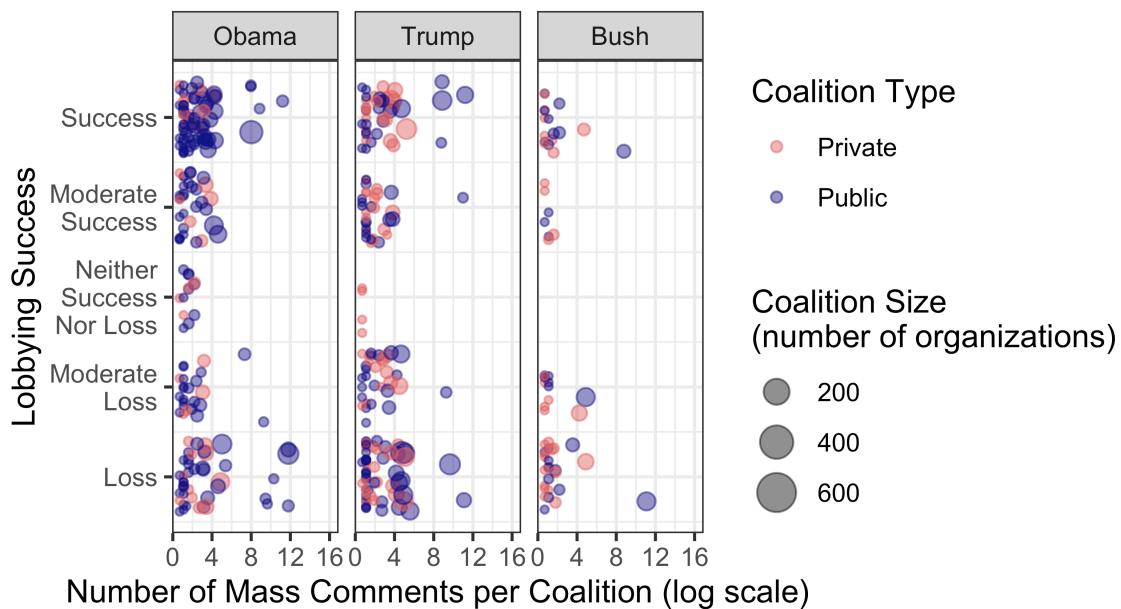


Figure 3.6: Lobbying Success by Number of Supportive Comments

This approach is significantly different than that employed in previous studies of mass comment campaigns in at least two ways. First, my methods allow me to identify coalitions consisting of multiple organizations. Previous studies measure mass comment campaigns at the organization level. For example, Balla et al. (2020) analyzes “1,049 mass comment campaigns that occurred during 22 EPA rulemakings”—an average of nearly 50 “campaigns” per rule. By “campaign,” Balla et al. (2020) mean an organization’s campaign rather than a coalition’s campaign. Especially on EPA rules, there are rarely more than two or three coalitions engaging in public pressure campaigns—one of the environmental advocacy groups and their allies, another of regulated industry groups and their allies. Using organizations as the unit of analysis means that observations are far from independent. An analysis that counts one coalition’s campaign as 40 smaller “campaigns” with the same policy demands would count this one campaign as 40 observations. My methods allow me to measure levels

of public pressure per organization *and* per coalition.

The second major difference between my approach and previous research is that I do not compare policymakers' responses to sophisticated comments to policymakers' responses to mass comments. Rather, I *attribute* mass comments to organizations and coalitions that also submit sophisticated technical comments. The set of comparisons one makes is critical to any study of responsiveness or policy influence. Researchers may reach different conclusions if they compare different things. Consider a study comparing how agencies respond to Sierra Club form letters to how they respond to the Sierra Club's sophisticated comments. Now consider a study that compares responsiveness to the Sierra Club's sophisticated comments between rules where they did and did not run a mass comment campaign. A study comparing the average influence of form-letter comments to the average influence of sophisticated comments is very different from a study that compares the influence of two sets of sophisticated comments with different *levels* of public pressure behind them. By measuring comments per coalition, both through hand-coding and text reuse, I capture different levels of public pressure than we would see if we were to look only at comments per organization.

### 3.3.1.6 Other predictor variables

Other predictors of lobbying success in the models below include the *size* of the lobbying coalition, and whether the coalition is a *business coalition*, and whether the coalition is lobbying *unopposed*. The number and type(s) of organization(s) is an attribute of each coalition (e.g., a *business* coalition with  $N$  organizational members). *Coalition size* is a count of the number of organizations lobbying together on the rule, i.e., the number of distinct commenting organizations in each coalition. For

organizations lobbying alone, coalition *coalition size* is 1. *Coalition* is an indicator variable for whether the organization is lobbying in a coalition. It takes a value of 0 when *coalition size* is 1 and 1 otherwise. A coalition is *unopposed* when no opposing organizations comments. This is derived from the hand-coded spatial position of each comment. If an organization supports the proposed rule and others oppose it, they have opposition. Likewise, if an organization opposes a proposed rule and others support it, they have opposition. However, if multiple coalitions support (or oppose) the rule for different reasons (e.g. one coalition would like one provision added while another coalition would like a different provision added), a rule may have multiple unopposed lobbying coalitions.

I code a coalition as a *business* coalition if the majority of commenting organizations are for-profit businesses and trade associations.<sup>6</sup> *Business* is binomial. Alternative models in the Appendix use the number and share of businesses in a coalition instead.

### 3.3.1.7 Examples of hand-coded lobbying success

**A rule with a public pressure campaign: the 2015 Waters of the United States Rule:** In response to litigation over the scope of the Clean Water Act, the Environmental Protection Agency and Army Corp of Engineers proposed a rule based on a legal theory articulated by Justice Kennedy, which was more expansive than Justice Scalia's. The Natural Resources Defense Council (NRDC) submitted a 69-page highly technical comment “on behalf of the Natural Resources Defense Council..., the Sierra Club, the Conservation Law Foundation, the League of Conservation Voters, Clean Water Action, and Environment America” supporting the proposed rule:

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<sup>6</sup>For more on how I identify types of organizations and coalitions, see 2.3.2

“we strongly support EPA’s and the Corps’ efforts to clarify which waters are protected by the Clean Water Act. We urge the agencies to strengthen the proposal and move quickly to finalize it...”

I coded this as support for the rule change, specifically not going far enough. NRDC makes four substantive requests: one about retaining language in the proposed rule (“proposed protections for tributaries and adjacent waters...must be included in the final rule”) and three proposed changes (“we describe three key aspects of the rule that must be strengthened”).<sup>7</sup> I also coded it as requesting speedy publication. These demands provide specific keywords and phrases for which to search in the draft and final rule text. By comparing the requested policy outcomes to the text of the final rule, I evaluate the extent to which NRDC got what it asked for.

A coalition of 15 environmental organizations mobilized over 944,000 comments. Over half (518,963) were mobilized by the four organizations mentioned in NRDC’s letter: 2421,641 by Environment America, 108,076 by NRDC, 101,496 by Clean Water Action, and 67,750 by the Sierra Club. Other coalition partners included EarthJustice (formerly a part of the Sierra Club, 99,973 comments) and Organizing for Action (formerly president Obama’s campaign organization, 69,369 comments). This is one of the larger campaigns in the dataset. This coalition made sophisticated recommendations and mobilized a million people in support of NRDC’s sophisticated lobbying.

The final rule moved in the direction requested by NRDC’s coalition, but to a lesser extent than requested—what I code as “some desired changes.” As NRDC et

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<sup>7</sup>NRDC’s three policy demands were: (1) “The Rule Should Categorically Protect Certain “Other Waters” including Vernal Pools, Pocosins, Sinkhole Wetlands, Rainwater Basin Wetlands, Sand Hills Wetlands, Playa Lakes, Interdunal Wetlands, Carolina and Delmarva bays, and Other Coastal Plain Depressional Wetlands, and Prairie Potholes. Furthermore, “Other ‘Isolated’ Waters Substantially Affect Interstate Commerce and Should be Categorically Protected Under the Agencies’ Commerce Clause Authority.” (2) “The Rule Should Not Exempt Ditches Without a Scientific Basis” (3) “The Rule Should Limit the Current Exemption for Waste Treatment Systems”

al. requested, the final rule retained the language protecting tributaries and adjacent waters and added some protections for “other waters” like prairie potholes and vernal pools. EPA did not alter the exemptions for ditches and waste treatment systems.

For this coalition, the dependent variable, *Lobbying success* is 1 on the scale from -2 to 2, *coalition size* is 15, *business* is 0, their position (*supports rule*) is 1, *campaign* is 1, and the number of *mass comments* is 943,931.

**2009 Fine Particle National Ambient Air Quality Standards:** In 2008, the EPA proposed a rule expanding air quality protections. Because measuring small particles of air pollution was once difficult, large particulates were allowed as a surrogate measure for fine particles under the EPA’s 1977 PM10 Surrogate Policy. EPA proposed eliminating this policy, requiring regulated entities and state regulators to measure and enforce limits on much finer particles of air pollution.

EPA received 163 comments on the rule, 129 from businesses, business associations such as the American Petroleum Institute and The Chamber of Commerce, and state regulators that opposed the rule. Most of these were short and cited their support for the 63-page comment from the PM Group, “an ad hoc group of industry trade associations” that opposed the regulation of fine particulate matter. Six state regulators, including Oregon’s, only requested delayed implication of the rule until the next revised their State Implementation Plans (SIPs) for Prevention of Significant Deterioration (PSD). EarthJustice supported the rule but opposed the idea that the cost of measuring fine particles should be a consideration. On behalf of the Sierra Club, the Clean Air Task Force, EarthJustice commented: “We support EPA’s proposal to get rid of the policy but reject the line of questioning as to the benefits and costs associated with ending a policy that is illegal.” The EarthJustice-led coalition also opposed delaying implementation: “EPA must immediately end any use of the Surrogate Pol-

icy — either by "grandfathered" sources or sources in states with SIP-approved PSD programs — and may not consider whether some flexibility or transition is warranted by policy considerations."

The final rule did eliminate the Surrate Policy but allowed states to delay implementation and enforcement until the next scheduled revision of their Implementation Plans. I code this as the EarthJustice coalition getting most of what they requested, but not a complete loss for the regulated coalition.

For the PM Group coalition, the dependent variable, *coalition lobbying success* is -1, *coalition size* is 129, *business coalition* is 1, *pressure campaign* is 0, and the number of *mass comments* is 0. For the State of Oregon's coalition, the dependent variable, *coalition lobbying success* is 2, *coalition size* is 6, *business coalition* is 0, *pressure campaign* is 0, and the number of *mass comments* is 0. For the EarthJustice coalition, the dependent variable, *coalition lobbying success* is 1, *coalition size* is 3, *business coalition* is 0, *pressure campaign* is 0, and the number of *mass comments* is 0.

These examples are broadly consistant with the overal data—lobbying success in these two examples is the same, despitely the large difference in public pressure. This is inconsistant with Hypotheses 3.1 or 3.3 that anticipated higher lobbying success with more public pressure. Figures 3.7 and 3.8 show the distribution of values for coalition-level variables in the hand-coded data.

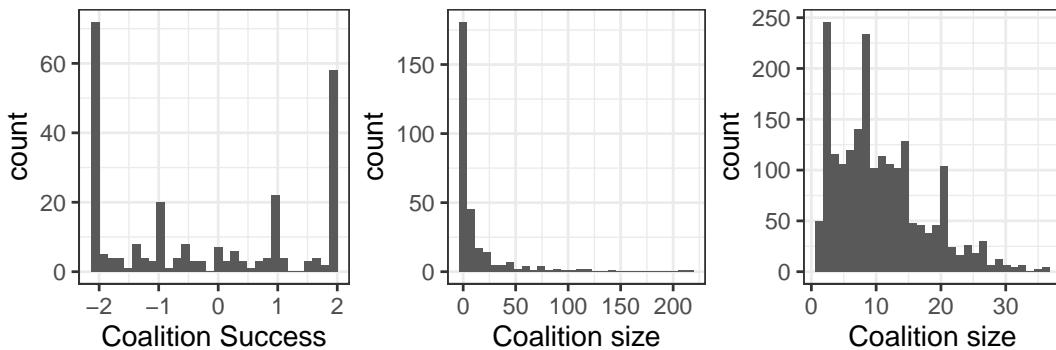


Figure 3.7: Hand-coded Data by Coalition

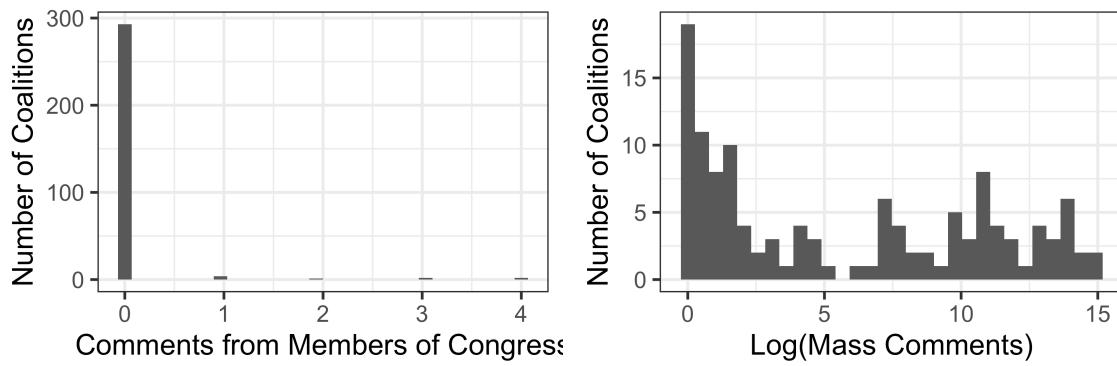


Figure 3.8: Number of Comments Linked to Hand-Coded Coalitions

### 3.3.1.8 Limitations

The two main limitations of this design both bias estimates of public pressure campaign influence toward zero.

First, lobbying success may take forms other than changes in policy texts. Agencies may speed up or delay finalizing a rule, extend the comment period, or delay the date at which the rule goes into effect. Indeed, commenters often request speedy or delayed rule finalization, comment period extensions, or delayed effective dates. I capture these potential outcomes in my hand-coding but not in the two automated methods, which apply only to observations with a final rule text. Likewise, when

there is no change between draft and final rule, both automated methods necessarily record lobbying success as 0, even if a comment asks an agency to publish a rule without change.

Second, bureaucrats may anticipate public pressure campaigns when writing draft rules, muting the observed relationship between public pressure and rule change at the final rule stage of the policy process. This is a limitation of all studies of influence during rulemaking comment periods.

### **3.3.2 Methods**

The most direct way to assess the hypothesis that mass engagement increases lobbying success is to assess the relationship between the number of comments that a coalition mobilizes and its lobbying success. The dependent variable for most analysis is the organization or coalition's lobbying success, hand-coded on the interval between 2 (total success; the policy changed as requested) to -2 (total loss; the policy changed in the opposite direction requested). However, public pressure campaigns may only be effective under certain conditions. Specifically, pressure campaigns may help some types of coalitions more than others. Thus, I assess both the main relationship between pressure campaigns and lobbying success and the interaction between campaigns and coalition type. I then assess evidence for or against different potential causal pathways of influence. The main indirect pathway by which campaigns may influence agency policymaking is through engaging members of Congress.

These data have a hierarchical structure. Comment-level observations are nested within an organization, within a coalition, within a rule, within an agency, and an administration. I use a combination of fixed and random effects to account for dependence among observations at higher levels of analysis. The main models use data

rolled up to the coalition level. Coalitions range from 1 to over 200 organizations in size and may include anywhere from 1 to over a million comments. Finally, I use a difference-in-difference design to assess variation in success *within* organizations lobbying that lobby on multiple rules.

### 3.3.2.1 Modeling Coalition-level Lobbying Success

#### The Direct Relationship Between Public Pressure and Lobbying Success

The dependent variable,  $Y$ , is the lobbying success of each coalition. To estimate the relationship between a coalition's lobbying success and the scale of public pressure it mobilizes, I model the success of each coalition  $i$  lobbying a rule  $j$  published by an agency  $k$  under a president  $p$ . Each coalition is unique to a rule; each rule is unique to an agency (I assigned joint rules to the lead agency only) and presidential administration. I thus use the simpler notation  $y_i$  rather than the equivalent, more specific notation  $y_{ijkp}$ .

The main variable of interest is the total number of form-letter public comments that a lobbying coalition mobilized. The base model (Equation 3.3) uses an indicator for whether coalition  $i$  used a public pressure campaign, i.e., mobilized mass comments (by definition, more than 99 mass comments).  $\beta_1$  estimates the difference in lobbying success when coalition  $i$  uses a pressure campaign compared to when it does not. Other models use either the logged number of comments or a quadratic term to account for the different marginal effects of additional public comments for smaller and larger campaigns.

$$Y_i = \beta_1 \mathbf{Pressure\ campaign}_i + \beta_{2:n} X_i + \gamma_j + \delta_p + \epsilon_i \quad (3.3)$$

The base models include agency and president fixed effects ( $\$ \ _k + \ _p \$$ ) and

control for other coalition-level factors that may affect a coalition's lobbying success,  $X_i$ . Controls include whether the coalition is lobbying unopposed, the coalition's size (the number of distinct organizations and elected officials), and the type of coalition (e.g., whether it is a business coalition or a public-interest coalition) and include agency fixed effects. I estimate these relationships using OLS regression.

**Congressional Support as a Mediator of Lobbying Success** To assess congressional support as a mediator in the influence of public pressure campaigns on rulemaking, I estimate the average conditional marginal effect (ACME) and the proportion of the total effect attributed to mediation through congressional support (comments or other communication from Members of Congress supporting the coalition's position on the proposed rule). As developed by Imai et al. (2010), this involves first estimating a model of the potential mediator as a combination of the main predictor, public pressure, and covariates,  $X_i$ .

The mediator model (Equation 3.4) estimates the relationship between the scale of public pressure and the number of comments from members of Congress, who may receive political information (e.g., about the level of public attention or public opinion) from public pressure campaigns.

$$\text{Congressional Support}_i = \beta_0 + \beta_1 \text{Pressure Campaign}_i + \beta_{2-n} X_i + \gamma_k + \delta_p + \epsilon_i \quad (3.4)$$

The outcome model (Equation 3.5) is the same as Equation 3.3, except that it now includes the number of supportive comments from members of Congress as a predictor.  $y_i$  is Lobbying success of coalition  $i$  on rule published by agency  $k$  under president  $p$ , Pressure Campaign $_i$  is whether the coalition organized a pressure cam-

paign, Congressional Support<sub>*i*</sub> is the number of members of Congress supporting the coalition, and  $X_i$  are other coalition-level predictors of lobbying success.

$$Y_i = \beta_1 \text{Pressure campaign}_i + \beta_2 \text{Congressional Support}_i + \beta_{3:n} X_i + \gamma_j + \delta_p + \epsilon_i \quad (3.5)$$

The next section presents results from estimating the above models using the hand-coded data.

