

Why Do Agencies (Sometimes) Get So Much Mail?: Public Pressure Campaigns and Bureaucratic Policymaking

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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 cause a few larger policy advocacy organizations to dominate. Over 80 percent of public comments were mobilized by just 100 organizations, most of which lobby in the same public interest coalitions. As a result, the public attention that pressure campaigns generate is concentrated on a small portion of policies on which these organizations focus. I also 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 partisan biases of mobilizing groups.

Keywords: Interest groups, civic engagement, pressure groups, lobbying coalitions, bureaucratic politics, rulemaking

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 valuable new information for policymakers (Yackee, 2006; Nelson and Yackee, 2012). The extent to which participatory processes make more democratic, accountable, or informed policy 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 (Hacker et al., 2021).

Bureaucratic policymaking, in particular, is the ideal context for powerful organized 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 embedded in the professional and epistemic networks of the industries they support and regulate (Gormley, 1986; Carpenter, Esterling and Lazer, 1998; Epstein, Heidt and Farina, 2014). Organizations with superior resources often flood policymakers with technical information valued both in the specific legal context of bureaucratic policymaking and 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 often framed as derivative of legislative statutes, even when these statutes are decades old. The assumption that Congress makes political decisions, not agencies, persists even as agencies write and rewrite policies that cite the same old statutes, advancing and reversing major policy programs under each subsequent president. All of these features—concentrated costs and benefits, the importance of expertise, and the anti-politics of the technocratic frame—privilege 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—all classic examples of “civic engagement” (Verba and Nie, 1987). While recent scholarship on bureaucratic policymaking has shed light on sophisticated lobbying, especially by businesses, we know surprisingly little about the vast majority of public comments, which come from the lay public. The few studies to address the massive level of participation from the lay public (i.e., not professional policy influencers) 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. Raising the quality of citizen

comments means making them more like the technical comments of lawyers and 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. Indeed, “it can be difficult to distinguish an individual’s independent contribution from an interest-group-generated form letter” (Seifter, 2016, p. 1313). Rather, to study public participation, we must *attribute* public engagement to the broader lobbying effort it supports. I show that most public comments in U.S. federal agency rulemaking are part of organized campaigns, more akin to petition signatures than “deliberative” participation or sophisticated lobbying. Moreover, nearly all comments are mobilized to support more sophisticated lobbying efforts. Comments from the lay public are neither “deliberative” nor “spam.” People participate because they are *mobilized* into broader lobbying efforts. Because nearly all mobilizing organizations are repeatedly lobbying, these public pressure campaigns are often broader than the policy they target. Often they aim to raise attention and build power for future policy fights.

Without an accurate and systematic understanding of public participation—*group-mediated* participation—in bureaucratic policymaking, 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 of 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, they may merely legitimize the demands of the same group of powerful interest groups that would dominate without broader public participation. If, however, public pressure campaigns are used 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 pay less attention to how groups gain and wield power (notable exceptions include Coglianese, 2001; Wagner, 2010; Wagner, Barnes and Peters, 2011; Seifter, 2016). Nearly all empirical studies of bureaucratic policymaking in political science journals

exclude form letters from their analysis. While Coglianese (2001) and Shapiro (2008) suggested that mass comments may have important effects, including on the time it takes to make policy, studies addressing more than a few example cases have only appeared recently. The most comprehensive study to date (Moore, 2017) finds less participation when agencies rely more heavily on expertise. Examining policies made by the Environmental Protection Agency, Potter (2017) finds that advocacy groups mobilize more often than industry groups, and Balla et al. (2020) find that form letters are cited less often and are less associated with policy change than comments written by lawyers and other professional policy influencers.

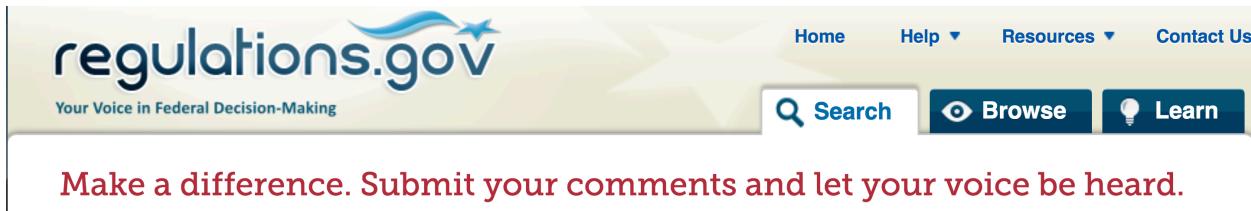
While this growing body of scholarship has improved our understanding of bureaucratic policymaking, public participation is still largely under-tilled empirical terrain on which to extend and evaluate theories about civic participation and pressure politics. Much of our knowledge about civic participation beyond voting comes from surveys and qualitative studies of particular groups. In contrast, models of bureaucratic policymaking focus on the participation of sophisticated lobbying groups. These models neither explain nor account for public pressure campaigns. Thus, civic engagement in general and organized public pressure in particular remain poorly understood in the context of bureaucratic policymaking.

Political scientists' neglect of public pressure campaigns that target the bureaucracy is surprising given that some of the most contentious recent public controversies involve bureaucratic policymaking.¹ Pressure campaigns are important because most people are only aware of bureaucratic policymaking when it is the target of a public pressure campaign. Indeed, because most agency policies receive so little attention, pressure campaigns often increase the level of public attention by several orders of magnitude. And as I show below, pressure campaigns have become more frequent. The ease of online mobilizing and commenting has, like other forms of participation (Boulianne, 2018), greatly increased the number of policies on which thousands and even millions of people comment.

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

¹While bureaucratic policymaking usually receives little attention, it is increasingly becoming a flashpoint for public controversies. 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 of the Dakota Access Pipeline, the Army Corps of Engineers received hundreds of thousands of public comments. Alongside protest actions that included shutting down many websites, the Federal Communications Commission's Open Internet Rule received millions of public comments. While some of these comments appear fake (Rinfret et al., 2021), 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 the omission from theories of bureaucratic policymaking would seem to imply.

Figure 1: Regulations.gov Solicits Public Comments on Draft Agency Rules



solicits visitors to “Make a difference. Submit your comments and let your voice be heard” and “Participate today!” (Figure 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, p. 1). 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” (p. 2). And yet, political scientists have paid little empirical or theoretical attention to the role of public pressure in bureaucratic policymaking.

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.

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 almost always a collective affair, this includes a typology of public pressure campaigns.

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 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.

Instead, 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 that 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, I argue, 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 overwhelmingly 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 percent 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. One consequence of the concentration of organizing capacity is that public engagement in rulemaking is highly clustered on a few rules made salient by public pressure campaigns. Moreover, because these large national advocacy groups are overwhelmingly more aligned with the Democratic party, the politics of public participation in bureaucratic policymaking look very different under Democratic and Republican presidents. Public pressure is much more likely to support policies made by Democrats than Republicans.

I proceed in the following steps. Section 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 3.1 introduces a novel dataset that systematically captures public participation in federal agency rulemaking. Section 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 4 presents the results of this analysis.

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. (Hacker et al., 2021, pg. 3)

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 (Truman, 1951). The next two sections address each in turn.

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. Advocacy groups are “intermediaries between public constituencies and government institutions,” which often represent segments of the public with “shared ideologies or issue perspectives” (Grossmann, 2012, p. 24). In doing so, public interest groups provide countervailing forces to business interest groups (Mansbridge, 1992). Engaging citizens to

participate in the policy process is a common strategy for groups to gain and exercise power (Mahoney, 2007), and thus a major driver of civic engagement (Skocpol, 2003; Dür and De Bièvre, 2007). 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, 1961), though they may do so poorly (Schattschneider, 1975; McFarland, 2007; Seifter, 2016).

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 the government from “cooperative activity” (p. 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 way. Cuéllar (2005) finds that members of the “lay public” raise important new concerns beyond those raised by interest groups. He advocates for reforms that would make it easier for individuals to participate and increase the sophistication of individual comments on proposed policies. However, most individual participation is not spontaneous and may be better classified as cooperative.

Cooperative activities are coordinated and mediated through organizations. By coordinating political action, public pressure campaigns expand civic participation in policymaking. I follow Verba and Nie (1987) in defining “civic participation” as “acts aimed at influencing governmental decisions” (p. 2). Some argue that participation only counts if it is deliberative, which mass comment campaigns are not (at least at the individual level). For example, Rossi (1997) argues mass comment campaigns are deleterious to civic republican ideals. 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 few 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, 2008). In terms offered by Mansbridge (2003), public pressure campaigns are more about democratic aggregation than deliberation. Carpenter (2021) similarly characterized petitioning as “another model of aggregation” (p. 479) beyond elections.