### 3.3.2.2 Difference in Differences in Organization-level Lobbying Success

While it would not be appropriate to compare the lobbying success of organizations *within* a rulemaking (because many organizations belong to the same coalition), we can compare the lobbying success *within* the same organization *across* rules. This limits the analysis to organizations that lobby on multiple policies. The key variation of interest is when organizations lobby with a public pressure campaign versus when they do not.

There is still a (lesser) problem with the i.i.d. assumption here because two organizations lobbying in a coalition on one rule may mobilize each other to lobby in coalition in a different rule (in my data, lobbying coalitions are at the policy-level, since they differ from policy to policy).

At the organization level, the appropriate analysis is a difference-in-difference design. We know the success of each organization when it does and does not participate in a lobbying coalition that mobilizes public pressure (at least each organization that I can use for this analysis). The difference within an organization is now the key variation.

$$Y_{ij} = \alpha_i + \beta_0 + \beta_1 \text{Pressure Campaign}_{ij} + \beta_{2:n} X_{ij} + \gamma_k + \delta_p + \epsilon_{ij} \quad (3.6)$$

Equation 3.6 is similar to the model of coalition-level success except that  $y_{ij}$  is now the lobbying success of *organization i* in coalition  $j$  and  $X_{ij}$  is now a vector of organization- and coalition-level controls. Additionally, Equation 3.6 adds  $\alpha_i$ , a fixed effect for each organization. This fixed effect accounts for the organization's characteristics that do not vary over time as it lobbies on multiple rules. This difference-in-difference design ensures that coefficient  $\beta_1$  captures variation related to changes in levels of public pressure and other factors that vary within each organization, not other factors that may vary across organizations.

$\beta_{2:n}$  captures estimates the effects of other factors that may affect an organization's lobbying success, including coalition size, the difference in the success of organization  $i$  when they support proposed policy  $j$  rather than oppose it.  $President_j$  is a dummy for whether policy  $j$  was proposed by President Trump or Bush rather than President Obama's administration.

Assuming that organizations have parallel trends in their level of success given a level of support,  $\beta$  represents the average effect of changing levels of public pressure on an organization's lobbying success.

### 3.4 Results: Lobbying Success

This section leverages a random sample of agency rules for which I have hand-coded nearly all public comments. The first subsection presents estimates of the direct relationship between public pressure and lobbying success (Table 3.7). The next subsection presents results of mediation analysis, assessing the support from members

of Congress as a mediator for the success of public pressure campaigns (Tables 3.8). The third subsection presents estimates of factors affecting within-organization levels of lobbying success using a difference-in-difference design (Table 3.9).

### 3.4.1 Coalition-level Lobbying Success

Table 3.7 present results estimating coalition-level lobbying success as a function of public pressure, coalition size, coalition type, whether the coalition supports the proposed rule, and whether there is an opposing coalition, as described in Equation 3.3.

Models 1 and 2 use a binary measure of public pressure—did the coalition sponsor a public pressure campaign or not? Models 2-6 use continuous measures of public pressure. Models 3 and 4 use the logged number of mass comments, reflecting the intuition that one additional comment matters more for smaller campaigns. Models 5 and 6 include both linear and quadratic terms for the number of comments to allow for a wider array of possible non-linear relationships.

I use two related measures of coalition type. Models 1, 3, and 5 use my classification of coalitions as primarily public or private interests. Private interest is the omitted category, so coefficients are estimates of the difference in lobbying success for public interest coalitions compared to private interest coalitions. Models 2, 4, and 6 use a related, more objective measure: whether the majority of coalition members are businesses or trade associations.

All models include fixed effects for agency and president to allow for differing average levels of lobbying success at different agencies and political conditions.<sup>8</sup>.

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<sup>8</sup>The Appendix includes a parallel set of models with random effects accounting for different levels of responsiveness to public comments in different agencies and administrations. The main results are similar

These models include coalitions of 1 (organizations lobbying alone), but excluding them yields similar results, except that coalition size has a much weaker correlation with lobbying success.

Table 3.7 shows that the main effect,  $\beta_1$ , in Model 1 is -0.55 (S.E. = 0.71) on the five-point scale of lobbying success. Because these models include interactions with coalition type, the main effect is the estiated effect for the omitted caegory. In Model 1 this is the effect or a pressure campaign for a private interest group coalition. For public interst groups, the estimate is and -0.3993899 ( $\beta_1 + \beta_6$ ). Estimates are inconsistant across specifications and not statistically significant.

The strongest predictor of lobbying success is whether the organization supported the rule. These coalitions had an average success 1.34 points greater than those that opposed the rule (S.E. = 0.21). This result reflects a combination of several related dynamics. First, rules often do not change between draft and final. Organizations that support the rule are thus likely to “succeed” when the status quo prevails. Second, organizations that support a proposed rule are necessarily aligned with agency officials’ preferred policy direction. If the agency officials change the final rule to go future in their preferred direction, such changes often align with organizations that supported the rule. Finally, by selecting proposed rules that had a final rule rather than being withdrawn, this sample is missing some lobbying success by organizations that requested a proposed rule be withdrawn.

The limited size of this sample means that we lack statistical power to have confidence in the effect of other variables.

As this sample is disproportionately draft rules that received an unusual number of comments, these results are largely based on variation within high-salience rulemakings.

Table 3.7: OLS Model of Coalition-Level Lobbying Success

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent Variable	Lobbying Success					
Pressure Campaign	-0.549*	-1.103+				
	(0.223)	(0.629)				
Public	-0.093		-0.084		-0.251	
	(0.376)		(0.362)		(0.306)	
Coalition	0.576	0.333	0.718	0.443	0.756	0.397
	(0.685)	(0.739)	(0.635)	(0.715)	(0.662)	(0.699)
Log(Coalition Size)	0.148	0.221	0.064	0.147	-0.003	0.132
	(0.190)	(0.202)	(0.163)	(0.205)	(0.157)	(0.176)
Supports Rule	1.336***	1.316**	1.312***	1.331***	1.306**	1.286**
	(0.341)	(0.358)	(0.342)	(0.340)	(0.359)	(0.361)
Unopposed	0.149	0.124	0.172	0.248	0.037	0.121
	(0.243)	(0.339)	(0.266)	(0.328)	(0.206)	(0.274)
Pressure Campaign × Public	-0.641					
	(0.496)					
Business Coalition		0.226		0.138		0.301
		(0.409)		(0.437)		(0.381)
Pressure Campaign × Business		0.107				
		(0.555)				
Log(Mass Comments)			-0.006	-0.145*		
			(0.056)	(0.064)		
Log(Mass Comments) × Public			-0.138+			
			(0.079)			
Log(Mass Comments) × Business				0.534		
				(0.336)		
Mass Comments					0.000*	0.000
					(0.000)	(0.000)
Mass Comments^2					0.000*	0.000
					(0.000)	(0.000)
Num.Obs.	212	178	212	178	212	178
R2	0.348	0.316	0.348	0.322	0.330	0.305
AIC	766.5	659.3	766.6	657.8	772.4	662.2
BIC	873.9	758.0	874.0	756.4	879.9	760.8
Log.Lik.	-351.254	-298.662	-351.317	-297.898	-354.220	-300.091
Std. Errors	Clustered (agency)	Clustered (agency)	Clustered (agency)	Clustered (agency)	Clustered (agency)	Clustered (agency)
FE: agency	X	X	X	X	X	X
FE:	X	X	X	X	X	X

I now turn to a key variable omitted from the models in Table ??, the level of attention and support from an agency's political principals—specifically, members of Congress, which may mediate the effect of public pressure campaigns.

#### *3.4.1.1 Congressional Support as a Mediator of Lobbying Success*

Hypothesis 3.4—that the overall level of public attention to a proposed rule moderates the level of attention from members of Congress—implies a correlation between the number of comments from members of Congress and all other comments on each rule. We should assess this correlation both across all rules and rules where at least one legislator commented, making it more plausible that legislators were aware of the rulemaking and thus faced the choice of whether to comment or not. Figure 3.9 shows both of these relationships. The dashed line shows the relationship for all rules and the solid line shows the relationship for rules where at least one legislator commented. The right-hand panel shows this same plot with both axes on a log scale. There is a strong correlation between mass comments and legislator attention (Spearman's rank correlation,  $\rho = 0.27$ , p-value = 0. However, for reasons discussed in 3.2.7, this should not be taken as strong evidence of a causal effect.

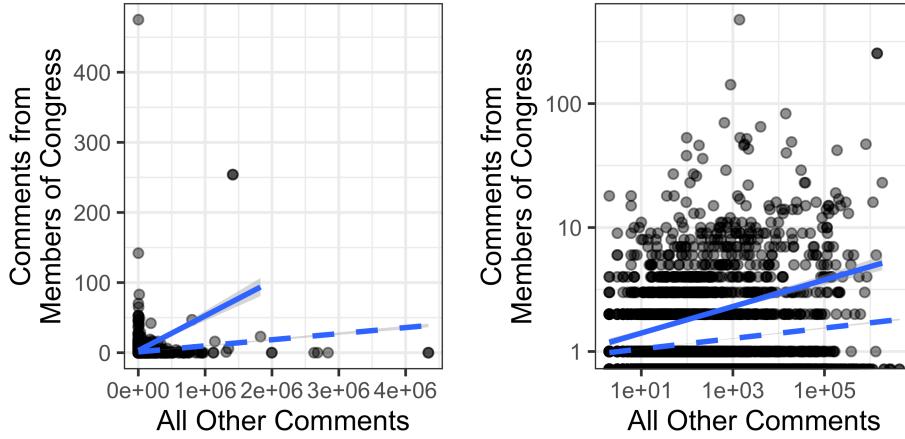


Figure 3.9: Correlation Between Mass Comments and Comments from Members of Congress

To assess congressional support as a mediator in the influence of public pressure campaigns on rulemaking, I estimate the average conditional marginal effect (ACME, conditional on the number of comments from Members of Congress) and average direct effect (ADE) of mass comments using mediation analysis. To do this, I estimate a model predicting the proposed mediator using both OLS and Poisson regression. Because the dependent variable (the number of supportive comments from members of Congress) is a count, a Poisson model is more appropriate. The dispersion parameter is not significantly above 1.

The first two models in table 3.8 are similar to those in Table 3.7, but the dependent variable is now the mediator variable (the number of supportive members of Congress). The outcome model is the same as Model 1 in Table 3.7 but includes the proposed mediator, the number of supportive comments from members of Congress. (See Equation 3.4).

By definition, only organizations lobbying in coalition with others have members of Congress in their coalition. Thus I exclude the “coalitions” of 1 organization and

omit the indicator of whether the group is lobbying in the coalition from the model. I also subtract the number of members of Congress from the coalition size.

OLS and Poisson regression results differ significantly, likely because the Poisson model drops coalitions with zero members of Congress. The Poisson results suggest that there is a large positive association between a pressure campaign and the number of members of Congress joining a coalition, but only for private-interest coalitions (the coefficient on the interaction between Pressure Campaign and Public Interest Coalition is negative and nearly equivalent to the main effect of Pressure campaigns). Public interest coalitions without pressure campaigns enjoy more support from members of Congress than private interest campaigns. These mixed results make it difficult to assess 3.5.

The outcome model results are similar to the results of Model 1 in Table 3.7. Adding congressional support to the model improves the R-squared and log-likelihood. The number of letters from members of Congress is associated with a  $\beta_2 = 0.24$  point increase in lobbying success (S.E. = 0.21).

The average effect of a public pressure campaign on lobbying success, conditional on letters from members of Congress (the ACME) is 0.03 on the 5-point scale, with a p-value of 0.682. This The Average Direct Effect (ADE) of a public pressure campaign on lobbying success is -0.72, with a p-value of 0.052.

### 3.4.2 Difference in Differences in Organization-level Lobbying Success

Estimates in Table 3.9 show the results of estimating model 3.6. The negative correlation between lobbying success and the number of mass comments is likely due to campaigns “going down fighting”—not trying to influence policy. The fact that organizations are more likely to get the outcome they seek when they already support

Table 3.8: Regression Models of Congressional Support and Lobbying Success for Mediation Analysis

<b>Dependent Variable</b>	"Fire alarm"/"Beacon" Mediator Model (Poisson)	"Warning Sign" Mediator Model (Poisson)	Outcome Model (OLS)
	Members of Congress in Coalition	Members of Congress Opposing Coalition	Lobbying Success
Pressure Campaign	0.057 (0.207)	0.092 (0.103)	-0.604+ (0.300)
Public	0.134+ (0.072)	-0.259* (0.101)	-0.457 (0.463)
Log(Coalition Size)	0.031 (0.034)	-0.028 (0.034)	0.073 (0.172)
Supports Rule	-0.178+ (0.104)	0.431* (0.194)	1.486** (0.443)
Unopposed	-0.173 (0.134)		-0.208 (0.337)
Pressure Campaign × Public	0.138 (0.100)	0.226 (0.205)	-0.418 (0.625)
coalition_congress			0.239** (0.081)
Num.Obs.	113	113	113
R2			0.513
R2 Adj.			0.327
R2 Within			0.397
R2 Pseudo	0.059	0.142	
AIC	310.2	309.7	385.0
BIC	394.7	391.6	472.2
Log.Lik.	-124.093	-124.869	-160.479
Std. Errors	Clustered (agency)	Clustered (agency)	Clustered (agency)
FE: agency	X	X	X
FE: president	X	X	X

+ p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

the rule makes sense because the agency is more likely to be sympathetic to their requests.

### **3.5 Conclusion**

I find little evidence that public pressure campaigns increase lobbying success. If anything, mass comment campaigns may be associated with lower average levels of lobbying success. There are several possible explanations for this result. First, it could be that many mass comment campaigns are not aimed at influencing policy. Second, agencies may not be persuaded by political information, either because of the institutions for dealing with public input or decisionmakers' biases. Finally, the relatively small sample may simply lack the power to reliably estimate small effects.

I do find evidence that lobbying coalitions are more successful when they mobilize more members of Congress, but legislators disproportionately align with private interest (e.g., business-led) coalitions, not the public interest coalitions that run most public pressure campaigns.

Table 3.9: Difference-in-Difference Model of Lobbying Success Within Organizations

Dependent Variable	Model 1	Model 2	Model 3
	Lobbying Success	Lobbying Success	Lobbying Success
Pressure Campaign	0.014 (0.389)	0.109 (0.462)	-1.572* (0.780)
Public	0.572 (0.378)	0.300 (0.417)	0.678 (0.579)
Coalition	-0.057 (0.709)	0.223 (0.866)	0.154 (0.720)
Log(Coalition Size)	-0.133 (0.154)	-0.224 (0.182)	-0.168 (0.161)
coalition_congress	0.045 (0.127)	0.240 (0.156)	0.028 (0.121)
Supports Rule	0.362+ (0.192)	0.434* (0.210)	0.234 (0.195)
Pressure Campaign × Public	-0.910+ (0.548)	-0.751 (0.690)	0.167 (0.935)
Trump			-1.320* (0.564)
Bush			-2.237*** (0.649)
Pressure Campaign × Trump			1.871* (0.883)
Pressure Campaign × Bush			2.361*** (0.623)
presidentTrump:coalition_typePublic			-0.336 (0.617)
presidentBush:coalition_typePublic			-1.141 (0.728)
campaign_TRUE:presidentTrump:coalition_typePublic			-1.354 (1.112)
Num.Obs.	2936	2936	2936
R2	0.825	0.851	0.828
R2 Adj.	0.008	0.131	0.021
R2 Within	0.031	0.030	0.076
R2 Pseudo			
AIC	11397.2	10947.0	11342.7
BIC	25862.5	25514.1	25837.9
Log.Lik.	-3281.622	-3039.525	-3249.373
Std. Errors	Clustered (org_name)	Clustered (org_name)	Clustered (org_name)
FE: agency	X		X
FE: docket_id		X	
FE: org_name	X	X	
FE: president	X		X

+ p &lt; 0.1, \* p &lt; 0.05, \*\* p &lt; 0.01, \*\*\* p &lt; 0.001

— 4 —

## **The Environmental Justice Movement and Bureaucratic Policymaking**

### *Abstract*

Social movements play a critical role in advancing landmark statutes recognizing new rights and social values. Likewise, a lack of movement pressure is a leading explanation for the failure of policy efforts. Yet, we have little systematic evidence about the impact of social movements on policy. To what extent do movements shape the thousands of policies that governments make every year? I examine how social movements affect policymaking by assessing the environmental justice movement's impact on 25,000 policy documents from 40 U.S. federal agencies from 1,993 to 2,020. Leveraging a new dataset of 42,000,000 public comments on these policies, I find that when public comments raise environmental justice concerns, these concerns are more likely to be addressed in the final rule. Effect sizes vary across agencies, possibly due to the alignment of environmental justice aims with agency missions. The magnitude of public pressure also matters. When more groups and individuals raise environmental justice concerns, policy texts are more likely to change, even when controlling for

overall levels of public attention. These findings suggest that distributive justice claims and levels of public attention and pressure systematically affect policymaking.

#### **4.1 Introduction**

Social movements like the civil rights movement and the environmental movement are understood to have played a critical role in advancing landmark statutes recognizing new rights and social values. Likewise, a lack of movement pressure is a leading explanation for the failure of policy efforts to address issues like climate change (Skocpol, 2013). Yet, we have little systematic evidence about the impact of social movements on modern policymaking. To what extent do movements shape the thousands of policies the government makes every year? I examine how social movements affect policymaking by assessing the environmental justice movement's impact on 25 thousand policy processes in 40 U.S. federal agencies from 1993 to 2020. Environmental justice concerns focus on unequal access to healthy environments and protection from harms caused by things like pollution and climate change (Bullard, 1993). The environmental justice movement illustrates how activists attempt to inject ideas directly into the policymaking process. Systematic data on how policy documents address (or fail to address) environmental justice allow empirical tests of theories about when institutions will address claims raised by activists.

I focus on the environmental justice movement because it offers a broad but tractable scope for analysis and illuminates what is at stake in the politics of agency policymaking. Policies have distributive consequences. How policy documents address distributive issues highlights how policy processes construct communities of “relevant” stakeholders and “appropriate” criteria to evaluate policy consequences. Raising environmental justice concerns in policy debates is an example of how social

movement organizations mobilize norms and evaluative frameworks that interact with organizational identities, mission, and reputations and, thus, impact policy decisions (Carpenter, 2001).

Tracing ideas like environmental justice (EJ) through policy processes reveals the mechanisms by which social movements succeed or fail to influence policy. If draft policies do not mention EJ concerns, but activists raise EJ concerns and policymakers then address in the final policy, this may be evidence that public pressure mattered. Likewise, when draft policies *do* address EJ, if groups comment on it and then policymakers change how the final policy addresses EJ, this may be evidence that public pressure mattered.

I assess the impact of the EJ movement qualitatively and quantitatively. Tracing the evolution of EJ analyses through several policy processes shows that the concept is hotly contested and rarely addressed by agencies in ways that activists find acceptable. Activist pressure affected how policies addressed EJ in some cases but failed to affect other policies.