Self-selection may not be ideal for representation, but opt-in forms of participation—including voting, attending hearings, or commenting on proposed policies—are often the only information decisionmakers have about public preferences. On any specific policy issue,

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

Forms of civic participation beyond voting, such as protests and petitions, 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.

Pluralism and Group Conflict in Democratic Theory An organization 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 often called “going public” (Kollman, 1998). Going public (also called 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), lawyers (Davis, 2011), and even judges (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.²

²I 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 an enduring organizational structure. More research is needed on the extent to which these mass mobilization campaigns create enduring organization.

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 (Schattschneider, 1942), policy advocacy groups (Potter, 2017; Grossmann, 2012), citizen groups (Berry, 1999), and policy change organizations (McNutt and Boland, 2007).

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 (Lipsky, 1968; 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).

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 were 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; Nelson and Yackee, 2012; ?; English, 2019). Other studies have described how organizations are behind form letter campaigns (Potter, 2017; Balla et al., 2018, 2020). Scholars have thus measured coalitions of organized groups and, separately, attached form letters to mobilizing organizations. I combine both of these approaches: defining mass mobilization as one tactic in coalition lobbying. I consider the lobbying coalition the unit of analysis and thus, unlike prior studies, attribute citizen comments to the coalition that mobilized them (not just the organization).

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 the dynamic they describe 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. (Nelson and Yackee, 2012, p. 343)

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.

Second-order Representation 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, then 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.

Advocacy organizations often claim to represent a large number of “members and supporters” (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 also claimed to have mobilized over 150,000 letters to members of Congress, which, if true, would indicate an active base of public support.

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 (Ahlquist and Levi, 2013; Mansbridge, 1992; Michener, 2019). 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 public 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” (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 active support for their specific position on a given issue.

To be sure, agency officials have a large amount of political information about their policy areas before soliciting comments. This information may vary across issues. For example, policymakers may better understand the number of people who support NRDC and their politics than they understand the supporters claimed by the Poker Players Alliance. Still, an organizations' level of effort and the scale and intensity with which the attentive public responds to a pressure campaign may provide information about the politics of a given policy issue. A large showing for a campaign supporting a proposed policy may give bureaucrats a talking point with their political superiors or provide political cover to avoid congressional constraints. A surprising level of opposition may make agency leaders question their political tactics.³

Furthermore, if D.C. professionals primarily make advocacy group decisions (Skocpol, 2003), 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. Demonstrated grassroots support is political information that may bolster a group’s representational claims.

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., fake petition signatures) bypass the public pressure and mass engagement step entirely, manifesting false political information. However, in a model where political information supports an or-

³In appendix ?? I elaborate on formal models that emphasize the impact of unexpected information in public comments.

ganization's broader 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 they 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 should rationally discount petitions submitted anonymously or by unknown organizations, fraudulent campaigns have little hope of influencing policy in this model. Compared to a model where political information is not mediated by groups that also engage in sophisticated lobbying, astroturf campaigns should be fairly rare if my theory is correct.

2.2 Lobbying in Bureaucratic Policymaking

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

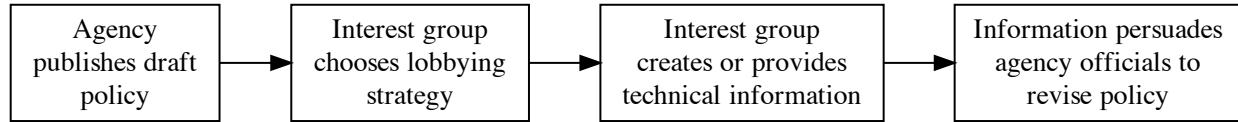
Foundational scholarship on rulemaking (Furlong and Kerwin, 2005; Furlong, 1997, 1998; Kerwin and Furlong, 2011) focuses on interest group lobbying. Theoretical models and empirical scholarship has focused on how interest groups help agencies learn about policy problems (Yackee, 2012; Gordon and Rashin, 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. Legal and scientific information is so important that flooding policymakers with technical information is a highly effective lobbying strategy (Wagner, 2010).

Figure 2 illustrates the “classic model” of insider lobbying that describes most rulemakings and nearly all scholarship on lobbying in bureaucratic policymaking to date. The first step

in the policy process is the publication of a draft rule (Agency publishes draft policy). The first broadly observable step in the rulemaking process is usually an agency publishing a draft rule in the Federal Register.⁴ 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. Taking the publication of a draft policy as my starting point builds on the idea that “new policies create politics” (Schattschneider, 1935).

After learning about the content of the policy, interest groups form concrete opinions about how exactly they would like the policy to change and develop a strategy to achieve their goals (Interest group chooses lobbying strategy) in the public comment stage of the policy process. These demands lead organizations to form lobbying coalitions and lobbying strategies that research may, in theory, observe. To date, most studies of rulemaking have focused on the power of expertise and novel technical information that may lead agency officials to re-evaluate their policy decisions (Information persuades agency officials to revise policy).

Figure 2: The “Classic Model” of Interest Group Lobbying in Bureaucratic Policymaking



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.

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 and Yackee, 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

⁴As agency rulemaking is my empirical case of policymaking, I use “rule” and “policy” interchangeably.

(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 in rulemaking 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, he finds that 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. 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 facilitates more of the same kind of engagement among the “like-minded” (i.e., mass-commenting).

Political science scholarship on mass comment campaigns is limited to a few published articles (Shapiro, 2008; Schlosberg, Zavestoski and Shulman, 2007; Balla et al., 2018, 2020), two unpublished dissertations (Moore, 2017; Cook, 2017)⁵, and an online report (Potter, 2017). Small adjacent literature in information technology and public administration journals document fraud in the public comment process (Rinfret et al., 2021) and gaps in training that bureaucrats receive (Rinfret and Cook, 2019). Schlosberg, Zavestoski and Shulman (2007) note that form letters differ from other comments. Shapiro (2008) investigates whether the number of public comments relates to the time between the publication of the draft and the 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 the effects of lobbying may differ between rules with a lot of public attention and more typical rulemakings, where regulated business groups often dominate or lobby 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.

⁵The article published from Cook’s dissertation (Cook, 2018) contains less about mass comment campaigns.

One of the most theoretically developed and systematic studies to date is a short Brookings Institution report (Potter, 2017) that also focused on Obama-era EPA rules. Across 359 EPA rules, Potter (2017) finds that 16 percent 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 lobby 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 (2017) 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 paper explicitly builds on these first two intuitions—how pressure campaigns expand the scope of conflict and grow advocacy organizations. Judge-Lord (2021a) addresses the third—how public pressure campaigns may affect agency leaders’ political principals.

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 Balla et al. 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 technical 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 the date that 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, p. 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.

2.3 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. Scholars should study public pressure 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 theories and testable hypotheses 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.

“Usual Suspects” or “Underdogs” Existing scholarship points to 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 depends 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, 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 would otherwise 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 public pressure campaigns are 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, then 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.

The Conditions Under Which Public and Private Interests Mobilize This section draws on theories of interest group lobbying and conflict expansion 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 (2020) suggest a similar reform whereby people could "upvote" comments with which they agree.

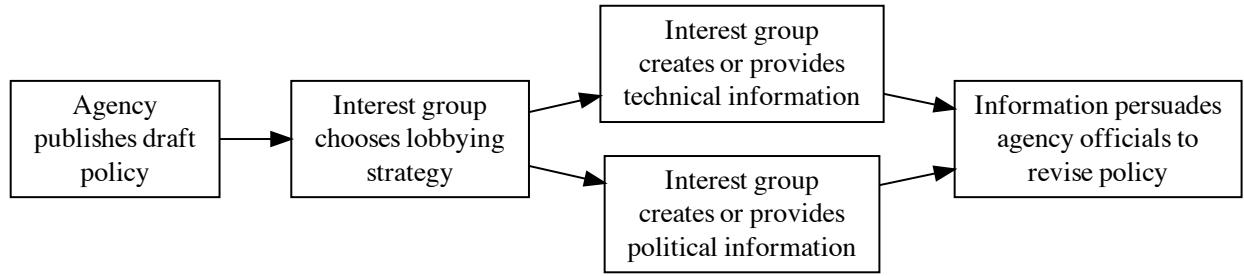
I build from a similar intuition that public pressure campaigns currently function like a poll or, more accurately, a petition, capturing the intensity of preferences among the attentive public—i.e., how many people are willing to take the time to engage. Indeed, many campaigns use the language of public opinion and petitioning. For example, a campaign by the World Wildlife Federation provided language explicitly claiming to have public opinion on its side. Its form letter cited an opinion poll, stating the following: "along with 80 percent 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 demonstrating support from members of the public and elected officials aim to provide similar kinds of political information.

Public pressure campaigns reveal the intensity of passions in attentive segments of the public. Because mass comment campaigns often presage or co-occur with other pressure tactics like protests and lobbying Congress, they may reveal 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 3). Public demands shape the decisions of organizations as they choose a lobbying strategy. If they believe a large segment of 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 3 amends what I labeled the "classic Model" of interest group lobbying from Figure 2 to incorporate political information. In the classic model, lobbying strategies are limited to inside lobbying strategies that aim to persuade officials with legal and technical analysis

Figure 3: Incorporating Political Information into Models of Interest Group Lobbying in Bureaucratic Policymaking



(Interest group creates or provides technical information). In the revised model presented in 3, interest groups may add a second strategy to support their legal and technical arguments with political information (Interest group creates or provides political information). For example, they may sponsor a public pressure campaign that generates political information about the attentive public. In this case, the organization provides technical information through sophisticated comments and organizes supporters to produce political information about their lobbying coalition through a mass comment campaign. This is a key feature of the theory: political information is mobilized *to support* a lobbying coalition's sophisticated legal or technical lobbying effort, not as an alternative to sophisticated lobbying.

Interest groups with more latent public support should see a larger public response to a mobilization. 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 volume of mass engagement than a narrower, less passionate base of public support. Thus the observed volume of mass engagement on a given side of a conflict can reveal political information about segments of the public. Broad 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 Judge-Lord (2021a).

The causal process visualized in Figure 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”). Agencies may thus have different levels of receptivity to technical and political information.

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 organizations will be more likely to launch a public pressure campaign when they have more public support.

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

2.4 Types of Pressure Campaign Motivations

The potential effects of public pressure campaigns depend, in part, on the aims of a campaign. Campaigns may pursue two distinct aims: (1) to advance policy goals or (2) to satisfy some audience other than policymakers (e.g., potential members or donors). Within each goal, campaigns can be further distinguished by whether their side is more likely to benefit or be harmed by an expansion of the conflict. Some groups have incentives to pursue policy goals by *proactively* launching a campaign, i.e., by “going public.” Others only have incentives to launch a campaign *reactively* after some other group has already expanded the scope of conflict. When groups aim to satisfy audiences other than policymakers and expect to win the policy conflict, campaigns are a form of *credit claiming*. Conversely, when a group anticipates losing the particular policy fight but still sees benefits in launching a campaign targeting non-policymaker audiences. I call this *going down fighting*. Proactively going public and reactively mobilizing after the other side has expanded the scope of conflict forms of outside lobbying. Credit claiming and going down fighting describe situations where an organization mobilizes for reasons other than influencing the policy at hand, like engaging or recruiting members.

Proactive campaigns. Coalitions “go public” when they believe that expanding the scope of conflict gives them an advantage. Because 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 decision-makers 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.⁶

Reactive campaigns. I theorize that when coalitions with less public support mobilize, it

⁶It 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.

is a reaction to their opponents. Because the impression of consensus is potentially powerful, when one coalition goes public, an opposing coalition may countermobilize to emphasize that “both sides” have support from the broader public. Because these are coalitions with less intense public support, I expect such campaigns to engage fewer people. In the extreme, these campaigns may rely on various forms of deception (i.e., astroturf campaigns) to compensate for their disadvantage in genuine public support.

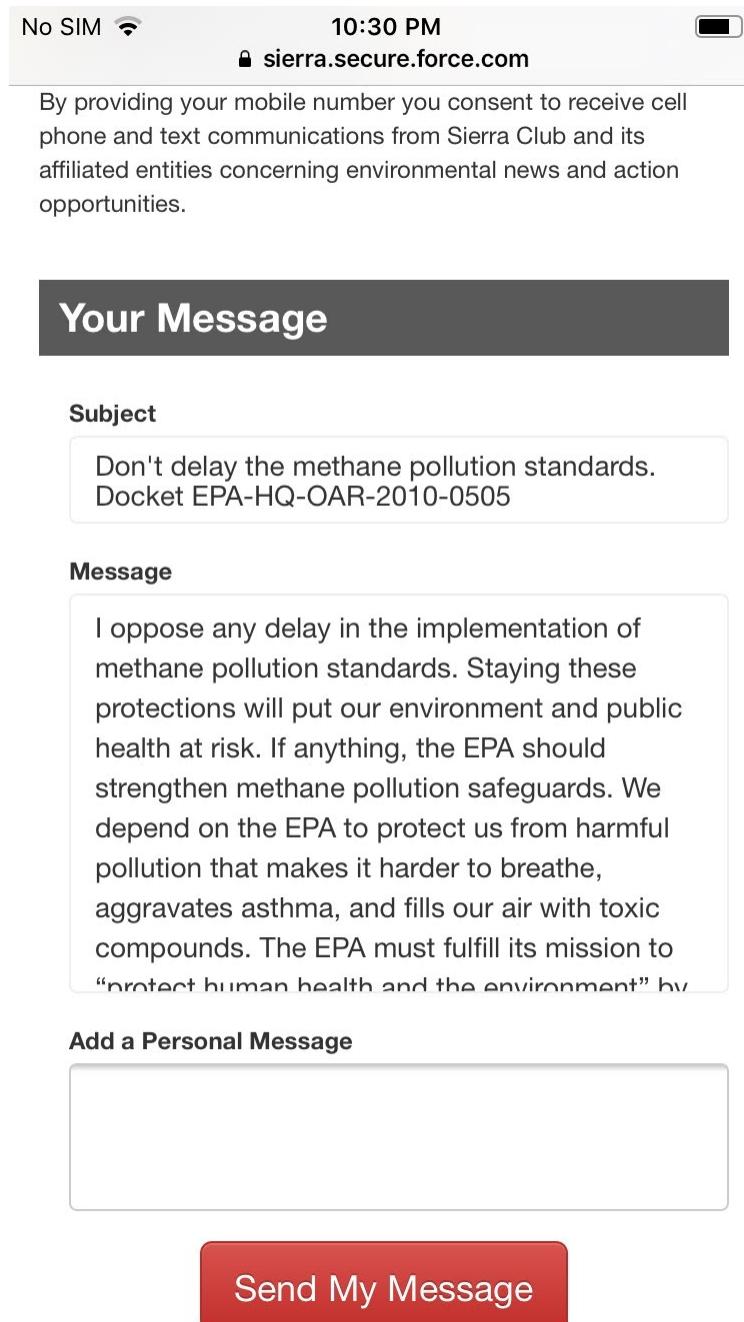
Credit claiming and going down fighting. Finally, campaigns may target audiences other than policymakers. When they expect to win, organizations may launch a “credit claiming” campaign to draw attention to and associate their organization with positive policy developments. When they expect to lose, organizations 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 example, 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 may target member retention or recruitment, fundraising, or satisfying a board of directors. For example, as Figure 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 likely saw little hope of protecting methane pollution standards in 2017. Still, for members of the public who wanted to voice their opinion to the Trump administration, the Sierra Club created an easy way to do so, as long as users consented to “receive periodic communication from the Sierra Club.” While this campaign may have had little hope of influencing these particular policies, it may have increased awareness of air pollution and built contact lists that could help the Sierra Club fundraise and mobilize in future policy fights.

While “credit claiming” and “going down fighting” are unlikely to have immediate policy effects, they may affect future policies. Because interest groups and agencies both expect to “repeat endlessly” the policymaking process (Lindblom, 1980), power built or demonstrated in one policy process may also be a political resource in future policy fights.

Through repeated interactions, organizations build power with respect to a constituency (Han, 2014) and policymakers (Grossmann, 2012). First, building contact lists or potential donors and supporters are a resource for future policy fights. Political support for a policy may depend on actors’ experiences with previous policies and their perceived relationship to the policy in question (Weir, 1989). “Going down fighting” may be a particularly effective strategy in building awareness and power for future fights. In interviews with mobilizing or-

Figure 4: The Sierra Club Collects Contact Information Through Public Pressure Campaigns



ganizations like the Sierra Club, Han (2014) finds that repeated engagement through a mix of online and in-person organizing can transform participants' motivations and capacities for involvement. By building the capacities and motivations of their members and supporters, organizations increase their own capacity for future policy fights. For example, if one administration makes a policy that a large segment of the public can be mobilized to oppose, it may help organizations put the repeal of that policy on the agenda of the next administration.