Examining all rules published by 40 agencies to regulations.gov between 1993 and 2020, I find that activist mobilization affected policy discourse, even under administrations explicitly hostile to their cause. When public comments raise EJ concerns, these concerns are more likely to be addressed in policy documents. Specifically, the number of comments mobilized (both overall and by EJ advocates specifically) is positively correlated with agencies adding language addressing EJ to policies where the draft policy did not mention EJ. When comments raise EJ concerns, sections of policies that do address EJ are also more likely to change. Furthermore, the correlation between EJ activist mobilization and policy changes is largest for agencies with missions focused on “environmental” and distributive policy—the kinds of pol-

icymakers we may expect to have institutional and cognitive processes primed to be most responsive to EJ concerns.

## 4.2 Theory

Participatory processes like public comment periods, where policymakers must solicit public input on draft policies, are said to provide democratic legitimacy (Cromley, 2003; Rosenbloom, 2003), new technical information (Yackee, 2006; Nelson and Yackee, 2012), and political oversight opportunities (Balla, 1998; McCubbins and Schwartz, 1984). While recent scholarship on agency policymaking has shed light on sophisticated lobbying by businesses, we know surprisingly little about the vast majority of public comments on proposed agency rules, which are submitted as part of public pressure campaigns.<sup>1</sup> Activists frequently target agency policymaking with letter-writing campaigns, petitions, protests, and mobilizing people to attend hearings, all classic examples of “civic engagement” (Verba and Nie, 1987). Yet civic engagement remains poorly understood in the context of bureaucratic policymaking. While practitioners and administrative law scholars have long pondered what to make of activists’ mass comment campaigns, political scientists have had surprisingly little to say about this kind of civic participation.

### 4.2.1 Social Movements and Policy Change

Social movement pressure is a major driver of policy change (Dahl 1956; Piven & Cloward 1977; Lipsky 1968; Tarrow 1994; Andrews 1997; McAdam 1982, 2001; McAdam & Su 2002, McCammon et al. 2011; Cress & Snow 2000; Weldon 2002).

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<sup>1</sup>As shown in Judge-Lord (2019), most comments submitted to regulations.gov are part of organized campaigns, more akin to petition signatures than “deliberative” participation or sophisticated lobbying. Indeed, approximately 40 million out of 50 million (80%) of these public comments on rulemaking dockets between 2004 and 2019 were mobilized by just 100 advocacy organizations.

This is especially true for policies that redistribute wealth or other social privileges. “From the very beginning, redistributive policies have been associated with social classes and social movements” (Lowi and Nicholson, 2015). The organizational forms that mobilize and channel movement pressure (often called social movement organizations by those who study their organization and advocacy organizations or pressure groups by those who study their effects) are essential features of modern politics and lawmaking (Baumgartner and Leech, 2001; Coglianese, 2001). Conversely, the lack of broad-based support for and movement pressure can be the failure of a policy effort (Skocpol, 2013).

Scholars have also shown the effect of specific pressure tactics. For example, protests affect policy (Gillion, 2013). Activists reshape political parties to enact new policy agendas (Schattschneider, 1942; Cohen et al., 2008; Schlozman, 2015; Skocpol and Williamson, 2016). Petition campaigns, in particular, can both build the organizational capacity and political coalitions required to affect policy and place issues on national agendas. As Carpenter (2021) finds, both Indigenous governments and activists have long used opportunities to build coalitions and raise concerns to the federal government:

Because they assisted in recruiting tribal communities and allies to Indigenous causes, these petitioning moments enhanced organizational democracy. They also advanced procedural democracy by effectively placing Indigenous issues on local, ecclesiastical, tribal, state, and national agendas.” (Carpenter, 2021, pg. 119)

Protests to be an effective mechanism for minority interests to communicate preferences to policymakers when electoral mechanisms fail to do so. Policymakers learn

and take informational cues from political behaviors like protests (Gillion (2013)). Carpenter (2021) finds similar potential for petitions to serve as a channel to raise “new claims” and influence policy beyond elections: “Petition democracy offer another model of aggregation, where numerical minorities could still make a case of quantitative relevance” (pg. 479). Numbers matter for protests and petitions, regardless of whether they represent a majority.

Still, most studies of social movements tend to explain social movement emergence rather than specific impacts (see reviews by Meyer (2004) and Mcadam (2017)). Reviews of the social movement literature find “limited research on [social movement] influence” (Andrews and Edwards, 2004).

Studies that do focus on policy influence tend to focus on landmark policies like the Civil Rights Act (Gillion, 2013) or case studies of local policy issues (e.g., Bullard, 1993; Rochon and Mazmanian, 1993). Reviewing the specificity of measures used to assess the impact of advocacy campaigns, Burstein (2020) concludes that “In contrast to those studying opinion and policy, however, researchers studying advocacy and policy rarely discuss levels of specificity.” In addition to measures of advocacy and influence, there are issues with case selection. Leech (2010) argues that the influence of advocacy campaigns is overstated because scholars focus on issues where impact is especially likely—issues characterized by a lot of advocacy and recent or impending policy change. Lowery (2013) voices the opposite concern, that high-salience issues that scholars select are the cases least likely to observe advocacy success. In short, studies often select cases on the dependent variable. While large-scale and longitudinal studies have become more common (Hojnacki et al., 2012), the dependent variable is rarely systematic impact across the thousands of non-landmark policies that governments make every year.

To address this gap, I focus on systematic impacts on specific policy documents over time. Specifically, I assess the impact of the environmental justice movement on bureaucratic policymaking.

#### **4.2.2 Technical Information: the Currency of Lobbying**

Dominant theories of bureaucratic policymaking have little room for social movements and political pressure. Instead, they focus on how agencies learn about policy problems and solutions (Kerwin and Furlong, 2011). Leading formal models are information-based models where sophisticated lobbying groups affect policy by revealing information to the agency (Gailmard and Patty, 2017; Libgober, 2018), and empirical studies support the conclusion that information is the currency of lobbying in rulemaking (Yackee, 2012; Cook, 2017; Gordon and Rashin, 2018; Walters, 2019).

Agency rulemaking is an especially technocratic and legalistic form of policymaking that explicitly privileges scientific and legal facts as the appropriate basis for decisions. Procedural requirements to consider relevant information create incentives for lobbying groups to overwhelm agencies with complex technical information, making rulemaking obscure to all but the most well-informed insiders (Wagner, 2010). As Yackee (2019) notes:

“to be influential during rulemaking, commenters may require resources and technical expertise. As Epstein, Heidt, and Farina (2014) suggest, agency rule-writers—who are often chosen because of their technical or policy-specific expertise—privilege the type of data-driven arguments and reasoning that are not common to citizen comments.” (p. 10)

The result is that rulemaking is dominated by sophisticated and well-resourced

interest groups capable of providing new technical or legal information. Empirical scholarship finds that economic elites and business groups dominate American politics in general (Jacobs and Skocpol, 2005; Soss, Hacker and Mettler, 2007; Hertel-Fernandez, 2019; Hacker, 2003; Gilens and Page, 2014) and rulemaking in particular. While some are optimistic that requirements for agencies to solicit and respond to public comments on proposed rules allow “civil society” to provide public oversight (Michaels, 2015; Metzger, 2010), most studies find that participants in rulemaking often represent elites and business interests (Seifter, 2016; Crow, Albright and Koebele, 2015; Wagner, Barnes and Peters, 2011; West, 2009; Yackee and Yackee, 2006; Yackee, 2006; Golden, 1998; Haeder and Yackee, 2015; Cook, 2017; Libgober and Carpenter, 2018). To the extent that scholars address public pressure campaigns, both existing theory and empirical scholarship suggest skepticism that it matters. For example, Balla et al. (2018) find that “legal imperatives trump political considerations.”

#### **4.2.3 Political Information**

While social movement organizations do engage in fights over technical reports and scientific studies, the information that activists provide is often more overtly political. Nelson and Yackee (2012) identify political information as a potentially influential result of groups expanding their lobbying coalition. While they focus on mobilizing experts, Nelson and Yackee (2012) describe a dynamic that can be extended to mobilizing public pressure:

“strategic recruitment, we theorize, mobilizes new actors to participate in the policymaking process, bringing with them novel technical and political information. In other words, when an expanded strategy is employed, leaders activate individuals and organizations to participate in the policy-

making process who, without the coordinating efforts of the leaders, would otherwise not lobby. This activation is important because it implies that coalition lobbying can generate new information and new actors—beyond simply the ‘usual suspects’ —relevant to policy decisionmakers.”

I argue that, concerning political information, this logic extends to non-experts in at least two ways. First, mobilizing new actors to participate in the policymaking process may yield information about a policy’s disparate effects. Second, levels of public pressure can be a political resource, allowing groups to change policymakers’ perceptions of their political environment and the political consequences of their decisions.

#### *4.2.3.1 Information About a Policy’s Disparate Effects*

First, while specific *data* on disparate impacts of policy may require expertise, anyone can highlight a community of concern or potential distributive effects of a policy. Just as Nelson and Yackee (2012) found regarding mobilizing diverse experts, mobilizing diverse communities affected by a policy may introduce new claims from new actors about how the communities that a policy may benefit or harm should be constructed. Indeed, telling a policymaker how a particular set of stakeholders will be affected or what they think is a lobbying tactic. Instead of bolstering *scientific* claims, such comments focusing on a policy’s disparate impacts bolster *political* claims about who counts and even *who exists* as a distinct, potentially affected group that deserves policymakers’ attention.

The political construction of policy-relevant groups through the policy process has long interested administrative law scholars. Gellhorn (1972) argues that “individuals and groups willing to assist administrative agencies in identifying interests deserving

protection” (p. 403) improve the policy process. Seifter (2016) argues that policy-maker’s beliefs about who is lobbying them and who those groups represent ought to be (and likely is) key to how they respond.

The politics and outcomes of policymaking depend on how the relevant groups are defined (Lowi, 1964). The power of groups to affect policy depends on their recognition by formal and informal institutions. Public comment periods in agency rulemaking are formally more “identity neutral” than policy processes with procedural rights reserved for certain interests (Feinstein, 2021). This means that the political construction of relevant groups depends on who participates and the identities they mobilize or claim to represent. As Yackee (2019) and others note, the information costs mean that individuals rarely participate. Instead, groups claim to represent various constituencies. “Because the costs of individualized participation in policy decision making are often excessive, informal representatives are prevalent as a form of participation in agency decisions” (Rossi, 1997, pg. 194).

Bureaucratic policymaking in the United States is dominated by cost-benefit analysis, which requires defining groups that are benefited or harmed by a policy and may even weigh or prioritize benefits or costs to certain groups. Agencies have many reasons to consider the distributional effects of policy and often do. For example, President Biden issued a memorandum instructing the Director of the Office of Management and Budget to propose recommendations for “procedures that take into account the distributional consequences of regulations.” Thus, comments raising distributive concerns provide potentially influential political information.

This distributive information raises claims of distributive justice. Public comment periods are celebrated as “a crucial way to ensure that agency decisions are legitimate, accountable, and just” (Bierschbach and Bibas, 2012). “Public participation can force

agencies to rethink initial inclinations” (Seifter, 2016)—for example, which social groups are relevant or deserve special attention. Courts purportedly review policy decisions made through rulemaking with a particular eye toward whether they foster “fairness and deliberation” (*United States v. Mead Corp.*, 533 U.S. 218 2001), though empirical evidence suggests skepticism about the importance of policy processes for judicial review (Judge-Lord, 2016).

#### *4.2.3.2 Public pressure as a political resource*

Second, the number of supporters may matter because it indicates support among relevant communities or the broader public. Again, instead of bolstering *scientific* claims, perceived levels of public support bolster *political* claims.

Like other forms of political participation, such as protests and letter-writing campaigns, public pressure campaigns provide no new technical information. Nor do they wield any formal authority to reward or sanction bureaucrats. The number on each side, be it ten or ten million, has no legal import for an agency’s response.

However, an organization’s ability to expand the scope of conflict by mobilizing a large number of people can be a valuable political resource (Schattschneider, 1975). Furlong (1997) and Kerwin and Furlong (2011) identify mobilization as a tactic. The organizations they surveyed believed that forming coalitions and mobilizing large numbers of people were among the most effective lobbying tactics. While Furlong (1997) and Kerwin and Furlong (2011) focused on how organizations mobilize their members, I expand on this understanding of mobilization as a lobbying tactic to include a campaign’s broader audience, more akin to the concept of an attentive public (Key, 1961) or issue public (Converse, 1964).

While scholars have generally distinguished the participation of groups from indi-

vidual citizens (see Yackee (2019) for a review), “it can be difficult to distinguish an individual’s independent contribution from an interest-group-generated form letter” (Seifter, 2016, pg. 1313). I argue that we should view the participation of individuals as a direct result of interest group mobilization. As (Rossi, 1997, pg. 194) argues, “individuals are most likely to participate in agency decisions by virtue of their membership in interest groups.” Indeed, nearly all individual comments on proposed policies are mobilized by interest groups (Judge-Lord, 2019). The small number of unaffiliated individuals, disconnected from any organized lobbying effort, can be safely ignored empirically. Interest groups are the unit of analysis, and individual participants are best understood as measuring an amplitude of support for their efforts.

Because many politically active groups are “memberless” or run by professionals who lobby with little input from their members (Baumgartner and Leech, 2001; Skocpol, 2003; Schlozman, Verba and Brady, 2012), evidence of an actual constituency is valuable political information. Petition signatures and form letters are among the only ways a pressure group can demonstrate an engaged and issue-specific constituency on whose behalf they claim to advocate. While lobbying disclosure requirements could provide other information about how well groups represent the constituencies they claim to represent (Seifter, 2016), letter-writing campaigns are one of the only strategies currently available to demonstrate issue-specific congruence between the positions of groups and the people they claim to represent (Judge-Lord, 2019).

Finally, expanding the scope of conflict by mobilizing public attention to rulemaking may shift policymakers’ attention away from the technical information provided by the “usual suspects” and toward the distributive effects of policy. The “fire alarm” role

that interest groups play in the policy process (McCubbins and Schwartz, 1984) may have different effects when sounding the alarm also involves “going public” (Judge-Lord, 2019).

#### 4.2.4 Hypotheses

The existing literature on bureaucratic policymaking in general—and EJ advocacy in particular—presents competing intuitions about the effect of EJ activists and the broader public in rulemaking. From the above discussion political information, I distill five hypotheses —three about distributive information and two about public pressure. I posit hypotheses in the direction that these advocacy groups do affect rulemaking while also noting equally plausible intuitions for the opposite conclusions. Because of the general skepticism and empirical work that has found that advocacy groups and public pressure campaigns have little to no effect on rulemaking, I set the empirical bar low: do EJ advocates and public pressure campaigns have *any* effect at all on policy documents.

##### 4.2.4.1 *Distributive Information Hypotheses*

*Distributive Information Hypothesis:* Policymakers are more likely to change whether or how policies address distributive justice when commenters raise distributive justice concerns.

As discussed above, agency policymakers have incentives to address distributive concerns, especially environmental justice, due to E.O. 12898 and judicial review of compliance with the Administrative Procedures Act. By raising EJ concerns, commenters draw attention to the distribution of policy impacts—who a policy may

affect. Asserting definitions and categories of stakeholders and affected groups is one type of policy-relevant information.

*Repeated Information Hypothesis:* Policymakers are more likely to change whether or how policies address concerns when more commenters raise them.

Scholarship on lobbying in rulemaking emphasizes the value of repeated information and coalition size (Mendelson, 2011; Nelson and Yackee, 2012). This implies that the more unique comments raise EJ concerns, the more likely the coalition will influence policy.<sup>2</sup>

Competing intuitions and other prior studies oppose both the *Distributive and Repeated Information Hypotheses*. Formal models and empirical scholarship on lobbying in rulemaking emphasize the importance of novel science and technical information—things unknown to agency experts (Wagner, 2010). Furthermore, scholarship finds business commenters are influential, and public interest groups are not (Yackee and Yackee, 2006; Haeder and Yackee, 2015). Furthermore, policymakers may be more likely to anticipate EJ concerns when they are more salient to interest groups. This would mean that rules where commenters raise EJ concerns may be the *least* likely to change whether or how EJ is addressed because policymakers are more likely to have already considered these issues and stated their final position in the draft rule.

*Policy Receptivity Hypothesis:* Policymakers that more frequently address concerns like environmental justice will be more responsive to commenters

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<sup>2</sup>I distinguish unique comments from mass comments. The number of unique comments approximates a coalition's size regarding the number of different groups, each submitting a unique text. The total number of comments, including signatures on identical form letters, indicates public attention and pressure.

raising those concerns.

Bureaucracies are specialized institutions built to make and implement certain kinds of policies based on certain goals and types of facts. Each agency's distinct norms and epistemic community determine whether policymakers see issues as "environmental" and whether they have disparate impacts that demand consideration of distributive "justice." Some policymakers may see their policy area as more related to environmental justice than others and thus be more receptive to commenter concerns.

The competing intuition to the *Policy Receptivity Hypothesis* is that policymakers familiar with EJ concerns are the *least* likely to respond to EJ concerns because they anticipate these concerns—they are not novel to them. If so, agencies that rarely consider EJ may be more easily influenced by commenters who present somewhat novel information and concerns. These policymakers may be less likely to have preempted EJ critiques in the draft policy.

#### *4.2.4.2 Public Pressure Hypotheses*

*General Pressure Hypothesis:* Policies are more likely to change when they receive more public attention (e.g., more public comments).

If policymakers respond to public pressure, policy should be more likely to change when more people comment on a draft policy. This follows the intuition that policy is most likely to move in high-salience policy processes (Leech, 2010).

The competing intuition against the *General Pressure Hypothesis* is again that large numbers of comments indicate policy processes that were already salient before the public pressure campaign. Policymakers anticipate public scrutiny and are thus more likely to have stated their final position in the draft policy. If this is the case, policies

with more public comments should be *less* likely to change. Public attention could also be unrelated to policy change, meaning that policymakers neither anticipate nor respond to public attention in writing or revising policy documents.

*Specific Pressure Hypothesis:* Policies are more likely to address an issue when they receive more public attention (e.g., more public comments) *and* at least one comment raises that issue.

This hypothesis asserts that the overall level of public attention will condition policy responses to specific claims—it is the interaction between the number of total public comments and at least one of those comments raising EJ concerns that makes policy more likely to address EJ.

The competing intuition against the *Specific Pressure Hypothesis* is again that large numbers of comments indicate high-salience rulemakings where policymakers are more likely to anticipate public scrutiny, including how they did or did not address specific issues like environmental justice. If policymakers anticipate public scrutiny, they may be more likely to preempt EJ concerns and state their final position in the draft policy.

## 4.3 Testing the Theory

### 4.3.1 “Environmental Justice” as a Boundary-drawing Tool

The politics of environmental justice has several convenient properties for studying the policy impact of social movements. First, discourse around policies framed as “environmental” issues are, unlike issues like civil rights and immigration, inconsistently racialized and, unlike issues like taxes and spending, inconsistently focused on *distributions* of costs and benefits. This means that policies may or may not be framed in

environmental justice terms. Despite policy almost always having disparate impacts, an “environmental” frame often creates a human-environment distinction and shifts attention to non-human objects such as air, water, food, or landscapes and away from the distribution of access to them or protection from them when they are contaminated. By focusing on distributions of costs and benefits, fights over EJ analyses differ from more traditional utilitarian or preservationist analyses.