Second, mobilizing in one policy fight helps organizations build a reputation among policymakers. A reputation for organizing public pressure campaigns may create an implicit credible threat that the organization may expand the scope of conflict. Organizations that mobilize members and create a long-lasting presence in Washington become, in the minds of policymakers and reporters, the taken-for-granted surrogates for these public groups (Grossmann, 2012).

While more performative or power-building campaigns may engage many people, they are unlikely to inspire countermobilization. To the extent that public interest organizations mobilize for reasons other than influencing policy, opposing private interest groups 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. In these cases, 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 in which mobilizing has benefits. Campaigns sponsored by narrow private interests should occur in opposition to another campaign, but public interest groups have reasons to launch a campaign even when policy is unlikely to move.

Put differently, broader (often public) interest groups often have incentives to mobilize *proactively* when policy could be affected by expanding the scope of conflict. Where the policy is not in play, they may still benefit from credit claiming or going down fighting. Therefore public interest groups will often want to mobilize. In contrast, narrow (often private) interest groups do not benefit from expanding the scope of conflict and should thus only mobilize pressure campaigns *reactively*. Nor do they have audiences like members and donors that create performative reasons for mobilizing a pressure campaign.

In many cases, going public as a lobbying strategy is simultaneously an opportunity to engage and recruit members. Organizations often go public in order to influence policy and engage in power-building tactics at the same time. For example, the Sierra Club organized several "Thank you, EPA" campaigns, asking supporters to thank the Obama EPA for new draft environmental policies and urge the agency not to back down. These campaigns simultaneously (1) engaged members, (2) implied that the Sierra Club had advanced its policy agenda (implicit credit claiming), and (3) pressured policymakers to hold their course

or strengthen policy rather than bend to industry pressures.

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.

2.5 Hypotheses About the Drivers of Mass Mobilization

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

First, public comments will differ in several ways depending on whether most public participation is individuals acting alone or organized and mediated through organizations their pressure campaigns. 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 alone 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, public commenting should show signs of “cooperative activity.” Comments from people who were mobilized as part of a campaign differ from those of individuals acting on their own in two observable ways: First, they often mention the name of the organization that mobilized them. Second, 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 more to offer than what the more sophisticated organization has already provided. If comments are identical, they certainly provide no new technical information.

While observers frequently talk about ordinary people engaging 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.

From a behavioral perspective, Hypothesis 2.1 posits that individuals are more likely to engage in behaviors like letter-writing and petition-signing as part of coordinated and cooperative activity. The barriers to individual participation make “citizen-initiated contacts” on matters of national policy relatively rare. Organized campaigns overcome these barriers by informing, motivating, and reducing the costs of participation.

Second, I argue that public pressure tactics complement rather than 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.

From a behavioral perspective, Hypothesis 2.2 posits that decisionmakers in lobbying organizations do not confront a choice of whether to pursue an inside or outside strategy; it is a choice between an inside strategy (the norm) or *both* an inside and outside strategy because public pressure campaigns lend political support to more sophisticated legal and technical arguments for specific policy changes.

Testing Hypothesis 2.2 requires that we group organizations into lobbying coalitions. It predicts that coalitions that use public pressure campaigns also include groups that engage in sophisticated lobbying. To the extent that coalitions using outside strategies do not also use inside strategies would be evidence against Hypothesis 2.2.

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

Building on Lowi (1969) and Wilson (1989), I theorize that mass mobilization is more 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 conflicts pit broad public interests against narrower private interests, the public interest groups more often have 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 sponsor public pressure campaigns *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 inverse 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 Hypothesis 2.3 and Schattschneider’s argument that it is the disadvantaged who seek to expand the scope of the conflict.

Fifth, 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 for a given level 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, and public interest groups more often have broad public support than narrow private interests.

Hypothesis 2.4. Public interest group coalitions have a larger response to their mobilizing efforts than private interest group (e.g., business-led) coalitions.

From a behavioral perspective, Hypothesis 2.4 suggests that the average person is more easily mobilized to sign a form letter from a public interest group than a private interest group.

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 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 that 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.

Finally, if the theory of conflict expansion posited by Schattschneider (1975) 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 *reactively* 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.

The next section outlines the data and methods I use to evaluate these hypotheses.

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 and other political decisions, including state-level rulemaking.

3.1 Data

I collected a corpus of over 80 million public comments via the regulations.gov API. 58 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 44,774 rulemaking dockets to regulations.gov and solicited public comments on 42,426. Only 816 of these rulemaking dockets were targeted by one or more public pressure campaigns, but this small share of rules garnered 99.07 percent (57,837,674) of all comments. Nearly all of these comments are form letters. The top 10 rulemaking dockets account for 33.74 percent (19,695,536), of all comments in agency rulemaking. Again, nearly all of these are form letters.

Table 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 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 5 shows a massive rise in the number of proposed rules targeted by public pressure campaigns (the bottom panel), greater than the overall increase in the number of proposed rules posted for comment on regulations.gov (the top panel). To some extent, the increase from 2005 to 2010 results from agencies using regulations.gov more systematically in the years after its launch in 2003. But the ease of online organizing has also increased the frequency of public pressure campaigns. As mentioned earlier, less than 5 percent of proposed rules each year are targeted by a pressure campaign (note the necessary difference in the y-axes). However, this share is growing.

Figure 6 shows the handful of agencies that publish the majority of proposed rules for public comment on regulations.gov (out of the 246 federal agencies that use regulations.gov). For the most part, these are also the agencies most often targeted by public pressure campaigns, but some agencies are relatively more or less likely to be targeted than others. For example, the U.S. Fish and Wildlife Service publishes a small share of rules overall but a large share of rules targeted by public pressure campaigns (many protecting threatened and endangered species habitat). In contrast, the U.S. Coast Guard and Federal Aviation Administration both publish a large number of rules (mostly regulating transportation safety), but pressure

Table 1: Rulemaking Dockets by Number of Public Comments, 2005-2020

Docket ID	Docket Title	Total Comments
EPA-HQ-OAR-2013-0602	Standards of Performance for Greenhouse Gas Emissions from Existing Sources: Electric Utility Generating Units	4,383,713
EPA-HQ-OAR-2011-0660	Greenhouse Gas New Source Performance Standard for Electric Generating Units	2,683,228
EPA-HQ-OAR-2013-0495	Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating ...	2,178,478
EPA-HQ-OAR-2017-0355	Repeal of Carbon Dioxide Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units; Emission Guidelines for Greenhouse Ga...	1,853,582
EPA-HQ-OAR-2010-0505	Oil and Natural Gas Sector – New Source Performance Standards, National Emission Standards for Hazardous Air Pollutants, and Control Techniques Guide...	1,761,990
FWS-HQ-ES-2013-0073	Removing the Gray Wolf from the List of Endangered and Threatened Wildlife and Maintaining Protections for the Mexican Wolf by Listing It as Endangere...	1,611,111
CFPB-2016-0025	Payday, Vehicle, Title and Certain High-Cost Installment Loans	1,413,787
BLM-2013-0002	Oil and Gas; Hydraulic Fracturing on Federal and Indian Lands	1,348,563
FWS-HQ-IA-2013-0091	Revision of the Special Rule for the African Elephant	1,315,513
CEQ-2019-0003	Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act	1,145,571

campaigns rarely target these agencies.

Figure 5: Proposed Rules Open for Comment on Regulations.gov 2005-2020

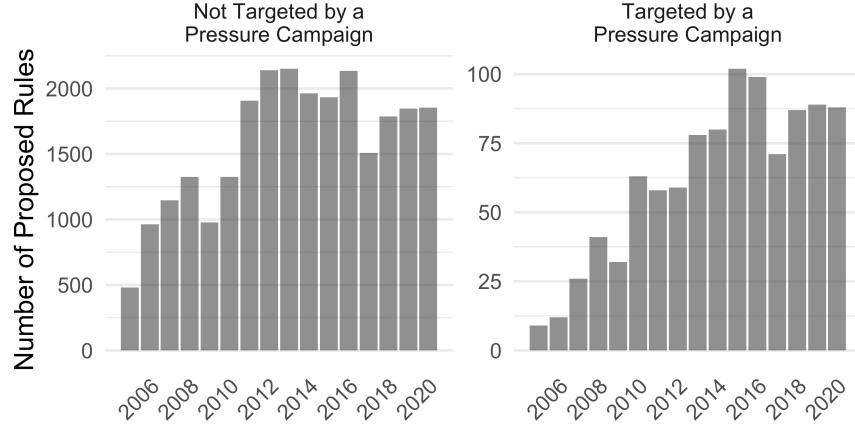


Figure 7 shows the total number of public comments received per rule from 2005-2020. This plot shows an increase in the number of rules receiving a large number of comments from 2005 to 2020. Note that comments per rule (the y-axis) are on a logarithmic scale in order to see this variation. While most rules receive few comments, there is a steep rise in the number of rules receiving over a thousand from 2005 to the mid-2010s. We see this same trend for the number of proposed rules receiving over 100 thousand comments, peaking around the time that the Obama EPA’s Clean Power Plan (the administration’s landmark climate change policy, rulemaking docket EPA-HQ-OAR-2013-0602) received over 4 million comments (highlighted in Figures 7 and Figure 8). Each year since then, hundreds of rules received over a thousand comments, and dozens received over 100 thousand comments.

While the average number of comments per rule is consistently around ten, more people are involved in more policy processes today than a decade ago. Occasionally, a large number of people are engaging in agency policymaking. It is not a coincidence that more people are engaging in a select set of policies as pressure campaigns target more agency rules (though still a small portion).

Figure 8 clearly shows the inequality in public participation across rulemakings. Of over 25 thousand proposed rules open for comment on regulations.gov between 2005 and 2020, Figure 8 shows that over a third of them received no comments. These rules appear as a long line of points at the bottom of the plot. Approximately another third received ten or fewer comments, including the U.S. Department of Agriculture’s Agriculture Management Services rule regulation the labeling of honey (AMS-FV-07-0008). As in Figure 8, I also labeled the Clean Power Plan rule. A version of Figure 7 split out by year is available in the

Figure 6: Proposed Rules Open for Comment on Regulations.gov 2005-2020 by Agency

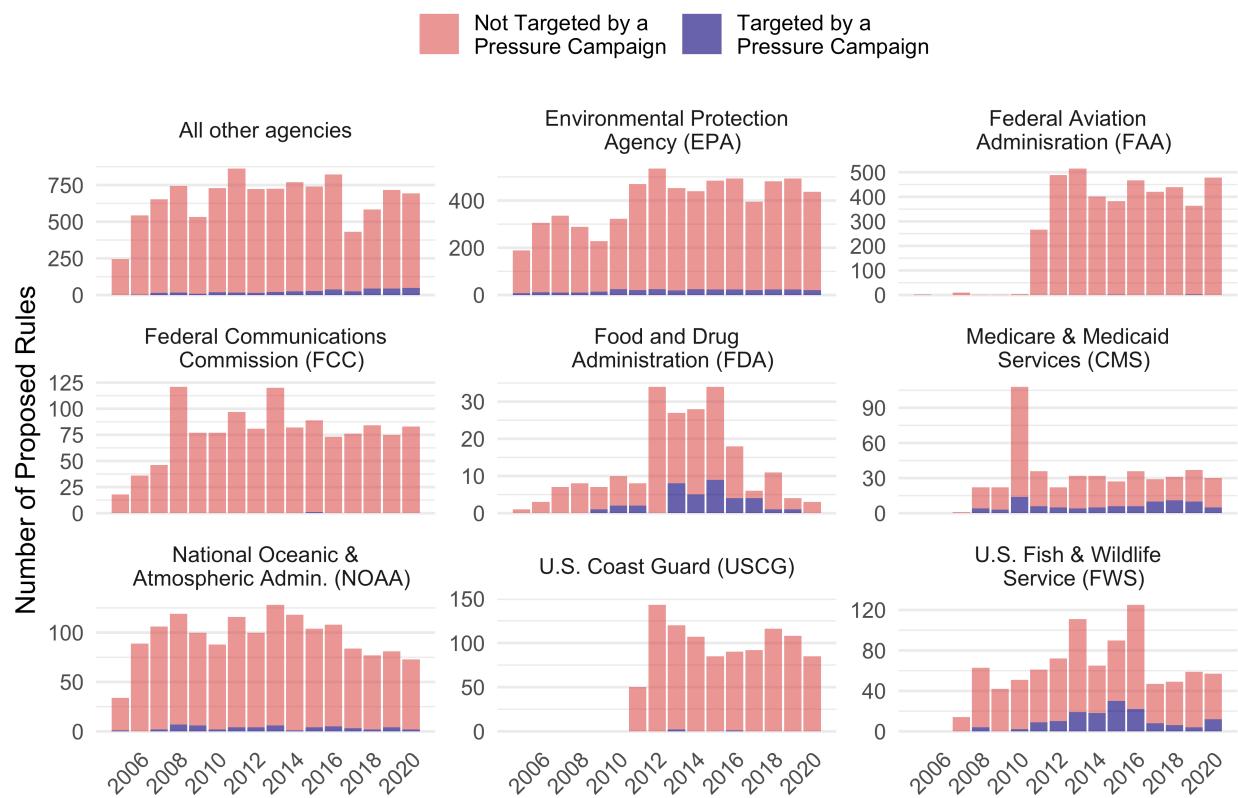
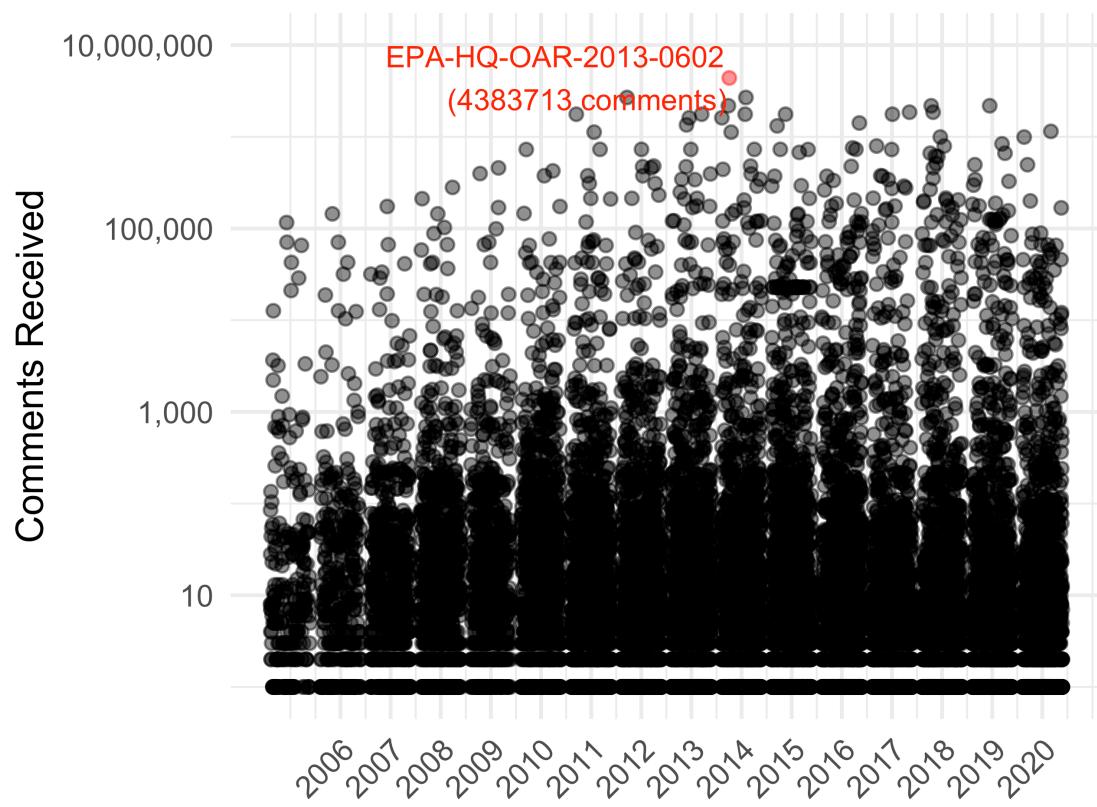
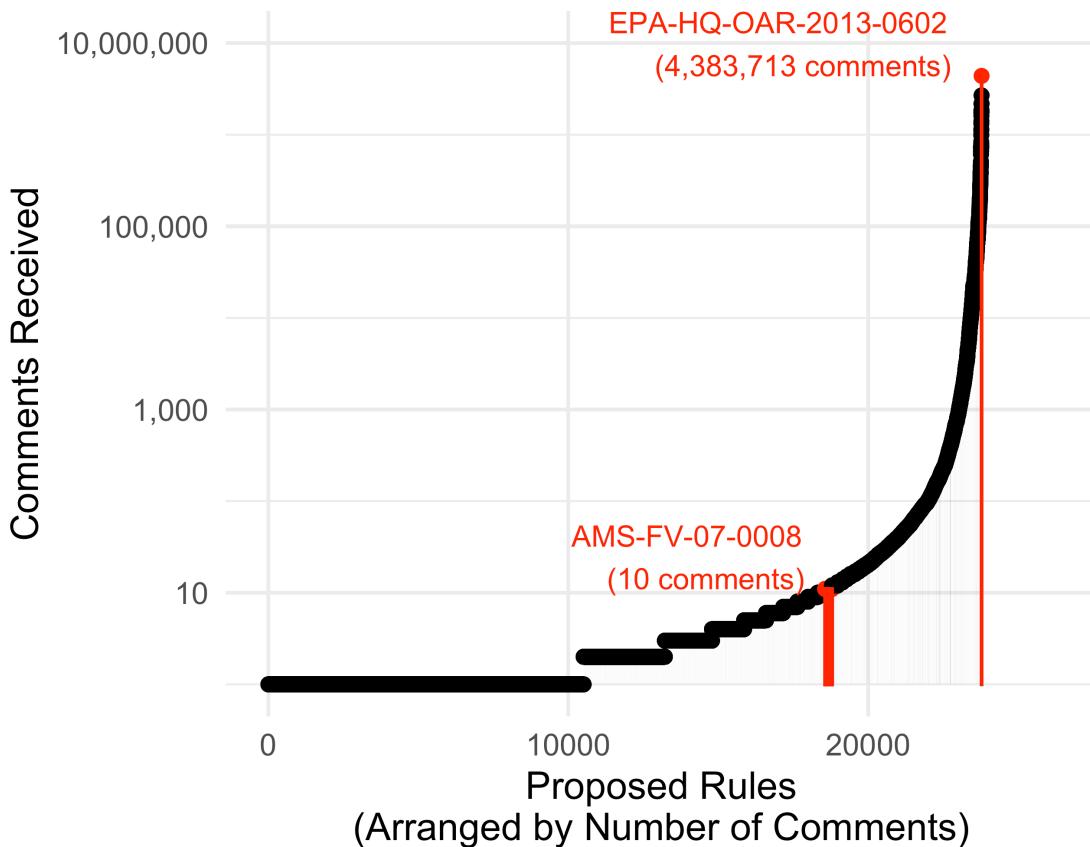