Second, compared to other ideas around which people mobilize, “environmental justice” is a fairly distinctive phrase. Most people who use this phrase share a general definitional foundation. Even attempts to reframe the term (e.g., to focus on class rather than race or jobs rather than health) come about as dialectical moves related to the term’s historical uses. Thus, when “environmental justice” appears in a text, it is rarely a coincidence of words; its appearance is a result of the movement or reactions to it.

Third, this phrase appears frequently when the idea is discussed. There are few synonyms. Groups raising equity concerns on “environmental” issues commonly use the phrase “environmental justice.” Those who use narrower, related terms—including the older concept of “environmental racism” and the newer concept of “climate justice”—almost always use “environmental justice” in their advocacy as well.

Finally, the term is relevant to rulemaking records in particular because Executive Order 12898 issued in 1994 by President Clinton—“Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations”—directs all agencies to consider EJ implications of their actions and policies. Executive Orders from Presidents Obama and Biden and statements from agency heads in every administration have since interpreted and reinterpreted parts of this Order, all with direct implications for rulemaking. This does not mean that all draft or final rules

address EJ, but they tend to cite Executive Order 12898 and explicitly discuss environmental justice when they do. For the same reason, commenters who critique draft rules also cite this Executive Order and use this language. Again, this is true both for movement activists and reactionary efforts to redefine the term. While EO 12898 does not itself create a right to sue agencies, courts may strike down rules for failing to comply with procedural requirements of the Administrative Procedures Act (APA) and National Environmental Policy Act (NEPA) if the agency fails to “examine the relevant data” or “consider an important aspect of the problem” (*Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 1983). This can include an agency’s 12898 EJ analysis: “environmental justice analysis can be reviewed under NEPA and the APA” (*Communities Against Runway Expansion, Inc. v. FAA*, 2004). The legal salience of the phrase “environmental justice” means that advocates attempting to frame policies in distributive terms tend to use the phrase, and agencies also tend to use it if they respond to these concerns.

#### 4.3.2 Data

To examine whether EJ activists and public pressure campaigns shape policy documents, I collect the text of all draft rules, public comments, and final rules from regulations.gov. Then, I select rulemaking documents from agencies that published at least one rule explicitly addressing EJ from 1993 to 2020. This yields over 25,000 rulemaking dockets from 40 agencies. 12,257 of these have both a proposed and final rule.<sup>3</sup>

Despite E.O. 12898, most rules do not address EJ. Figure 4.1 shows that most draft and final rules (about 90%) do not mention “environmental justice.” Interestingly, the

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<sup>3</sup>Some final rules are published without a draft, and some proposed rules are withdrawn or never finalized. Additional descriptives on each type of rule are available in the online appendix.

total number of final rules and the percent of the total addressing EJ have remained relatively stable for the period where regulations.gov data are complete (after 2005). From 2006 to 2020, these agencies published between 2000 and 3000 final rules per year, of which between 200 and 300 addressed EJ.

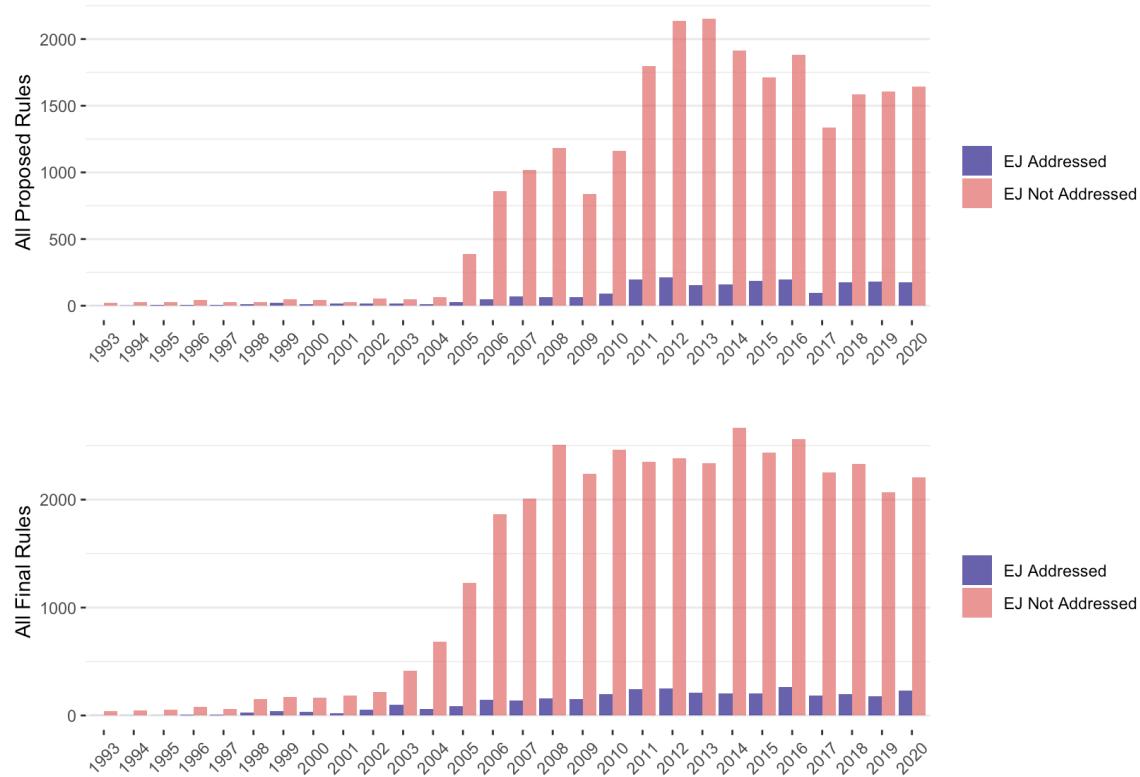


Figure 4.1: Proposed and Final Rules by Whether they Address Environmental Justice.

Even at the Environmental Protection Agency (EPA), where most policies are clearly framed as “environmental” issues, a consistent minority of rules address EJ. Many agencies that make policy with apparent EJ effects almost never address EJ. These include the Fish and Wildlife Service (FWS), Department of Housing and Urban Development (HUD), National Oceanic and Atmospheric Administration (NOAA), Nuclear Regulatory Commission (NRC), and the Office of Surface Mining

(OSM). A majority of rules addressed EJ only in a few years at a few agencies that publish relatively few rules, including the Council on Environmental Quality (CEQ), Army Corps of Engineers (COE), Federal Emergency Management Agency (FEMA), Forest Service (FS), and several Department of Transportation agencies (the Federal High Way Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), Federal Railroad Administration (FRA), and Federal Transit Administration (FTA)). Figure 4.2 shows the number of rulemaking projects over time by whether they ultimately addressed EJ at agencies that either published more than ten rules addressing EJ or receiving over 100 comments raising EJ concerns.

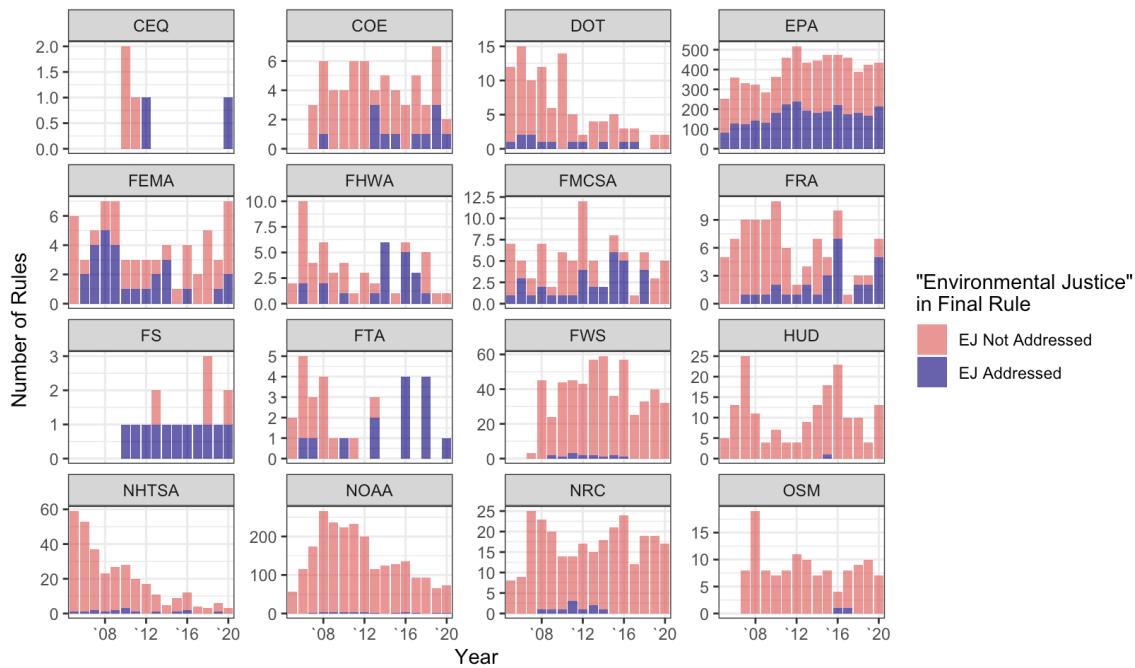


Figure 4.2: Number of Proposed and Final Rules Addressing Environmental Justice at the Council on Environmental Quality (CEQ), Army Corps of Engineers (COE), Department of Transportation (DOT), Environmental Protection Agency (EPA), Federal Emergency Management Agency (FEMA), Federal High Way Administration (FHWA), Federal Motor Carrier Safety Administration (FMCSA), Federal Railroad Administration (FRA), Forest Service (FS), Federal Transit Administration (FTA), Fish and Wildlife Service (FWS), Department of Housing and Urban Development (HUD), National Highway Transportation Saftey Administration (NHTSA), National Oceanic and Atmospheric Administration (NOAA), Nuclear Regulatory Commission (NRC), and Office of Surface Mining (OSM)

#### 4.3.2.1 Comments

Figure 4.3 shows the number of comments on each proposed rule published between 1993 and 2020. Light red circles indicate rules where no commenters raised EJ concerns. Dark blue Triangles indicate rules where they did. The bottom row shows the subset of rules where “environmental justice” appeared in neither the draft nor the final rule. The middle row shows rules where “environmental justice” appeared in the final but not the draft. My first analysis compares these two subsets. The top row

shows rules where “environmental justice” appeared in both the draft and final rule. My second analysis assesses change in this subset of rules. Predictably, commenters most often raised EJ concerns on rules in the first row, but many rules that did not initially address EJ still received comments raising EJ concerns.

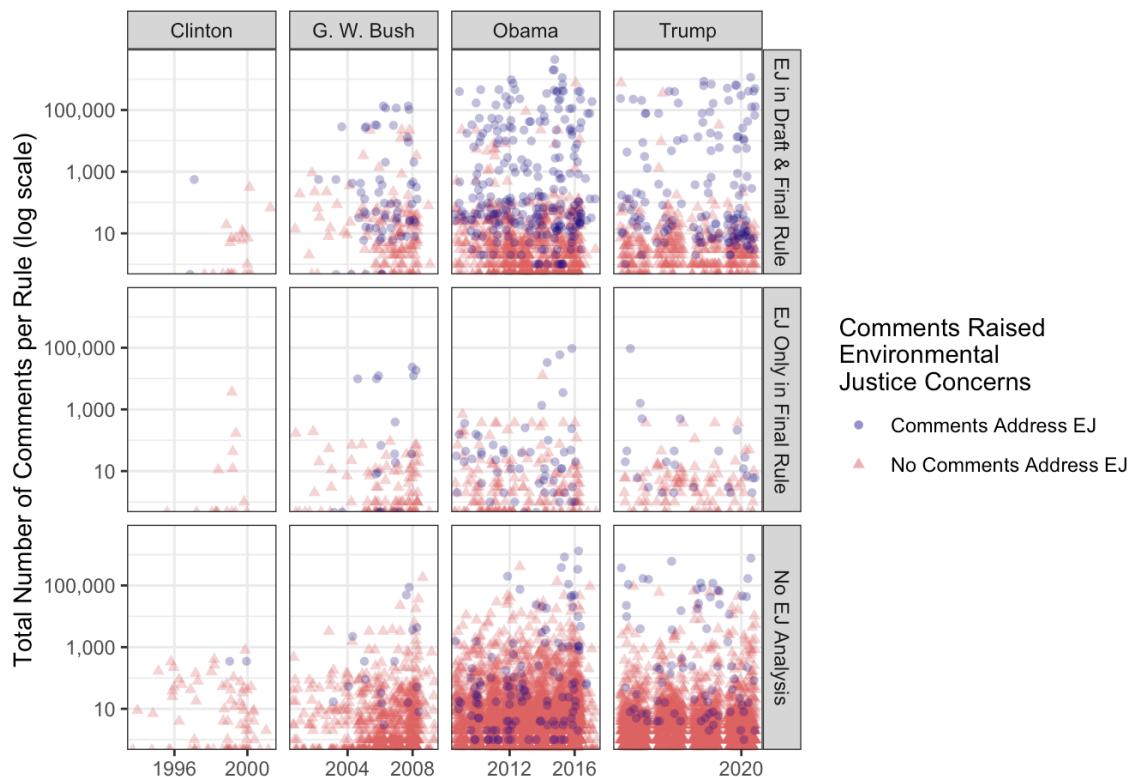


Figure 4.3: Number of Comments on Proposed and Final Rules and Whether Comments Raised Environmental Justice Concerns

#### 4.3.2.2 Interest Groups and Second-order Representation

When lobbying during rulemaking, groups often make dubious claims to represent broad segments of the public (Seifter, 2016). Thus, to interpret substantive results or the normative import of any findings in this analysis, it is insufficient to know which groups participate. We also need to know who these groups claim to represent and

whether those people are actually involved in the organization's decisions. As Seifter argues:

“the expertise a group claims is often based on its ability to convey a particular constituency’s perspective, experience, or concerns...A group that does not have or engage with a membership cannot reliably convey those sorts of constituency-based insights. Moreover, even when a group’s assertions seem independent of a constituency—say, the results of a scientific study—information about second-order participation matters. Understanding the group’s sources, funding, and potential biases is important to assessing the reliability of its information and its contribution to agency expertise” (Seifter, 2016, pg. 1306).

Examining second-order representation is thus required to assess “what contemporary participation does and does not achieve” (Seifter, 2016, pg. 1306)—for example, the extent to which EJ concerns (and any potential policy response) indicate genuine social movement advocacy and influence. Recall that EJ is a contested concept used to evoke different distributive claims by different groups. The prevalence and impact of EJ concerns in the policy process are only meaningful against the backdrop of who exactly is using EJ rhetoric.

I examine who is raising EJ concerns in two ways. First, I identify the top organizational commenters such as tribes, businesses, and nonprofits using EJ language and investigate whom these groups represent. Second, for comments where a commenter signed their name, I compare surnames to their racial and ethnic identity propensities in the U.S. Census. Together these two pieces of information allow me to

comment on “second-order” representation, i.e., the extent to which public comments are representative of the groups they claim to represent (Seifter, 2016).

**Which Organizations Most often Raise EJ Concerns?** To explore who raises EJ concerns, I first identify the organization behind each comment through a mix of hand-coding and text analysis. This includes organizational comments on signed letterhead and individuals who use the text of a form letter provided by an organization. I then investigated the top 20 organizations that mobilized the most comments (form letters) mentioning “environmental justice” and all organizations that raised EJ concerns on more than one policy.

The top mobilizer of comments mentioning “environmental justice” between 1993 and 2020 was the Sierra Club, with over 340,000 comments mentioning EJ on dozens of rules. The Sierra Club a membership organization whose members pay dues, elect the leaders of local chapters and have some say in local advocacy efforts. However, its policy work is directed by a more traditional national advocacy organization funded by donations, including over \$174 million from Bloomberg Philanthropies that funded several of the public pressure campaigns in these data. The Sierra Club does have a major program arm dedicated to Environmental Justice that works with local partners “to foster the growth of the environmental justice movement so that oppressed communities will find justice and everyone can experience the benefits of a healthy and sustainable future.” The extent to which those individuals have a formal say in the national organization’s lobbying decisions varies across campaigns. The National Board of Directors adopted a statement on social justice in 1993 and principles on environmental justice in 2001. The national website does contain regular Spanish language content. As a federated organization with many local efforts, it is difficult to generalize about second-order representation.

The second most prolific organizer of EJ comments was Earthjustice, with over 175,000 comments on many of the same rules that the Sierra Club lobbied on. Earthjustice is primarily engaged in litigation on behalf of environmental causes. Their website boasts 2.2 million supporters, but it is not clear who they are or if they play any role in the advocacy strategy. A search on the website returns 360 results for “Environmental Justice,” with the top results from staff biographies who work on more local or targeted campaigns, such as environmental conditions for the incarcerated. The EJ language used on the main page is relatively vague. For example, “We are fighting for a future where children can breathe clean air, no matter where they live.” (Earthjustice, 2017). The website does contain some Spanish-language content.

The Natural Resources Defense Council is similar to Earthjustice—a national non-profit funded by donations and focused on litigation—but they also lobby and organize public pressure campaigns, including over 160,000 comments mentioning environmental justice.

CREDO Action and MoveOn are more generic progressive mobilizers who lack a systematic focus on EJ issues, but occasionally leverage their vast membership and contact lists to support EJ campaigns led by others.

The Alliance for Climate Protection is more of an elite political group founded by former Vice President Al Gore.

We Act and Communities for a Better Environment both have environmental justice in their central mission statement. Community leaders founded We Act in Harlem, New York, to advocate against environmental racism and poor air quality (WEACT, 2017). Communities for a Better Environment has projects throughout California but is particularly active in Oakland (CBECAL, 2017). Much of the content of their website is in both English and Spanish. Both organizations focus primarily on “low-

income communities of color” and frame their work primarily in terms of race and class. While both organizations participated in national policymaking, We Act is more focused on communities in Harlem and New York, whereas Communities for a Better Environment casts a broader frame: “CBE’s vision of environmental justice is global—that’s why the organization continues to participate in such international efforts as the Indigenous Environmental Network and the Global Week of Action for Climate Justice” (CBECAL, 2017).

While not a large portion of EJ comments, companies repeatedly raise research about the unequal impacts of policy to frame these issues as a legitimate but unresolved scientific debate that is not yet conclusive enough to base regulations on, mirroring the way tobacco and fossil fuel companies have emphasized scientific uncertainty in their lobbying efforts.<!--TODO CITE--> For example, in one comment, the Southern Company wrote:

“People with lower SES are exposed to almost an order of magnitude more traffic near their homes (Reynolds et al., 2001), and live closer to large industrial sites and are exposed to more industrial air pollution (Jerrett et al., 2001). Legitimate health concerns must be addressed. But adopting standards with a scientific basis so uncertain that health improvement cannot be assured is not sound public health policy.”

Like many companies, they claim to represent their customers: “electric generating companies and their customers are expected to bear much of the burden” of regulations (Hobson, 2004). Yet, customers have little say in companies’ decisions.