Figure 7: Number of Comments (log scale) per Proposed Rule 2005-2020



appendix (Figure 19).

Figure 8: Number of Comments (log scale) per Proposed Rule 2005-2020



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 3.2. To provide empirical context, this section 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 from more “grassroots” to more “astroturf” strategies. 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 rulemaking are not pure volunteerism but

are organized by policy advocacy organizations like MoveOn and Organizing For America on the political left and Americans for Prosperity and the National Association For Gun Rights on the political 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 advocacy organization, as well.

Like people mobilized through their membership organizations, people mobilized by policy advocacy organizations will often cite the mobilizing organization. Unlike those mobilized through membership organizations, mobilization by policy advocacy 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 have 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., they are 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.

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, but the 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](#), Jansen began a career in Government Relations after serving as the legislative director for a Republican member of Congress. 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, was 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 organizations’ 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 (EnergyCitizens, 2014). 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 signatures were submitted twice by each organization, successfully inflating the number of pro-API comments that the agency reported receiving on the rule. Energy Citizens has attracted media attention for bussing in paid actors to protests and town halls to oppose regulations (Krauss and Mouwad, 2009), paying actors to pose as concerned citizens, and skirting Facebook’s policy against deceptive advertising (Merrill, 2018).

In a more complex example, Axcess Financial and other payday lending companies sponsored several campaigns targeting a regulation proposed by the 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 (repeatedly issuing short-term high-interest loans to pay interest and fees on previous loans of the same type) 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 customers’ 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. It is unlikely that members of these organizations would have commented had they not been paid by Axcess.

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, Monsanto, a major glyphosate manufacturer, described how they collected the letters:

These letters were collected during the 2016 Farm Progress Show from U.S. 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 hats and shirts in exchange for many of these signers. Still, the context and transparency make it more plausible that the petition signers genuinely opposed regulation on glyphosate. Thus, I do not code this as astroturf. 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. ([BSEE-2013-0011-0033](#))⁷

Though Shell stood to profit 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, workers, and politicians 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. Again, this means that it was not coded as astroturf.

⁷Some of Shell's supporters neglected to fill in the blanks in the template letter ([BSEE-2013-0011-0033](#)).

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.

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 United States, 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, 2021). 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, which, in turn, mobilize their own members and supporters, often with logistical support and funding from the larger national organization. For example, for the same campaign where the Gulf Restoration Network mobilized hundreds of restaurants that serve sustainable seafood, one of their larger coalition partners, the Pew Charitable Trusts, mobilized thousands of individuals, including members of the New York Underwater Photography Society. 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 crucial 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 lobby in broader coalitions.

Importantly, even campaigns that achieve very low public response rates appear in these data. Because campaigns aim to collect many thousands of comments, it is implausible that even the most unpopular position would achieve no supportive responses. For example, Potter (2017) 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. (These numbers are from Potter’s sample of EPA rules; the Sierra Club’s average is even larger in my sample; see Table 2.)

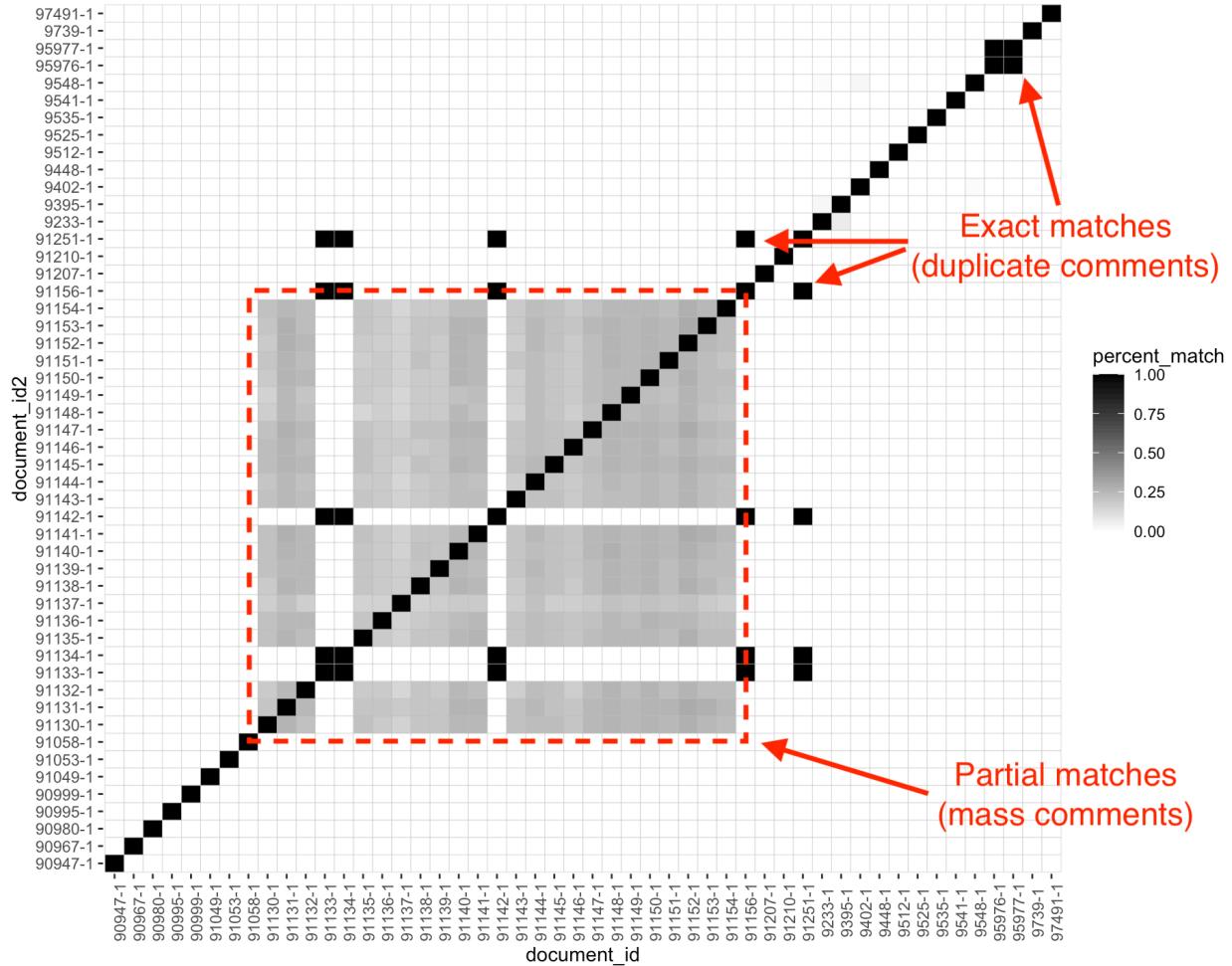
For each comment on a rulemaking docket, I identify the percent of words it shares with other comments using a 10-word (or “10-gram”) moving window function, looping over each possible pair of texts to identify matches.⁸ When actors sign onto the same comment, it is clear that they are lobbying together. However, various businesses, advocacy groups, and citizens often comment separately, even when they are aligned. Text-reuse (using the same ten-word phrases) captures this alignment. When individuals use identical wording, I interpret that to mean they’re endorsing the same policy position as part of a lobbying coalition.