Overall, regarding second-order representation, it appears that the groups most often using the language of environmental justice may do so sincerely but generally

represent affected communities in a surrogate capacity (Mansbridge, 2003). Several groups representing local communities and led by community leaders have participated, but not nearly as often or with the same intensity as the “big greens.” The domination of large advocacy organizations highlights the importance of resources as a condition for lobbying and mobilizing. Not all groups who may benefit from generating political information can leverage it because they lack the resources to fund a campaign or even comment on relevant policies. However, smaller, more member-driven groups may partner with national groups that have more resources to mobilize on their behalf. Finally, a third, much less common type of commenter raises EJ issues to reframe them as ongoing debates and thus undermine their urgency. I call this reason for engaging an attempt to “break a perceived consensus.” In a way, the fact that energy companies felt compelled to acknowledge and question EJ concerns suggests their importance for policy outcomes.

**Commenter Race** To estimate the racial distribution of commenters using EJ language, I select commenters who signed with a surname appearing in census records. Figure 4.4 shows a probabilistic racial distribution of commenters who raise EJ concerns in their comments based on the distribution of self-reported racial identities associated with surnames as recorded in the 2010 census.<sup>4</sup> I estimate this distribution using the proportion of people with a given surname identified as belonging to each racial category (from this limited set of options). This approach does not assign specific individuals to racial categories. Instead, it represents each commenter as a set of probabilities adding up to 1. The estimated racial distribution of the sample is the sum of individual probabilities.

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<sup>4</sup>I recode “Hispanic” as “Latinx”

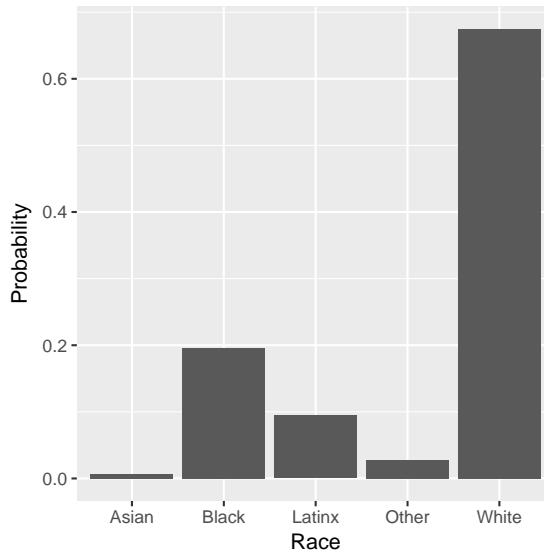


Figure 4.4: Estimated Racial Distribution from Census Surnames of Commenters raising "Environmental Justice" Concerns in Rulemaking

Compared to the overall distribution in the 2010 census, this sample of commenters appears to be disproportionately Black and less than proportionately Latinx or Asian, with just slightly fewer Whites relative to the national population. This distribution makes sense given that environmental justice African Americans have led theorizing and activism (Bullard, 1993).

#### **4.3.3 Tracing Ideas Through Rulemaking: "Environmental Justice" as a Contested Concept**

Using an environmental justice frame does not always imply the same communities of concern. Environmental justice emerged from movements against environmental racism, especially the disposal of toxic materials in predominantly Black neighborhoods (Bullard, 1993). However, the term quickly took on other meanings, encompassing various marginalized groups. President Clinton's 1994 Executive Order on Environmental Justice required all parts of the federal government to make "address-

ing disproportionately high and adverse human health or environmental effects of programs, policies, and activities on minority populations and low-income populations” a core aspect of their mission. This meant considering the disproportionate effects of policies by race and income during rulemaking.

In 2005, Environmental Protection Agency (EPA) political appointees reinterpreted the Order, removing race as a factor in identifying and prioritizing populations. This move was criticized by activists and two reports by EPA’s own Office of Inspector General.

President Obama’s EPA Administrators reestablished race as a factor. They named EJ as one of their top priorities, but they also faced criticism from activists for paying lip service to environmental racism without adequate policy changes.

In an October 2017 proposed rule to repeal restrictions on power plant pollution, the Trump EPA acknowledged that “low-income and minority communities located in proximity to [power plants] may have experienced an improvement in air quality as a result of the emissions reductions.” Because the Obama EPA discussed EJ when promulgating the Clean Power Plan rule—stating that “climate change is an environmental justice issue”—, the Trump EPA attempted to reframe rather than ignore environmental justice. The Trump EPA contended that the Obama EPA “did not address lower household energy bills for low-income households [and that] workers losing jobs in regions or occupations with weak labor markets would have been most vulnerable” (EPA 2017). Like regulated industry commenters, these statements frame the distribution of jobs and electricity costs as EJ issues in order to push back against policies that would equalize the distribution of health impacts from pollution.

The central conflict over the role of race in policy analyses is just one of many conflicts that the environmental justice movement has caused to be fought somewhat

on its terms. The next section briefly reviews the decades-long policy fight over regulating Mercury pollution to illustrate how these definitional conflicts shape rules and rulemaking. This case and other examples in this article emerged from reading hundreds of rulemaking documents where agencies did and did not respond to comments raising EJ concerns. Their purpose is to assess whether the cases in the quantitative analysis are plausibly what they appear to be: that changes in rule text are, sometimes, causally related to public comments and that non-changes are cases of agencies disregarding comments, not some accident of the data or measures. The qualitative reading also confirmed other key assumptions, such as the fact that advocates do, in fact, use “environmental justice” when they raise distributional concerns, even on many rules that are not about issues traditionally considered “environmental.”

#### *4.3.3.1 The Evolving Distributional Politics of Mercury Pollution*

Definitions of the public good and minority rights are implicit in most policy documents, including agency rules. The public comment process offers an opportunity to protest these definitions. Protest is one way that marginalized groups can communicate opinions on issues to government officials (Gillion, 2013). In the EPA’s Mercury Rules, two definitional issues were decisive. First, as with many forms of pollution, mercury-emitting power plants are concentrated in low-income and non-White communities. Second, some populations consume much more locally-caught freshwater fish, a major vector of Mercury toxicity. Studies inspired by the political controversy around the Mercury Rules found high risk among certain communities, including “Hispanic, Vietnamese, and Laotian populations in California and Great Lakes tribal populations (Chippewa and Ojibwe) active on ceded territories around the Great Lakes” (EPA 2012). Thus the standards that EPA chooses depend on whom the regulation aims to protect: the average citizen, local residents, or fishing

communities. This decision has disparate effects based on race and class because of disparate effects based on geography and cultural practices.

In December 2000, when the EPA first announced its intention to regulate Mercury from power plants, the notice published in the Federal Register did not address EJ issues, such as the disparate effects of mercury on certain populations; it only discussed anticipated impacts in reference to “the U.S. population” (EPA 2000). When the first draft rule was published, it only discussed the effects of the rule on regulated entities, noting that

“Other types of entities not listed could also be affected” (EPA 2002).

Commenting on this draft, Heather McCausland of the Alaska Community Action on Toxics (ACAT) wrote:

“The amount of methyl-mercury and other bioaccumulative chemicals consumed by Alaskans (especially Alaskan Natives) could potentially be much higher than is assumed... [This could increase] the Alaskan Native mortality rate for babies, which according to the CDC, is 70% higher than the United States average. Indigenous Arctic & Alaskan Native populations are some of the most polluted populations in the world. Global transport & old military sites contaminate us too.”

By citing the CDC, McCausland’s comment provided both technical and distributive information. As allies mobilized, public pressure mounted to address the disparate impacts of mercury levels. After receiving hundreds of thousands of comments and pressure from tribal governments and organizations, a revised proposed rule echoed McCausland’s comment noting that

“Some subpopulations in the U.S., such as Native Americans, Southeast Asian Americans, and lower-income subsistence fishers may rely on fish as a primary source of nutrition and/or for cultural practices. Therefore, they consume larger amounts of fish than the general population and may be at a greater risk of the adverse health effects from Hg due to increased exposure” (EPA 2004).

After nearly a million additional public comments, a further revised proposed rule ultimately included five pages of analysis of the disparate impacts on “vulnerable populations” including “African Americans,” “Hispanic,” “Native American,” and “Other and Multi-racial” groups (EPA 2011). In the final rule, “vulnerable populations” was replaced with “minority, low income, and indigenous populations” (EPA 2012). The EPA had also conducted an analysis of sub-populations with particularly high potential risks of exposure due to high rates of fish consumption as well as additional analysis of the distribution of mortality risk by race.

Of this second round of comments, over 200 unique comments explicitly raised EJ issues. The Little River Band of Ottawa Indians expressed the Tribe’s

“frustration at trying to impress upon the EPA the multiple and profound impacts of mercury contamination from a Tribal perspective. Not to mention the obligations under treaties to participate with tribes on a ‘Government to Government’ basis. At present, no such meetings have occurred in any meaningful manner with EPA Region V, the EPA National American Indian Environmental Office, nor the State of Michigan’s Department of Environmental Quality...Although EPA purported to consider environmental justice as it developed its Clean Air Mercury Rule,

it failed utterly. In this rulemaking, EPA perpetuated, rather than ameliorated, a long history of cultural discrimination against tribes and their members” (Sprague 2011).

Did comments like these play a role in EPA’s changed analysis of whom should Mercury limits aim to protect? Given the many potential sources of influence, it may be difficult to attribute causal effects of particular comments on a given policy. However, comments may serve as a good proxy for the general mobilization of groups and individuals around an administrative process, and it is not clear why the EPA would not address EJ in the first draft of a rule and then add it to subsequent drafts in the absence of activist pressure. Electoral politics does not offer an easy explanation. The notice proposing the Mercury Rule was issued by the Clinton administration, the same administration that issued the Executive Order on Environmental Justice, and the subsequent drafts that did address EJ issues were published by the Bush administration, which had a more contentious relationship with EJ advocates, while Republicans controlled both houses of Congress. The expansion of the analysis from one draft to the next seems to be in response to activist pressure.

#### 4.3.4 Measuring Policy Change

Having shown how public comments and pressure can influence policy texts, I assess the general relationship between comments and policy texts across all rules. I use two indicators of responsiveness to model the effect of public comments on policy documents: *whether* a rule addresses EJ and change in *how* it addresses EJ, i.e., change in portions of the text discussing EJ. Both measures represent a relatively low bar, indicating whether the agency explicitly paid any attention to EJ. This is similar to measures of “procedural responsiveness” used by Balla et al. (2020). The

low empirical bar is appropriate given that prior research shows little to no effect of public comments from advocacy groups (Yackee and Yackee, 2006; Balla et al., 2020) and low levels of attention to EJ concerns in particular [CITE].

Examples in the previous section illustrate how text mentioning “environmental justice” might be added or change. Carefully tracing a few rulemaking processes also helped to avoid analytic pitfalls. For example, one case where an agency did an EJ analysis and then appeared not to respond to a comment discussing EJ was, in fact, due to the fact that the commenter included an annotated version of the draft rule their comment, adding only “no comment” next to the 12898 section. To correct this, I removed text copied from the proposed rule from comments in pre-processing.

#### *4.3.4.1 Measure 1: Adding Text Addressing EJ to Final Rules*

For the subset of draft rules that did not address EJ, I measure whether agencies added any mention of “environmental justice” in the final rule. Such additions usually take the form of an “E.O. 12898” section where the agency justifies its policy changes with respect to some concept(s) of environmental justice. The next most common addition occurs in the agency’s response to comments, explaining how the rule did not have disparate effects or that they were insignificant.

Agencies may both respond to a comment and add a 12898 section. For example, the EPA responded to several commenters, including Earthjustice, the Central Valley Air Quality Coalition, the Coalition for Clean Air, Central California Environmental Justice Network, and Central California Asthma Collaborative: “EPA agrees it is important to consider environmental justice in our actions and we briefly addressed environmental justice principles in our proposal.” As the commenters noted, the EPA had not, in fact, addressed environmental justice in the proposed rule, which

approved California rules regulating particulate matter emissions from construction sites, unpaved roads, and disturbed soils in open and agricultural areas. EPA did add a fairly generic 12898 section to the final rule but did not substantively change the rest of the policy.

Less frequently, an agency may explicitly dismiss a comment and decline to add a 12898 section. For example, EPA responded to a comment on another rule, “One commenter stated that EPA failed to comply with Executive Order 12898 on Environmental Justice...We do not believe that these amendments will have any adverse effects on...minority and low-income populations...Owners or operators are still required to develop SSM plans to address emissions...The only difference from current regulations is that the source is not required to follow the plan” (71 FR 20445). As these examples illustrate, agencies may add text addressing environmental justice that would not satisfy critics. This measure merely indicates whether the agency engaged with the claims.

Most frequently, agencies neither responded to comments nor added a 12898 section.

#### *4.3.4.2 Measure 2: Changing Text Addressing EJ in Final Rules*

Where draft rules did address EJ, I measured whether a rule changed *how* it discussed “environmental justice” between its draft and final publication.<sup>5</sup> When an agency addresses EJ in the draft rule, it is almost always in a section about how it addressed E.O. 12898. In many cases, much of the text of final rules, including 12898 sections, remain exactly the same between draft and final versions. To measure change, I

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<sup>5</sup>Occasionally, there is more than one version of a proposed or final rule on a rulemaking docket. Here I opt for an inclusive measure of change that counts change from *any* proposed to *any* final rule. If the change occurred between the first and second draft of a proposed rule, I count it as a change. This best captures the concept of rule change. However, estimates are similar if we only count cases where a change occurred between *every* version of the rule.

parse draft and final rules into sentences and identify sentences containing the phrase “environmental justice.” If an agency leaves these sentences unchanged between the draft and final rule and adds no new sentences mentioning EJ, this suggests that the agency did not engage with comments raising EJ concerns.<sup>6</sup>

## 4.4 Results

### 4.4.1 Are final rules more likely to address environmental justice after comments do so?

Where environmental justice is not addressed in the draft rule, a higher percent of rules add EJ language when comments raise EJ concerns. Descriptively, there is a large difference in the rate of addressing EJ between rules where commenters did (33%) and did not raise EJ concerns (4%). However, in most cases (67%), agencies did not respond at all when commenters raised EJ concerns.

Rates of adding EJ in rules without EJ comments decreased over time, leveling out at 3% during the Obama and Trump presidencies. Rates of adding EJ when commenters raised EJ concerns are consistently much higher, but it also decreases over time, from 57% under G.W. Bush to 26% under Trump. EPA had a relatively high baseline rate of change (10%), which increased to 52% when comments raised EJ concerns. Most other agencies also added EJ at a higher rate when comments raised EJ concerns; indeed, most agencies almost never do so when comments did not raise EJ concerns.

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<sup>6</sup>An alternative approach would be to parse documents by section and assess whether E.O.12898 sections are identical. Parsing by sentences has three advantages: it is computationally faster, it avoids problems with section numbering and other frustrations with section matching, and it captures attention to EJ outside of this section, especially in the section responding to comments. If an agency is paying attention to EJ issues, sentence matching will likely detect it. However, other measures, such as the percent of EJ sentences changed, the percent of words in a 12898 section that changed, or the change in topic proportions (Judge-Lord, 2017), could be useful in future work.

To account for differences across presidents, agencies, and the number of comments, I estimate logit regression. For models 1 and 2 in Table 4.1, the outcome is whether the agency added environmental justice to the final rule. The predictors are whether comments raised EJ concerns, the number of unique (non-form letter) comments addressing EJ, the total number of comments (including form letters), and the interaction between the total number of comments and whether any comments raised EJ concerns. Models 3 and 4 are the same as models 1 and 2, except that the outcome is whether the policy text changed how EJ is discussed (described in the next section). All models include fixed effects for the presidential administration. Models 2 and 4 also include fixed effects for agency. Thus, estimates in Models 1 and 3 include variation *across* agencies, whereas estimates in models 2 and 4 only rely on variation *within* agencies. All estimates rely on variation *within* each presidential administration. All predicted probabilities shown below include agency fixed effects, models 2 and 4.

#### 4.4.1.1 *The Predicted Probability of Added Text*

As logit coefficients are not easily interpretable, Figures 4.5, 4.6, and 4.7 show the predicted probability of a final rule addressing environmental justice when the draft rule did not.

Controlling for average rates of policy change per agency and the number of comments, Figure 4.5 shows a large increase in the probability of policy change when comments raise EJ concerns. This supports the *Distributive Information Hypothesis*. When comments raise distributive justice concerns, they are more likely to be addressed in the final policy. Rates of adding EJ language decrease after the G.W. Bush Administration, but differences between presidents are small compared to the

Table 4.1: Logit Regression Predicting Change in Rule Text

	1	2	3	4
<b>Dependent Variable</b>	<b>EJ Added</b>	<b>EJ Added</b>	<b>EJ Changed</b>	<b>EJ Changed</b>
EJ Comment	3.336*** (0.229)	2.296*** (0.237)	0.513* (0.237)	0.530* (0.241)
Log(Comments+1)	0.068* (0.028)	0.234*** (0.036)	-0.147*** (0.032)	-0.156*** (0.033)
Log(Unique EJ Comments+1)	0.806*** (0.198)	0.680** (0.241)	0.374** (0.123)	0.418** (0.127)
EJ Comment*Log(Comments+1)	-0.350*** (0.065)	-0.204** (0.071)	0.064 (0.051)	0.059 (0.053)
President FE	X	X	X	X
Agency FE		X		X
Num.Obs.	11721	11721	1885	1885
AIC	3850.5	3132.8	2182.6	2168.1
BIC	3909.4	3471.8	2226.9	2328.8
Log.Lik.	-1917.233	-1520.387	-1083.280	-1055.069

+ p < 0.1, \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001

difference between rules that did and did not receive EJ comments. Other variables are held at their modal values: the EPA, zero additional EJ comments, and one comment total.<sup>7</sup>

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<sup>7</sup>All predicted probability plots below also show probabilities at the modal values for other variables: President Obama, the EPA, zero additional EJ comments, and the median number of total comments (one comment for models 1 and 2; four comments for models 3 and 4) unless otherwise specified.

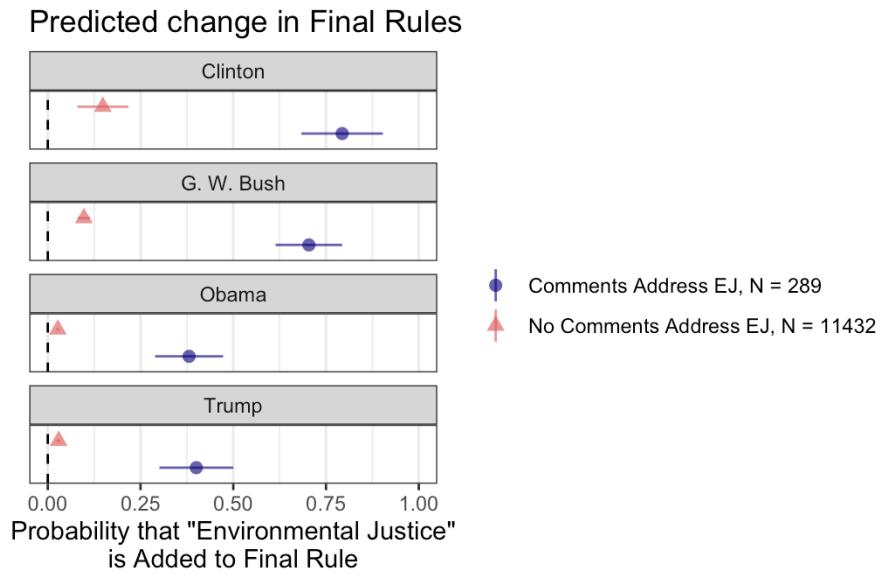


Figure 4.5: Probability that "Environmental Justice" is Added Between Draft and Final Rules by President

Figure 4.6 shows the probability that an agency will add EJ language given different total numbers of comments. At low numbers of comments, anyone comment raising environmental justice has a strong relationship with policy change. For rules with less than ten comments (most rules), one comment mentioning EJ is associated with a 30% increase in the probability that EJ will be addressed in the final rule. This supports the *Distributive Information Hypothesis*. However, the probability that an agency will add EJ language is still below 50%—even when comments raise EJ concerns, agencies tend not to address them.