Figure 9 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 percent of the words from Comment 95976 are part of some tengram 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 handwritten comments, but the n-gram method still picks up overlap in the OCRed text in the header and footer. Tengrams 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

⁸For more about n-gram window functions and comparisons with related partial matching methods such as the Smith-Waterman algorithm, see Casas, Denny and Wilkerson (2019) and Judge-Lord (2017).

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



Where a new presidential administration solicited comments on a proposed rule tied to a docket number that a previous administration also used to solicit comments on a different previous rule, 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. Many of the same organizations comment but with the opposite positions; support becomes opposition and vice versa.

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 that is submitting or is 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.

Classifying Public and Private Interests In addition to classifying all organizations that appear in the hand-coded samples as businesses, industry associations, other nonprofits, governments, or individual elected officials and a range of subtypes within these broader categories, I also classify the coalitions in which they lobby.

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 (2017) 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 membership organizations that are both broad and focused on material outcomes for their members (such as labor unions) are especially difficult to classify. Potter (2017) 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, I classify this as a private interest-driven coalition (Mildenberger, 2020). 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 govern-

ments, 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 and sustainable seafood restaurants to help push for stricter commercial fishing regulations. We know that the environmental groups mobilized the restaurants because they used a form letter from a nonprofit called the Gulf Restoration Network ([NOAA-NMFS-2012-0059-0185](#)). This was coded 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, it would have been coded as a private interest coalition. The vast majority of coalitions were much more straightforward to code as public or private.

Coding Policy Positions To assess whether organizations and their broader coalitions lobby unopposed or in opposition to other interests, I code the position of each organization on each proposed policy given the direction of change from the current policy. Specifically, I trained research assistants to place comments on a spatial scale relative to change between the status quo and proposed rule like the one shown in Figure 10. In Figure 10, x_1 is the current (status quo) policy and x_2 is the new proposed policy on which commenters are commenting. Let p_i be commenter i ’s ideal policy. In Appendix F, I formalize intuitions about why a commenter may comment and how it may influence a policymaker. Here, I merely aim to clarify the coding of policy support and opposition, which relies on the spatial coding of each comment (for more details, see the Codebook in Appendix A).

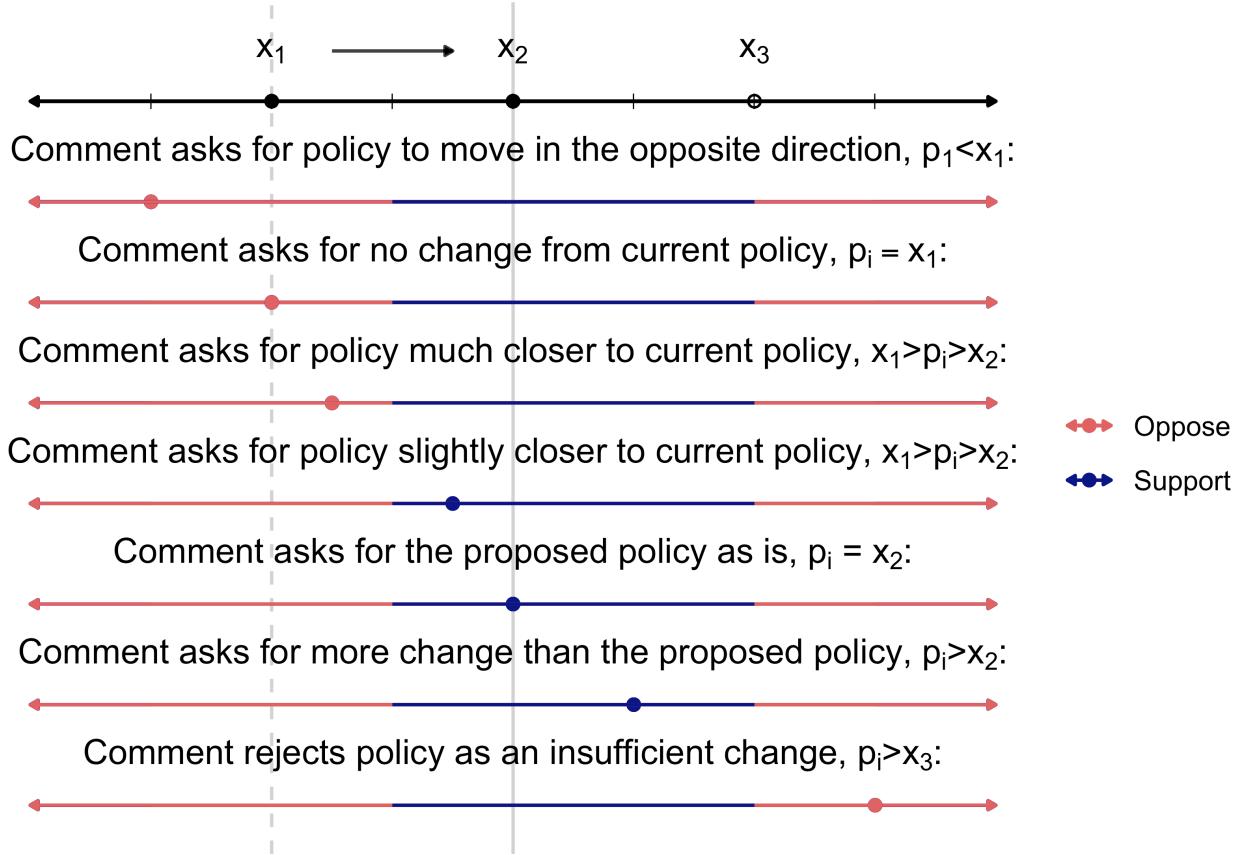
In spatial models, whether an organization supports or opposes a proposed policy change generally depends on whether the policy is moving closer or further from its ideal policy. For example, if the ideal point of commenter 1 is the current policy (i.e., $p_1 = x_1$) or close to it, they will oppose any proposed change. Likewise, if the ideal point of commenter 2 is the new proposed policy ($p_2 = x_2$) or closer to it, they likely support the proposal.

While potentially 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 prefers a more extreme change and will not accept anything less than a certain level of change ($p_i \geq x_3$), 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 and preferred change (x_3) later.

If a commenter made statements like “We need stronger, not weaker regulations” or “These

Figure 10: Coding the Spatial Position of Comments on Proposed Policy Changes

Position of Commenter i (p_i) on Proposed Policy x_2 , Given Current Policy x_1



regulations are already bad for our business, we should not make them even more strict,” they were coded as opposed to the proposed rule for moving in the wrong direction ($p_i < x_1$). If the commenter expressed a preference for the status quo over the proposed rule ($p_i = x_1$), they were also coded as opposing the proposed rule.

Conversely, when a comment included statements like “we applaud EPA’s efforts to regulate, but would prefer less severe limits,” this was coded as supporting the rule but asking for less change. If the commenter expressed unqualified support for the proposed rule ($p_i = x_2$) or requested even more policy change ($p_i > x_2$) they were almost always coded as supporting the rule.