As the number of comments increases, the probability that a rule will add text addressing EJ increases. This supports the *General Pressure Hypothesis*—policy change is more likely when there is more public attention to a policy process. Simultaneously, there is a negative interaction between the number of comments and EJ comments—the more comments, the smaller the relationship between comments raising EJ and

agencies addressing EJ in the rule. In the small-portion of highly salient rules with 10,000 or more, the presence of comments raising EJ concerns no longer has a statistically significant relationship with agencies adding EJ to the text. With or without EJ comments, these rules have about the same probability of change as those with just one EJ comment, just under 50%. This is evidence against the *Specific Pressure Hypothesis*—the number of comments matters (i.e., the scale of public attention) matters regardless of whether these comments explicitly raise EJ concerns. However, as shown in Figure 4.3, few rules with 10,000 or more comments do not have at least one comment mentioning EJ, so we are highly uncertain about estimates of the impact of EJ comments with high levels of public attention. We can be much more confident about the relationship between comments raising EJ concerns and rule change at lower, more typical levels of public attention.

The probability of “environmental justice” appearing in the final rule also increases with the number of unique comments mentioning “environmental justice” in models 2, 3, and 4. Overall this supports the *Repeated Information Hypothesis*.

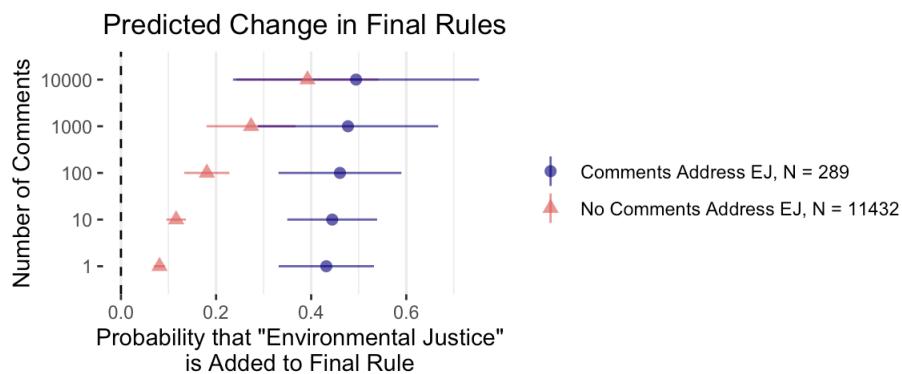


Figure 4.6: Probability Environmental Justice is Added Between Draft and Final Rules by Number of Comments

Figure 4.7 shows estimated variation in rates of adding EJ to final rules across

agencies. Agencies with the largest average rates of adding EJ language are the agencies we would expect to be more receptive to EJ claims. While many agencies make policies that could be framed as “environmental,” and all policy decisions have distributive consequences, institutions have norms and procedures that lead policymakers to see problems in different ways. For example, some agencies have dedicated staff and prominent internal guidance on EJ analysis in rulemaking, including the Environmental Protection Agency and the Department of Transportation (which includes the Federal Railroad Administration (FRA), Department of Transportation, Federal Motor Carrier Safety Administration (FMCSA), and the Federal Highway Administration (FHWA)). These agencies are among the most responsive to commenters raising EJ concerns. However, differences among agencies are fairly uncertain due to the small number of rules where EJ was added at most agencies. Thus, there is more support for the *Policy Receptivity Hypothesis* than against it, but differences between agencies with different missions and institutional practices regarding EJ are not clear cut.

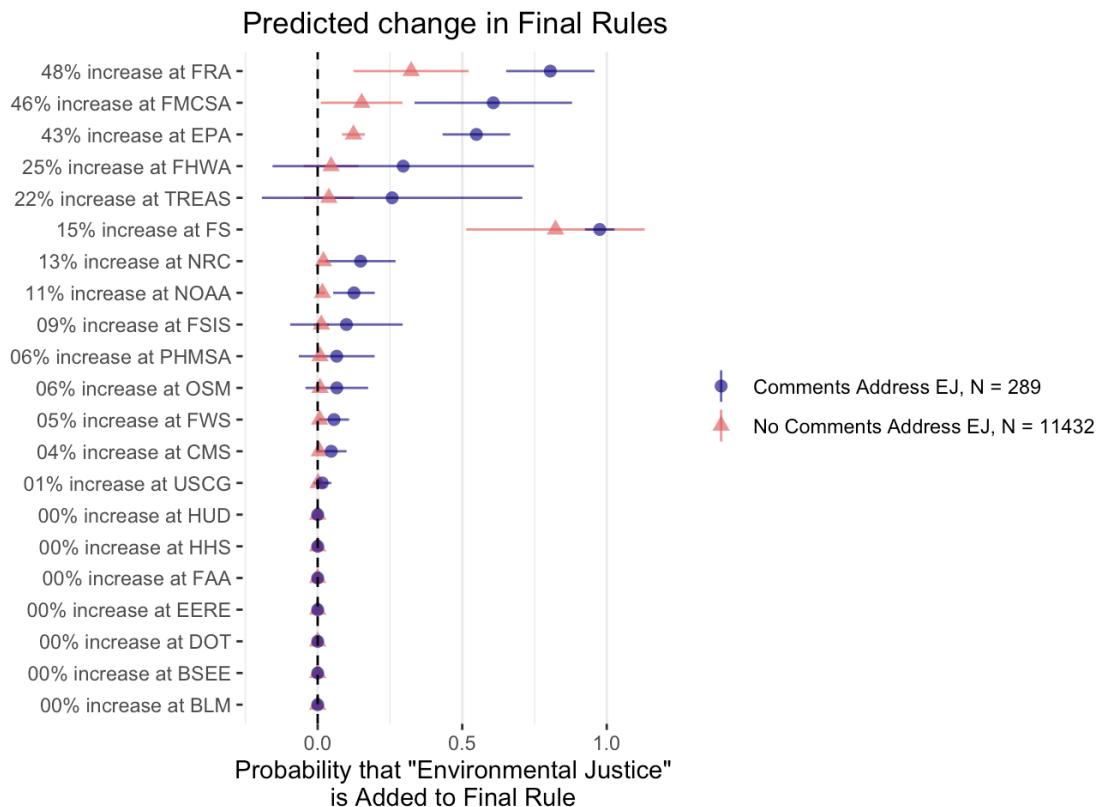


Figure 4.7: Probability Environmental Justice is Added Between Draft and Final Rules by Agency

#### 4.4.2 Are rules more likely to change how they address environmental justice when comments mention it?

Turning to rules that do address EJ in the draft, we also see responsiveness to comments raising EJ concerns, now measured as whether any sentences containing “environmental justice” changed between draft and final rule. Models 3 and 4 in Table 4.1 are the same as Models 1 and 2, except that the dependent variable is now whether any sentences mentioning EJ changed between the draft and final rule.

Most rules that addressed EJ in the draft were published by the EPA. The EPA had a high rate of baseline change, which increased when comments raised EJ concerns.

Other agencies had too few draft rules mentioning EJ to make strong inferences, but many changed how they discussed EJ 100% of the time when comments raised EJ concerns, while inconsistently doing so when comments did not.

#### 4.4.2.1 The Predicted Probability of Changed Text

Controlling for average rates of change per agency and the number of comments, Figure 4.8 shows little difference in baseline rates of changing EJ language across the Bush, Obama, and Trump presidencies. All are significantly lower than the Clinton administration's rate, which could be related to Clinton's Executive Order on environmental justice or simply an artifact of the limited sample of rules posted to regulations.gov before the mid-2000s.

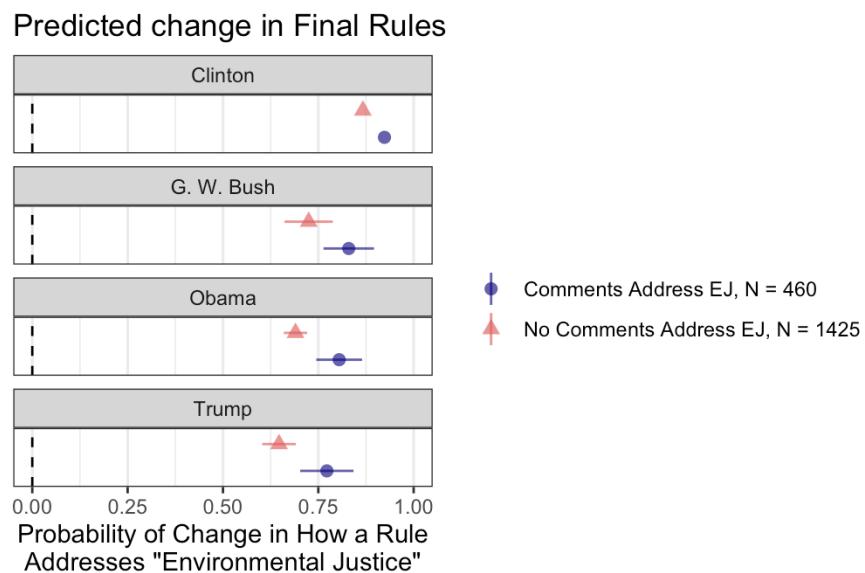


Figure 4.8: Predicted Change in \*How\* Environmental Justice is Addressed Between Draft and Final Rules by President

For draft rules that already addressed EJ, the relationship between the total number of comments and policy change is in the opposite direction posited by the *General*

*Pressure Hypothesis.* The logged total number of comments is inversely related to change in the final rule text. The more comments on a proposed rule, the less likely it is to change. Rules are more likely to change when they receive *fewer* comments. Thus, the total number of comments has the opposite relationship to *how* rules that already addressed EJ changed as it did to *whether* rules added any EJ text. While the *General Pressure Hypothesis* explained adding EJ text where none existed in the draft, the opposite is true for changing a text that already addressed EJ. Instead, this result supports the competing intuition that more salient rules may be harder to change because the agency has anticipated public scrutiny. Their position stated in the draft is more likely to be the position of the final rule.

As shown in Figure 4.9, EJ comments have a small but discernable relationship to the probability of rule change at typical (low) numbers of comments. As the total number of comments increases, the estimated difference between policies that did and did not receive EJ comments increases. When no comments mention EJ, a rule that receives 10,000 comments is much less likely to change than a rule that received 10,000. When comments do raise EJ concerns, more public attention has a smaller impact on the probability of policy change.

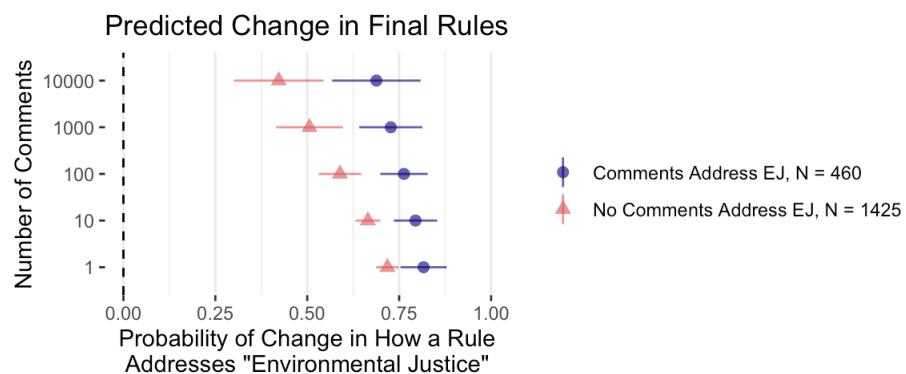


Figure 4.9: Predicted Change in \*How\* Environmental Justice is Addressed Between Draft and Final Rules by Number of Comments

## 4.5 Conclusion

This analysis presents a rare, systematic account of a social movement's impact on specific policy outcomes across institutions and over time. It illustrates the importance of ideas in policymaking and how social movements can affect policy, even in technocratic processes like rulemaking, where most U.S. law is now made.

When activists raise issue frames like environmental justice, there is a higher probability that policymakers engage in discourse that highlights the distributive effects of policy. However, baseline rates of addressing environmental justice in rulemaking are so low that, even when activists raise EJ concerns, most policy documents pay no explicit attention to EJ. We see this general lack of attention across agencies and across the G.W. Bush, Obama, and Trump administrations. Indeed, I find surprisingly small differences across administrations in both baseline rates of considering EJ and the relationship between public pressure and policy change.

There is a great deal of variation across agencies, suggesting that policy receptivity and responsiveness to public input are conditional on institutional factors.

The policy outcomes suggested by an environmental justice analysis depend on how the populations of concern are defined. In some cases, those raising environmental justice concerns present it as an economic inequality issue, leading policy to account for disparate impacts on low-income populations. In other cases, groups raise claims rooted in cultural practices, such as fish consumption among certain tribes. As occurred in the Mercury Rule, the analysis in subsequent drafts of the policy used evaluative criteria specific to these communities. Thus, policy outcomes will depend on the specific environmental justice concerns raised. Future research should assess the relationship between specific EJ claims and corresponding policy changes.

Which communities and concerns are raised by activist campaigns depend on second-order representation—who makes decisions in the organizations that mobilize public pressure. Examining which groups raise environmental justice concerns and second-order participation in these organizations' advocacy decisions validates some of the skepticism about who is able to participate and make their voice heard. Elite groups dominate policy lobbying, even for an issue like environmental justice. National advocacy organizations frequently request that regulators protect “all people” or even “low-income communities of color.” However, this more generic advocacy may not lead to the same outcomes as participation by groups that can present more specific local environmental justice concerns unique to a community. In between generic progressive advocacy organizations and community-based organizations are high-capacity organizations like the Sierra Club and Earthjustice, which frequently partner with local organizations for more place-based litigation and campaigns and may be more likely to raise these local concerns in national policymaking. Given the importance of federal policy for local environmental outcomes, and advocacy organizations’ potential to draw policymakers’ attention to environmental justice issues, future research should examine the quality of partnerships between frontline communities and national advocacy organizations.

In the end, the above analysis offers some clarity on two poorly understood and rarely linked features of American politics: the policy impact of social movements and the role of public pressure in bureaucratic policymaking. It offers some hope that policymakers may address concerns raised through direct democracy mechanisms like public comment periods. At the same time, it highlights how policymakers rarely explicitly address the disparate impacts of policy, even when directly confronted with distributive justice concerns. Social movements do affect policy, but there are steep

odds to overcome.

— 5 —

## **Reforming the Policy Process**

Each week, students in my public policy class must write to an elected official or comment on a proposed agency rule and then post about it in the class forum. But college students should not be the target demographic for notice and comment rulemaking—they are too informed and have too much time to write thoughtful comments. If we wish to realize the ideals of the Administrative Procedure Act, we must broaden participation. Can we do this? Is it worthwhile? Many scholars assume not, but the data offer some hope.

This chapter reviews dominant ways of thinking about public comments and proposed reforms to participatory processes in light of the empirical evidence in the previous chapters. I start with a sketch of the various positions staked out by administrative law scholars, each rooted in different theories of democracy. I then review several specific challenges and proposed reforms to the policy process.

## 5.1 Re-thinking Public Participation in Bureaucratic Policymaking

Understanding mass commenting as a form of petitioning, as presented in chapters 2, 3, and 4, runs against how it is often discussed by scholars and agencies. With a few notable exceptions (e.g., Cuéllar (2005); Mendelson (2011); Rauch (2016)), administrative law scholars imply that mass commenting is misguided and potentially harmful spam of the technocratic process.

“Many fear a surging wave of electronic mass submissions will overwhelm and thus delay agencies with limited resources. Furthermore, some warn us that electronic rulemaking may already have instantiated a sense that rulemaking decisions are akin to a plebiscite.” - Stuart W. Shulman (EPA-HQ-OEI-2004-0002-0015)

In a 2020 meeting, Reeve T. Bull, Research Director, Administrative Conference of the United States, summed up the dominant attitude of legal professionals:

”What are the fundamental goals that the agency and the APA are trying to accomplish by creating this mechanism for public participation?...[W]hen somebody files a comment with an agency, the comments sort of fall into two broad categories...the first type of comment are those expressing fact—providing data to the agency, either supporting the position that it wants to take or opposing the position that it wants to take—and trying to influence the agency’s decision making accordingly.

The second broad type of [public comments] are those expressing opinions. Now obviously, there’s extensive overlap between the two. Pretty much

every comment is going to express an opinion one way or the other. But as Steve's data shows, sometimes a comment is nothing but an opinion. It's 'I support this policy' or 'I don't support the policy... the law is very, very clear that with respect to the fact, with respect to data, the agency is legally required to take that into account... With respect to opinion, though, the law is much less clear. Indeed it's not clear whether the agency has to take opinion into account or conversely whether the agency is even permitted to take opinion into account. ...[Agencies] have been very, very consistent in saying the rulemaking process is not a plebiscite. It's not a vote. We're not tabulating the number of comments in favor or against. ...On the part of the public, though, I think the perception is quite a bit different. And I think that people really considered it problematic from their perspective that the agency might take a position that is different from what the vast majority of commenters might have preferred. And with respect to that latter aspect – the democratic aspect, if you will – that's where I think a lot of the problems potentially start to arise.

I don't think it's ever legitimate in a mass comment campaign for the agency to tabulate the number of comments received and say we got this number of this percentage in favor or against. Even if the comments are 99 percent in one direction or the other, I think that the agency should certainly consider mass comments. They should certainly consider the relevant information – the facts contained in those comments. But I don't think that the overall number or percentage should ever matter."

- Reeve T. Bull, Research Director, Administrative Conference of the United States

In response to public pressure campaigns, agencies often assert that rulemaking is not a plebiscite.

At the same time, agencies frequently do tally up comments on each side. In a 2008 rule regulating border crossing by private aircraft, The U.S. Customs cited the scale of public engagement as providing information on “public sentiment”: >based on the ample number of comments received by the end of the original comment period, CBP believed that public sentiment was accurately captured.” (CBP-E8-26621/p-61)

In the preamble to the 2015 Waters of the United States Rule, EPA evoked both majoritarian and pluralist justifications:

“This final rule reflects the over 1 million public comments on the proposal, the substantial majority of which supported the proposed rule, as well as input provided through the agencies’ extensive public outreach effort, which included over 400 meetings nationwide with states, small businesses, farmers, academics, miners, energy companies, counties, municipalities, environmental organizations, other federal agencies, and many others.” (2015-13435/p-67)

EPA Administrator Gina McCarthy testified that EPA “received over one million comments, and 87.1 percent of those comments...are supportive of this rule” (Lipton and Davenport, 2015). When the EPA issued a new rule under the Trump administration, it noted “a number of comments” in favor of the new definition but “a significant number of comments” in favor of the 2015 definition (2020-02500/p-231). While not going so far as to explicitly state that a supermajority of commenters opposed the new policy, it is still remarkable that the agency would choose to note quantitative opposition to the policy.

Agencies also regularly refer to form comments as petitions. When the Bureau of Land Management received 6,948 identical emails that did not cite an organization, they labeled these comments a “Pro Fracking Petition” (LM-2013-0002-5720) This text was nearly identical was signed by “Oil and Gas industry individuals” (BLM-2013-0002-5688). Another batch of 1,289 nearly identical emails submitted through the social networking website Care2.org was labeled “Anti Fracking Petition” (BLM-2013-0002-5721)

The organizations running public pressure campaigns are even more explicit that they consider mass comments to be petition signatures, frequently citing mass comments as “Letters in support of [our organization’s] Comments” (NOAA-NMFS-2012-0059-0023), a “petition from World Wildlife Fund-US (WWF-US), signed by 271,893 WWF-US supporters” (BOEM-2016-0003-2556), The files containing comments collected by organizations are often named “signatures.”

## 5.2 The Debate in Administrative Law

Scholars vary significantly in both the value they place on political information and the extent to which they believe that meaningfully engaging large numbers of people is possible.

### *Participatory democracy optimists*

Optimists see notice and comment as the “purest example of participatory democracy in actual American governance.” [CITE] The process is technically open to anyone with an opinion to offer, and agencies are, to an extent, required to respond to substantive ideas. This optimism is rooted in a volunteerism idea of democracy and a value for inclusive and substantive discourse. It assumes that those who “ought”

to be included do not have large barriers beyond the formal rules of the institution. It also assumes that meaningful discourse among those who show up is possible and likely to occur.

*“Regulatory democracy” reformers*

A related camp is slightly less rosy about the current institutions and practices but is nevertheless optimistic that reforms can at least improve the quality of discourse and thus policy. For these scholars, democracy is more a function of procedure than inclusion. “issues and contributions, information and reasons.” Cuéllar (2014) argues that rulemaking could be more discursive. Mendelson (2011) found that agencies often discard non-technical comments but argues that they shouldn’t because mass comments contain valuable information. For this camp, the quality of the public debate is more important than the total number of people, their affiliations, or their biases. They emphasize the transformative power of discourse.

*Pluralist reformers*

A different brand of reformer focuses less on discourse and more on interest group representation. Reform-oriented scholars building on pluralist ideas of representation argue that lobbying groups should be required to disclose their membership, funding, and decision-making processes (Seifter, 2016). In this view, organized groups, not individuals, are the central actors in public comment processes. However, because agencies often lack information about groups, it is difficult to know how well they represent the people they claim to. Interest groups’ faithful representation of their members is crucial to pluralist ideas of democracy. However, reforms requiring groups to disclose information about their funding and membership only go part way to assess groups’ representational claims, which often extend well beyond their membership.

*Rational pluralists*

Another group of scholars sees organized interest groups and experts that can provide credible information. In this view, random or self-selecting members of the general public are not appropriate participants. “The goal of e-rulemaking is to more fully capture such credible, specific, and relevant information, not to solicit the views of random, self-nominating members of the public” (Herz 2016). Speaking on the topic of mass comment campaigns, Oliver Sherouse, a regulatory economist at the Small Business Administration, expressed the same sentiment:

“It’s worth remembering why we have a public comment process in the first place, which is that the public has knowledge that regulators do not have and that they need to do their jobs well...how do the poor quality mass comments affect small businesses in the comment process? The most obvious problem would be if legitimate small business concerns are just lost in the flood.” (GSA 2019a, p. 31-32)

Sharehouse raised an additional concern that mass-comment campaigns might distract people from writing their own, more informative comments. While recognizing that “not everyone who does not sign onto that kind of [mass] comment would be willing to write a high-quality one,” the tradeoff of a few “quality” comments for many “poor quality” comments is worthwhile. (GSA 2019a, p. 32)

However, Sherouse was also wary about dismissing mass comments. > “A good point is not less of a good point because 10,000 people happen to agree with it.” (GSA 2019a, p. 32)

### *Skeptics*

The most skeptical camp goes even further, arguing that open solicitations to the general public should be abolished.

## 5.3 Reforms

Can the unwashed masses provide useful information to agencies? My answer is yes. Will this information be biased? Yes, but all information provided by lobbying groups has a bias, the task is to make biases transparent, and reforms could do this.

1. First, we must dispense with the idea that agencies merely implement the law. The APA provides for public participation because the ideal of direct democracy might affect the important substantive policy made by agencies. Indeed, agencies are often seeking comment on revisions to rules based on authority delegated decades ago. Agency must make policy to satisfy its mandates. The present question is one of process. Calling for greater congressional oversight or presidential control sidesteps the issue—by what process should agencies make policy? (Indeed, Potter et al. (2019) shows us that agencies often sidestep oversight, making their procedural rules all the more important.)
2. Critics may argue that opening the door wider to petition campaigns lets in biases. Indeed we know that people who opt to participate are disproportionately privileged. In an unequal society, we have unequal participation, but higher barriers to entry only make this worse.

More problematic is the concern that a well-funded group that typically dominates rulemaking (Yackee and Yackee, 2006) will sponsor astroturf campaigns, thus creating

a false impression of public support. This is a real concern. If dark money can secretly drive impressions of support for a policy, the case for expanding participation is weaker. My analysis suggests that this is uncommon.

Reforms along these lines have been suggested. Rauch (2016) would make comment periods more like polls. Nationally representative polling may be a good investment for some rules, but we know from polling research that individuals do not always have clearly formed opinions, and much depends on question wording. The reality is that American politics is animated through groups—people rely on organizations they trust to keep them informed and engaged. In classic pluralist fashion, organizations claim to represent segments of the population in rulemaking.

Raso and Kraus (N.d.) suggest a similar reform whereby people could “upvote” comments with which they agree. Raso and Kraus (N.d.) lament the “mail from the public dumped on the agency’s doorstep” and claim that “upvoting” would “make rulemaking more interactive. The happy result would bring us closer to the deliberative national town meeting.” In contrast, I argue that, empirically, mass comment campaigns already act as a poll or upvote. An upvoting feature would thus codify existing dynamic, not fundamentally depart from it. Either way, the possibilities for “deliberation” with the mass public likely exists in the historical push and pull of pressure groups and government institutions over time, not among millions of people upvoting their policy position in a single rulemaking process.

## **Aims of Reform**

### **Lower barriers to participation.**

The main barrier to participation in rulemaking is information. Even people with relatively high social capital, like small business owners, rarely participate because

they do not know about the opportunity or lack the time necessary to engage.

“they might only find out about a proposed regulation when they’re presented with one of these mass comments. And they might not have time to go back and investigate and then write a full comment letter right before the comment period is going to close. Because there aren’t a lot of small business owners who read the Federal Register every day...writing a detailed comment letter is hard work.” - Oliver Sherhouse (GSA 2019a, p. 33)

**Reduce the cost of extracting information from comments.** Reformers often highlight the value of linking comments to particular questions or sections of a draft rule. Technology can certainly improve sophisticated debates about a rule’s technical provisions. Indeed, sophisticated commentors have adopted track-changes technology to provide marked-up versions of draft rules.

New technologies may provide an even more important role in gleaning political information from the “torrents of email” and “vexing challenge” posed by mass comment campaigns.

### **Parsing the questions**

Agencies often specifically ask questions and solicit comments on specific topics in an NPRM. These topics offer an initial structure to allow commenters to self-identify the topics of their comments. The American Bar Association’s Section of Administrative Law and Regulatory Practice recommends “technology that would allow agencies to identify categories that commenters could select when submitting comments.” To

stay open to new ideas, lobbying groups should be allowed to petition the agency to add topics to the menu or ask additional questions.

For example, agencies may encourage groups to mobilize in support of the groups' answers to the questions that agencies ask. Given past trends, this will likely take the form of petition campaigns, and agencies should have a mechanism to receive those comments as such.

### **Offering answers**

Agencies could also lower the bar to participation by posting answers to their questions from different organizations and allow people to co-sign them or disagree with them. This is both easier for participants and requires less work for agencies to interpret where the commenter stands.

Social media engagement may be especially important if agencies implement the recommendations of ACUS (2018) that "Agencies should consider using social media before or in connection with direct final rulemaking to quickly identify whether there are significant or meaningful objections" (p. 34).

The risk of astroturf is real under any public comment system (including the current one), but transparency requirements can go a long way. Organizations or individuals acting in their professional capacity as organizations (not individuals) should be required to disclose where the money they paid for them to produce their comments came from. Likewise, organizations running campaigns should disclose the sources of funding for the campaigns and how much they spent mobilizing public support. These numbers will provide a helpful denominator for agencies to gauge public enthusiasm.

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## Gaurding against fraud

As with any form of public participation, fraud merits attention. If organizations submit comments on behalf of people who do not exist or did not consent, this is akin to fraudulent petition signatures or fake constituent letters being sent to Members of Congress.

**Authentication.** Matt Cutts (acting director of the U.S. Digital Service) suggests CAPTCHAS, email confirmations, and multi-factor authentication. If comments are allowed to be collected by third parties like the Sierra Club, the government can encourage but *may not be able to enforce the use of CAPTCHAS*. Requiring confirmation or authentication by email or phone alone would be a barrier to participation. Requiring both could be prohibitive.

The most secure approach that allows third parties to gather comments may be to authenticate each comment by asking each commenter to provide an email address or phone number at which to receive a message asking them to confirm the text of their comment.

Asking for a second interaction with the agency raises the cost of participation but may also make participation a slightly richer experience. People may be more likely to feel that their voice was heard. Of course, many people will fail to confirm their authentication of their comment, but like mass comments themselves, the number of people willing to take the time to authenticate offers information on the intensity of genuine support. Unauthenticated comments need not be discounted, but authenticated comments may indicate stronger preferences.

More importantly, authentication guards against identity theft. It is difficult to provide a large number of fake phone numbers, and real phone numbers used fraud-

ulently would likely generate complaints, alerting the agency that the campaign may be engaging in fraud. Again, fraud complaints need not discount an entire campaign. Opponents of a campaign by the Sierra Club, for example, could submit fraudulent comments through their system in order to complain when asked to authenticate and thus cast doubt over the campaign. However, a legitimate campaign will also have a portion that will authenticate, allowing rough estimates of the scale of true support versus fraud.

Some means of authentication, such as email, maybe slightly more open to fraud than others, like texts, but the benefits to lower barriers to participation may outweigh the greater risk of fraud.

Because mass comment campaigns include a fairly large number of individuals, especially if the barriers to participation are lower, there are many opportunities to identify fraud of any significant scale, and the stakes of a few fraudulent comments slipping through the cracks are low.

**Should agencies accept anonymous comments?** There are good reasons to accept technical information from anonymous sources. For example, they may fear retaliation. However, anonymous comments should not be used to infer political information. This distinction supports two tracks with distinct requirements. An agency may want to allow sophisticated anonymous comments to be co-signed by large numbers of authenticated supporters, thus allowing insiders with the necessary knowledge to make sophisticated arguments, but also to put ideas into public and the agency to gauge public reactions to those ideas.

## 5.4 Conclusion

The legitimacy of bureaucratic policymaking is said to depend on the premise that rulemaking provides for public voice (Croley, 2003, Rosenbloom (2003)). Yet we lack an empirical base necessary to evaluate whether any legitimacy the public comment process may provide is deserved. If input solicited from ordinary people has little effect on policy outcomes, directly or indirectly, it may be best understood as providing a veneer of democratic legitimacy on an essentially technocratic and/or elite-driven process. I have made a few initial steps toward better understanding actual public engagement in bureaucratic policymaking. If public pressure campaigns do shape agency decisions, a new research program will be needed to investigate who exactly these campaigns mobilize and represent.

## Bibliography

*About NRDC.* 2021.

ACUS. 2018. Mass and Fake Comments in Agency Rulemaking. Technical report  
Administrative Conference of the United States.

Andrews, Kenneth T. and Bob Edwards. 2004. “Advocacy Organizations in the U.S.  
Political Process.” *Annual Review of Political Science* 30:479–506.

Arnold, R. Douglas. 1979. *Congress and the bureaucracy: a theory of influence*. New  
Haven: Yale University Press.

Balla, Steven J. 1998. “Administrative Procedures and Political Control of the Bu-  
reaucracy.” *American Political Science Review* 92(03):663–673.

Balla, Steven J., Alexander R. Beck, Elizabeth Meehan and Aryamala Prasad. 2020.  
“Lost in the flood?: Agency responsiveness to mass comment campaigns in admin-  
istrative rulemaking.” *Regulation & Governance* .

Balla, Steven J, Alexander R Beck, William C Cubbison and Aryamala Prasad. 2018.  
“Where’s the Spam? Mass Comment Campaigns in Agency Rulemaking.”.

- Baumgartner, Frank R. and Beth L. Leech. 2001. *Basic Interests: The Importance of Groups in Politics and in Political Science*. Princeton University Press.
- Baumgartner, Frank R. and Bryan D. Jones. 1993. *Agendas and Instability in American Politics*. Vol. 56.
- Berry, Jeffrey M. 1999. *The New Liberalism: The Rising Power of Citizen Groups*. Brookings.
- Bierschbach, Richard A. and Stephanos Bibas. 2012. "Notice-and-Comment Sentencing." *Minnesota Law Review* 97(1):24.
- Boulianne, Shelley. 2018. "Twenty Years of Digital Media Effects on Civic and Political Participation." *Communication Research* p. 009365021880818.
- Bullard, Robert D. 1993. *Confronting environmental racism: voices from the grassroots*. Boston Mass.: South End Press.
- Burnstein, Paul. 2019. "The influence of organizations on policy: theories, findings, conclusions." *Interest Groups & Advocacy* 8:1–22.
- Burstein, Paul. 2020. "Why Do Lobbying, Protest, and Other Forms of Advocacy Often Fail to Affect Policy? Some Possible Explanations." *APSA Preprints*.
- Carmines, Edward G, Michael J Ensley and Michael W Wagner. 2011. Issue Preferences, Civic Engagement, and the Transformation of American Politics. In *Facing the Challenge of Democracy - Explorations in the Analysis of Public Opinion and Political Participation*. pp. 329 – 354.
- Carpenter, Daniel. 2014. *Reputation and power: organizational image and pharmaceutical regulation at the FDA*. Princeton University Press.

- Carpenter, Daniel. 2021. *Democracy by Petition: Popular Politics in Transformation, 1790-1870*. Harvard University Press.
- Carpenter, Daniel, Devin Judge-Lord, Brian Libgober and Steven Rashin. 2020. “Data and methods for analyzing special interest influence in rulemaking.” *Interest Groups & Advocacy* 9.
- Carpenter, Daniel P. 2001. *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1862-1928*. Princeton University Press.
- Casas, Andreu, Matthew J Denny and John Wilkerson. 2017. “Legislative Hitchhikers: Re-envisioning Legislative Productivity and Bill Sponsorship Success.”
- CBECAL. 2017. “Communities for a Better Environment.”
- Claggett, W.J.M. and Byron Shafer. 2010. “The American public mind: The issues structure of mass politics in the postwar United States.” *The American Public Mind: The Issues Structure of Mass Politics in the Postwar United States* pp. 1–295.
- Coglianese, Cary. 2001. “Social Movements, Law, and Society: The Institutionalization of the Environmental Movement.” *University of Pennsylvania Law Review* 51.
- Coglianese, Cary. 2006. “Citizen Participation in Rulemaking: Past, Present, and Future.” *Duke Law Journal* 55(5):943–968.
- Cohen, Marty, David Karol, Hans Noel and John Zaller. 2008. *The Party Decides: Presidential Nominations Before and After Reform*. Chicago: University of Chicago Press.

- Converse, Philip E. 1964. *The nature of belief systems in mass publics*.
- Cook, Jeffrey J. 2017. Setting the record straight: interest group influence on climate policy at the Environmental Protection Agency PhD thesis Colorado State University.
- Cox, Gary W. and Mathew Daniel McCubbins. 2005. *Setting the Agenda: Responsible Party Government in the U.S. House of Representatives*. Cambridge [England] ; New York, N.Y.: Cambridge University Press.
- Croley, Steven. 2003. "White House Review of Agency Rulemaking: An Empirical Investigation." *Harvard Law Review* 70(3):821–835.
- Crow, Deserai A., Elizabeth A. Albright and Elizabeth Koebele. 2015. "Evaluating Informational Inputs in Rulemaking Processes: A Cross-Case Analysis." *Administration & Society* 49(9):1318–1345.
- Cuéllar, Mariano-Florentino. 2005. "Rethinking Regulatory Democracy." *Administrative Law Review* 57(2).
- Cuéllar, Mariano-Florentino. 2014. "Administrative War." *George Washington Law Review* 82(1343).
- D., Schlosberg. 2007. "Democracy and e-rulemaking: Web-based technologies, participation, and the potential for deliberation." *Journal of Information Technology and Politics* 4:37.
- Dahl, Robert. 1958. "A Critique of the Ruling Elite Model." *American political science review* (52).
- Dahl, Robert A. 1989. *Democracy and its critics*. Yale University Press.

Dahl, Robert A. N.d. *Who Governs?*

Davis, Richard. 2011. *Justices and Journalists: The U.S. Supreme Court and the Media.* Cambridge University Press.

DiSalvo, Daniel. 2012. *Engines of Change: Party Factions in American Politics, 1868-2010.*

Dür, Andreas and Dirk De Bièvre. 2007. “The Question of Interest Group Influence.” *Journal of Public Policy* 27(1):1–12.

Dür, Andreas and Gemma Mateo. 2013. “Gaining access or going public? Interest group strategies in five European countries.” *European Journal of Political Research* 52(5):660–686.

Dwidar, Maraam. 2019. ‘(Not So) Strange Bedfellows? Lobbying Success and Diversity in Interest Group Coalitions’. Southern Political Science Association Annual Conference.

Earthjustice. 2017. “Our Work.”

Epstein, David and Sharyn O’Halloran. 1994. “Administrative Procedures, Information, and Agency Discretion.” *American Journal of Political Science* 38(3):697.

Epstein, Dmitry, Josiah Heidt and Cynthia R Farina. 2014. “The Value of Words: Narrative as Evidence in Policymaking.” *Evidence & Policy* 10(2):243–258.

Farhang, Sean and Miranda Yaver. 2016. “Divided Government and the Fragmentation of American Law.” *American Journal of Political Science* 60(2):401–417.

Farina, Cynthia R. 2018. “Comments on ACUS Proposed Recommendations on Public Engagement in Rulemaking.”

- Farina, Cynthia R., Dmitry Epstein, Josiah Heidt and Mary J. Newhart. 2012. "Knowledge in the People: Rethinking "Value" in Public Rulemaking Participation." *Cornell e-Rulemaking Initiative Publications*.
- Farina, Cynthia R, Mary J Newhart and Josiah Heidt. 2014. "Rulemaking vs. Democracy: Judging and Nudging Public Participation That Counts."
- Farina, Cynthia R., Mary Newhart, Claire Cardie and Dan Cosley. 2011. "Rulemaking 2.0." *University of Miami Law Review* 65(2).
- Feinstein, Brian D. 2021. "Identity-conscious Administrative Law".
- Ferejohn, John A. and Charles Shipan. 1990. "Congressional Influence on Bureaucracy." *Journal of Law, Economics, and Organization* 6(April 1990):1–20.
- Furlong, Scott R. 1997. "Interest Group Influence on Rule Making." *Administration & Society* 29(3):325–347.
- Furlong, Scott R. 1998. "Political Influence on the Bureaucracy: The Bureaucracy Speaks." *Journal of Public Administration Research and Theory* 8(1):39–65.
- Furlong, Scott. R. and Cornelius M. Kerwin. 2005. "Interest Group Participation in Rule Making: A Decade of Change." *Journal of Public Administration Research and Theory* 15(3):353–370.
- Furnas, Alexander C, Michael T Heaney and Timothy M LaPira. 2017. "The Partisan Ties of Lobbying Firms".
- Gailmard, Sean and John W Patty. 2017. "Participation, process and policy: the informational value of politicised judicial review." *Journal of Public Policy* 37(3):233–260.

- Gellhorn, Ernest. 1972. "Public Participation in Administrative Proceedings." *Yale Law Journal* 81:359.
- Gerring, John. 1998. *Party ideologies in America, 1828-1996*. Cambridge University Press.
- Gilens, Martin and Benjamin I. Page. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens." *Perspectives on Politics* 12(03):564–581.
- Gillion, Daniel Q. 2013. *The political power of protest: minority activism and shifts in public policy*. Cambridge, MA: Cambridge University Press.
- Golden, Marissa Martino. 1998. "Interest Groups in the Rule-Making Process: Who Participates? Whose Voices Get Heard?" *Journal of Public Administration Research and Theory* 8(2):245–270.
- Gordon, Sanford C. Gordon and Steven Rashin. 2018. "Citizen Participation in Policymaking: Evidence from Medicare Fee Schedule Revisions."
- Gormley, William T. 1986. "Regulatory Issue Networks in a Federal System." *Polity* 18(4):595–620.
- Grossmann, Matt, Zuhair Mahmood and William Isaac. 2021. "Political Parties, Interest Groups, and Unequal Class Influence in American Policy." *Journal of Politics* .
- Hacker, Jacob. 2003. Privatizing Risk without Privatizing Benefits: Path Dependence, Policy Drift, and Welfare-State Reform in the United States. In *Continuity and Discontinuity in Institutional Analysis*, ed. Wolfgang Streeck and Kathleen Thelen.

- Hacker, Jacob S, Alexander Hertel-Fernandez, Paul Pierson and Kathleen Ann Thelen. 2021. *The American Political Economy: Politics, Markets, and Power*. Cambridge University Press.
- Haeder, Simon F. and Susan Webb Yackee. 2015. “Influence and the Administrative Process: Lobbying the U.S. President’s Office of Management and Budget.” *American Political Science Review* 109(03):507–522.
- Hall, Richard L. and Kristina C. Miler. 2008. “What Happens After the Alarm? Interest Group Subsidies to Legislative Overseers.” *The Journal of Politics* 70(4):990–1005.
- Hertel-Fernandez, Alexander. 2019. *State Capture: How Conservative Activists, Big Businesses, and Wealthy Donors Reshaped the American States—and the Nation*. Oxford University Press.
- Herz, Michael. 2016. “E-Rulemaking’s Democratic Transformation: Anticipated, Actual, and Potential.” *Revue Internationale des Gouvernements Ouverts* 3:195–208.
- Hobson, Chris M. 2004. “Comment submitted by Chris M. Hobson, Southern Company.”
- Hojnacki, Marie, David C. Kimball, Frank R. Baumgartner, Jeffrey M. Berry and Beth L. Leech. 2012. “Studying Organizational Advocacy and Influence: Reexamining Interest Group Research.” *Annual Review of Political Science* 15(1):379–399.
- Hutchings, Vincent L. 2003. *Public opinion and democratic accountability: how citizens learn about politics*. Princeton University Press.

J., Cook J. 2018. "Framing the debate: How interest groups influence draft rules at the United States Environmental Protection Agency." *Environmental Policy and Governance* 28:1.

Jacobs, L.R. and T. Skocpol. 2005. *Inequality and American Democracy: What We Know and What We Need to Learn*. Book collections on Project MUSE Russell Sage Foundation.

Johnson, Stephen M. 1998. "The Internet Changes Everything: Revolutionizing public participation and access to government information through the internet." *Administrative Law Review* 50(2):277–337.

Johnson, Stephen M. 2013. "Beyond the Usual Suspects: ACUS, Rulemaking 2.0, and a Vision for Broader, More Informed, and More Transparent Rulemaking." *Administrative Law Review* .

Judge-Lord, Devin. 2016. Why Courts Defer to Administrative Agency Judgement. Midwest Political Science Association Annual Conference.

Judge-Lord, Devin. 2017. Measuring Change and Influence in Budget Texts. American Political Science Association Annual Conference.

Judge-Lord, Devin. 2019. Why Do Agencies (sometimes) Get So Much Mail? Lobbying coalitions, mass comments, and political information in bureaucratic policy-making. Southern Political Science Association Annual Conference.

Kernell, Samuel. 2007. *Going public: new strategies of presidential leadership*. Fourth edi ed. CQ Press.

Kerwin, Cornelius M. and Scott R. Furlong. 2011. *Rulemaking: How Government Agencies Write Law and Make Policy*. 4th ed. CQ Press.

- Key, V.O. 1961. *Public Opinion and American Democracy*. New York: Alfred A. Knopf.
- Kollman, Ken. 1998. *Outside lobbying : public opinion and interest group strategies*. Princeton University Press.
- Krewson, Christopher N. 2019. “Save this Honorable Court: Shaping Public Perceptions of the Supreme Court Off the Bench.” *Political Research Quarterly* 72(3):686–699.
- Leech, Beth. 2010. Lobbying and Influence. In *The Oxford Handbook of American Political Parties and Interest Groups*, ed. Sandy L. Maisel, Jeffrey M. Berry and George C. Edwards. Oxford University Press pp. 696–719.
- Libgober, Brian. 2018. “What biased rulemaking looks like.”
- Libgober, Brian and Daniel Carpenter. 2018. “Lobbying with Lawyers: Financial Market Evidence for Banks’ Influence on Rulemaking.”
- Lipton, Eric and Coral Davenport. 2015. “Critics Hear E.P.A.’s Voice in Public Comments.” *The New York Times* .
- Lowande, Kenneth and Rachel Augustine Potter. 2021. “Congressional Oversight Revisited: Politics and Procedure in Agency Rulemaking.” *The Journal of Politics* 83(1):401–408.
- Lowery, David. 2013. “Lobbying Influence: Meaning, Measurement, and Missing.” *Interest Groups & Advocacy* 2(1):1–26.
- Lowi, Theodore. 1969. *The End of Liberalism*. New York: W.W. Norton.

- Lowi, Theodore J. 1964. "American Business, Public Policy, Case-Studies, and Political Theory." *World Politics* 16(4):677–715.
- Lowi, Theodore J. 1972. "Four Systems of Policy, Politics, and Choice." *Public Administration Review* 32(4):298–310.
- Lowi, T.J. and N.K. Nicholson. 2015. *Arenas of Power: Reflections on Politics and Policy*. Taylor & Francis.
- Lyon, Thomas P. and John W. Maxwell. 2004. *Journal of Economics & Management Strategy* 13:561–597.
- M., Golden M. 1998. "Interest groups in the rule-making process: Who participates? Whose voices get heard?" *Journal of Public Administration Research and Theory* 8:245.
- Mahoney, Christine. 2007a. Lobbying Success in the United States and the European Union Author. Technical Report 1.
- Mahoney, Christine. 2007b. The Role of Interest Groups in Fostering Citizen Engagement: The Determinants of Outside Lobbying. In *Politics Beyond the State: Actors and Policies in Complex Institutional Settings*, ed. Kris Deschouwer and M. Theo Jans. ASP.
- Malecha, Gary Lee and Daniel J. Reagan. 2012. *The public Congress: Congressional deliberation in a new media age*. Routledge.
- Mansbridge, Jane. 2003. "Rethinking Representation." *American Political Science Review* 97(4).

- Mansbridge, Jane J. 1992. A Deliberative Theory of Interest Representation. In *The Politics Of Interests: Interest Groups Transformed.*, ed. Mark P. Petracca. Routledge chapter 2, p. 448.
- Mayhew, David R. 2000. "Electoral Realignments." *Annual Review of Political Science* 3(1):449–474.
- McAdam, Doug. 2017. "Social Movement Theory and the Prospects for Climate Change Activism in the United States." *Annual Review of Political Science* 20:189–2008.
- McCubbins, Mathew D., Roger G. Noll and Barry R. Weingast. 1987. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, & Organization* 3(2):243–277.
- McCubbins, Mathew D and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science* 28(1):165–179.
- McFarland, Andrew S. 2007. "Neopluralism." *Annual Review of Political Science* 10(1):45–66.
- McKay, Amy. 2007. "Interest group competition on federal agency rules." *American Politics Research* 35:336.
- McNutt, John and Katherine Boland. 2007. "Astroturf, Technology and the Future of Community Mobilization: Implications for Nonprofit Theory." *The Journal of Sociology & Social Welfare* 34.
- Mendelson, Nina A. 2011. "Foreword: Rulemaking, Democracy, and Torrents of E-Mail." *George Washington Law Review* 79:101.

- Metzger, Gillian E. 2010. "Ordinary Administrative Law as Constitutional Common Law." *Columbia Law Review* 110:479.
- Meyer, David S. 2004. "Protest and Political Opportunities." *Annual Review of Sociology* 30(1):125–145.
- Michaels, Jon D. 2015. "An Enduring, Evolving Separation of Powers." *Columbia Law Review* 115:515.
- Mildenberger, Matto. 2020. *Carbon Captured: How Business and Labor Control Climate Politics*. Cambridge, MA: MIT Press.
- Moore, Emily H. 2017. "Public Participation in Rulemaking.".
- Moore, Emily H. 2018. "Polarization, Excepted Appointments, and the Administrative Presidency." *Presidential Studies Quarterly* 48(1):72–92.
- Nelson, David and Susan Webb Yackee. 2012. "Lobbying Coalitions and Government Policy Change: An Analysis of Federal Agency." *The Journal of Politics* 74(2):339–353.
- Noveck, Beth Simone. 2004. "Public Participation in Electronic Rulemaking: Electronic Democracy or Notice-and-Spam?".
- Noveck, Beth Simone. 2005. "The Future of Citizen Participation in the Electronic State." *I/S: A Journal of Law and Policy* 1(1).
- Noveck, Beth Simone. 2009. *Wiki Government: How technology can make government better, democracy stronger, and citizens more powerful*. Brookings Institution Press.
- Potter, Rachel Augustine. 2017a. "More than Spam? Lobbying the EPA Through Public Comment Campaigns.".

- Potter, Rachel Augustine. 2017b. "Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking." *Journal of Politics* 79(3):841–855.
- Potter, Rachel Augustine, Andrew Rudalevige, Sharece Thrower and Adam L. Warber. 2019. "Continuity Trumps Change: The First Year of Trump's Administrative Presidency." *PS: Political Science & Politics* pp. 1–7.
- Potter, Rachel Augustine and Charles R. Shipan. 2019. "Agency rulemaking in a separation of powers system." *Journal of Public Policy* 39(1):89–113.
- Rashin, Steven. 2017. Private Influence on the Regulatory Process: Evidence from Comments on SEC Rules.
- Raso, Connor and Bruce R. Kraus. N.d. "Upvoting the administrative state.".
- Rauch, Daniel E. 2016. "Two-Track E-Commenting." *Yale Journal on Regulation* 33(1).
- Reich, Charles A. 1966. The Law of the Planned Society. Technical report.
- Rinfret, Sara and Jeffrey Cook. 2019. "Trial by fire? Rulewriters, training, the BLM, and EPA." *Environmental Practice* 21(3):113–120.
- Rinfret, Sara, Robert Duffy, Jeffrey Cook and Shane St. Onge. 2021. "Bots, fake comments, and E-rulemaking: the impact on federal regulations." *International Journal of Public Administration* 0(0):1–9.
- Rochon, Thomas R and Daniel A Mazmanian. 1993. "Social Movements and the Policy Process." *The Annals of the American Academy of Political and Social Science* 528(July):75–87.
- Rosenbloom, David H. 2003. *Administrative law for public managers*. Westview Press.

- Rossi, Jim. 1997. "Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking." *Northwestern Law Review* 92(1).
- Sant'Ambrogio, Michael and Glen Staszewski. 2018. Public Engagement in Agency Rulemaking. Technical report Administrative Conference of the United States.
- Schattschneider, Elmer. 1942. *Party Government*.
- Schattschneider, Elmer E. 1975. *The Semisovereign People: A Realist's View of Democracy in America*. Revised ed. Dryden Press.
- Schlozman, Daniel. 2015. *When movements anchor parties: electoral alignments in American history*. Princeton University Press.
- Schlozman, Kay Lehman, Sidney Verba and Henry E. Brady. 2012. *The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy*. Princeton University Press.
- Seifter, Miriam. 2016. "Second-Order Participation in Administrative Law." *UCLA Law Review* 63(1300).
- Selin, Jennifer L. 2015. "What Makes an Agency Independent?" *American Journal of Political Science* 59(4):971–987.
- Shafer, Byron E. 2016. *The American Political Pattern: Party Balance , Ideological Polarization , and Substantive Conflict , 1932-2016*. University Press of Kansas.
- Shane, Peter M. 2009. Turning GOLD into EPG: Lessons from Low-Tech Democratic Experimentalism for Electronic Rulemaking and Other Ventures in Cyberdemocracy. In *Online Deliberation: Design, Research, and Practice*, ed. Todd Davies and Seeta Peña Gangadharan. CSLI Publications.

- Shapiro, Stuart. 2008a. "Does the amount of participation matter? Public comments, agency responses and the time to finalize a regulation." *Policy Sciences* 41(1):33–49.
- Shapiro, Stuart. 2008b. "Does the Amount of Participation Matter? Public Comments, Agency Responses and the Time to Finalize a Regulation." *Policy Sciences* 41(1):33–49.
- Skocpol, Theda. 2003. *Diminished Democracy: From membership to management in American civic life*. University of Oklahoma Press.
- Skocpol, Theda. 2013. "Naming the Problem: What It Will Take to Counter Extremism and Engage Americans in the Fight against Global Warming".
- Skocpol, Theda and Vanessa Williamson. 2016. *The Tea Party and the remaking of Republican conservatism*. Oxford University Press.
- Soss, Joe, Jacob S Hacker and Suzanne Mettler. 2007. *Remaking America : democracy and public policy in an age of inequality*. New York: Russell Sage Foundation.
- Sundquist, James L. 1973. *Dynamics of the Party System Alignment and Realignment of Political Parties in the United States*. Brookings Institution Press.
- Sunstein, Cass R. 2001. *Republic.com*. Princeton University Press.
- Verba, Sidney. and Norman H. Nie. 1987. *Participation in America: Political Democracy and Social Equality*. University of Chicago Press.
- Wagner, Wendy E. 2010. "Administrative Law, Filter Failure, and Information Capture." 59:1321.

- Wagner, Wendy E., Katherine Y. Barnes and Lisa Peters. 2011. "Rulemaking in the Shade: An Empirical Study of EPA's Air Toxic Regulations." *Administrative Law Review* 63(1):99–158.
- Wagner, Wendy, William West, Thomas Mcgarity and Lisa Peters. 2017. "Dynamic Rulemaking." *N.Y.U. Law Review* 21(183):92–2017.
- Walker, Jack L. 1991. *Mobilizing interest groups in America: patrons, professions, and social movements*. University of Michigan Press.
- Walters, Daniel E. 2019. "Capturing Regulatory Agendas?: An Empirical Study Of Industry Use Of Rulemaking Petitions." *Harvard Environmental Law Review* 49.
- WEACT. 2017. "WE ACT for Environmental Justice: Empowering Communities to Power Change."
- West, William F. 2004. "Formal Procedures, Informal Processes, Accountability, and Responsiveness in Bureaucratic Policy Making: An Institutional Policy Analysis." *Public Administration Review* 64(1):66–80.
- West, William F. 2009. "Inside the Black Box." *Administration & Society* 41(5):576–599.
- West, William F. and Connor Raso. 2013. "Who Shapes the Rulemaking Agenda? Implications for Bureaucratic Responsiveness and Bureaucratic Control." *Journal of Public Administration Research and Theory* 23(3):495–519.
- White, Adam J. 2018. "Comments on ACUS Proposed Recommendations on Public Engagement in Rulemaking."
- Wilson, James Q. 1967. "The Bureaucracy Problem." *The Public Interest* 6(3):3.

Wilson, James Q. 1989. *Bureaucracy: what government agencies do and why they do it.* Basic Books.

Yackee, Jason Webb and Susan Webb Yackee. 2006. “A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy.” *Journal of Politics* 68(1):128–139.

Yackee, Jason Webb and Susan Webb Yackee. 2009a. “Divided government and US federal rulemaking.” *Regulation & Governance* 3(2):128–144.

Yackee, Jason Webb and Susan Webb Yackee. 2009b. Is the Bush Bureaucracy Any Different? A Macro-Empirical Examination of Notice and Comment Rulemaking under ”43”. In *President George W. Bush’s Influence over Bureaucracy and Policy.*, ed. C Provost and P Teske. Palgrave Macmillan pp. 41–59.

Yackee, Susan Webb. 2006. “Sweet-talking the fourth branch: The influence of interest group comments on federal agency rulemaking.” *Journal of Public Administration Research and Theory* 16(1):103–124.

Yackee, Susan Webb. 2009. “Private Conflict and Policy Passage: Interest-Group Conflict and State Medical Malpractice Reform.” *Policy Studies Journal* 37(2):213–231.

Yackee, Susan Webb. 2012. “The Politics of Ex Parte Lobbying: Pre-Proposal Agenda Building and Blocking during Agency Rulemaking.” *Journal of Public Administration Research and Theory* 22(2):373–393.

Yackee, Susan Webb. 2015. “Participant Voice in the Bureaucratic Policymaking Process.” *Journal of Public Administration Research and Theory* 25(2):427–449.

Yackee, Susan Webb. 2019. "The Politics of Rulemaking in the United States." *Annual Review of Political Science* 22(1).

Zavestoski, Stephen, Stuart Shulman and David Schlosberg. 2006. "Democracy and the Environment on the Internet." *Science, Technology, & Human Values* 31(4):383–408.