Opposition to a proposed rule because it was insufficient to gain the organization’s support was rare but did occur. For example, one commenter stated that “[w]hile the proposed rule may improve current protections to some degree, it is utterly inadequate. . . If the agency fails to revise the rule to incorporate such measures, then they should withdraw the proposed rule completely.” ([NOAA-NMFS-2020-0031-0668](#)). Taking the commenter at their word, this was coded as opposition to the proposed rule, even though the commenter’s spatial position is closer to the proposed rule than the current policy.

Having identified the coalition lobbying on each proposed rule and each organization’s position, I assign each coalition’s position 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. Conflicting policy demands indicate different coalitions.

Differences with Prior Studies This approach differs from previous studies of mass comment campaigns in at least two major 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) analyze “1,049 mass comment campaigns that occurred during 22 EPA rulemakings”—an average of nearly 50 “campaigns” per rule. By “campaign,” they 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, and, occasionally, a coalition of tribal governments primarily concerned with sovereignty issues. Often, only one coalition uses a public pressure campaign.

This is important because many comments nominally submitted or mobilized 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.

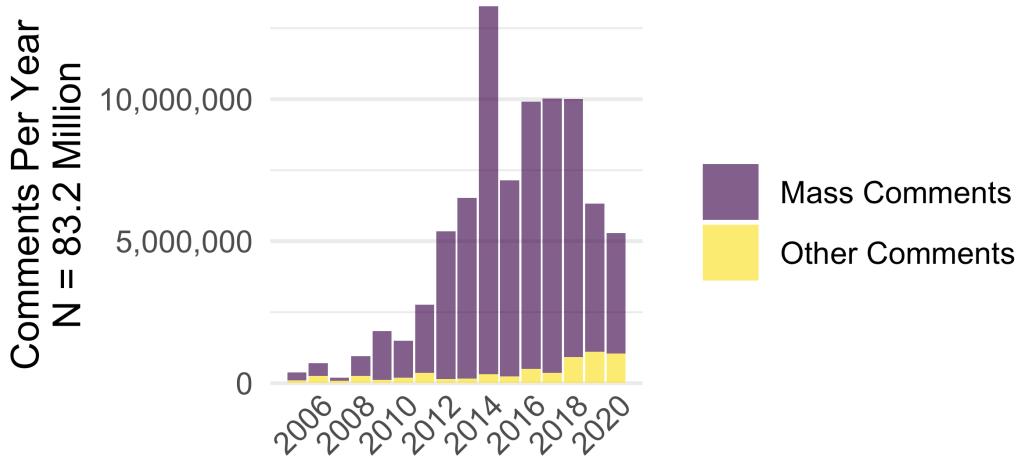
4 Results: Patterns of Public Engagement in Rulemaking

4.1 Most Comments Result from Public Pressure Campaigns

Hypothesis 2.1 posited that most people engage in the policy process due to organized public pressure campaigns. This is overwhelmingly true. Figure 11 plots the number of comments received on regulations.gov each year from 2005 to 2020. Columns are shaded by whether I have classified each comment as part of a public pressure campaign (a mass comment campaign). Figure 11 shows that every year since 2007, the vast majority of comments on draft regulations posted to regulations.gov were the result of a public pressure campaign. All other comments (including comments from individuals acting alone and sophisticated comments from companies, governments, and other organizations) make up a small portion of all comments.

Furthermore, the rise in the total number of comments from 2005 to 2013 is much steeper than the rise in the number of rules being published.

Figure 11: Public Comments, 2005-2020



4.2 Most Comments and Campaigns are Mobilized by Public Interest Coalitions

Public pressure campaigns are almost exclusively organized by coalitions that include groups that engage in sophisticated technical lobbying. This supports Hypothesis 2.2. Table 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 top ten organizations (NRDC, Sierra Club, CREDO, Environmental Defense Fund, Center For Biological Diversity, Earthjustice, World Wildlife Fund, National Wildlife Federation, Friends Of The Earth, Environment America) mobilized 44 percent of comments on proposed rules posted to regulations.gov (25,947,612). All of these top ten organizations have lawyers on staff that engage in sophisticated lobbying, and all ten lobby together in the same coalitions. Nine are closely aligned environmental groups. Earthjustice began as the Sierra Club Legal Defense Fund. Eight of these nine organizations (all but the Center for Biological Diversity) are members of the Partnership Project, a 501c3 nonprofit founded by 20 leading environmental groups with the aim of " creating a sum of citizen participation and advocacy greater than they could generate acting apart" (Saveourenvironment.org,

2021). CREDO Action is a generic progressive group often mobilized to amplify progressive public interest campaigns. The top 100 organizations mobilized 75 percent of comments on proposed rules posted to regulations.gov (43,938,811). Each mobilized between 39,729 and 5,939,264 comments.

The percent of rules on which each organization lobbies with a pressure campaign rather than without one (the “Percent” column in Table 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 tool that advocacy organizations may use in addition to more insider tactics.

In line with Hypothesis 2.3, 67 percent of public pressure campaigns are led by public interest coalitions, with only 33 percent led by private interest coalitions. While public interest groups lobbied slightly more often in the sample selected for hand coding (because half the sample was weighted to capture rules that received more comments), private interest coalitions are more common in the broader sample. In contrast, Table 3 shows that mass comment campaigns were twice as likely to be led by public interest groups.

Figure 12 provides further evidence for Hypothesis 2.3, showing that, overall, public interest campaigns mobilized more often under both the Obama and Trump administrations. Public interest coalitions mobilized more campaigns both opposed and supporting policies of the Obama administration. However, public interest coalitions were more likely to support policies of the Obama administration and oppose policies of the Trump administration, whereas private interest group coalitions were more likely to support Trump-era policies. Figure 12 shows the number of coalition-level campaigns (on the x-axis) organized by public and private coalitions under each administration. Many of these campaigns included hundreds of organizations. The color of the bars indicates whether the average hand-coded spatial position of each coalition’s members indicated coalition-level support or opposition to the proposed rule on which they were commenting.

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 205,183. In contrast, the average number of comments for a private interest campaign is 50,241. On

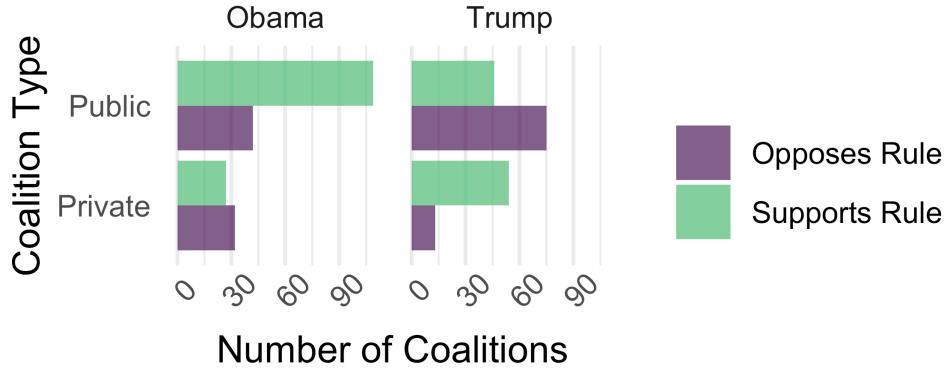
Table 2: Organizations Mobilizing the Most Public Comments 2005-2020

Organization	Rules Lobbied On	Pressure Campaigns	Percent (Campaigns /Rules)	Comments	Average per Campaign
NRDC	530	62	11.7%	5,939,264	95,795
Sierra Club	591	110	18.6%	5,111,922	46,472
CREDO	90	41	45.6%	3,019,150	73,638
Environmental Defense Fund	111	31	27.9%	2,849,517	91,920
Center For Biological Diversity	572	86	15.0%	2,815,509	32,738
Earthjustice	235	59	25.1%	2,080,583	35,264
World Wildlife Fund	69	9	13.0%	1,133,001	125,889
National Wildlife Federation	141	36	25.5%	1,113,056	30,918
Friends Of The Earth	127	28	22.0%	1,051,930	37,569
Environment America	40	24	60.0%	833,680	34,737
Humane Society	297	24	8.1%	825,350	34,390
Defenders Of Wildlife	198	17	8.6%	796,571	46,857
Organizing For Action	11	8	72.7%	779,270	97,409
Axcess Financial	4	1	25.0%	695,580	695,580
League Of Conservation Voters	32	24	75.0%	637,807	26,575
Union Of Concerned Scientists	105	30	28.6%	625,152	20,838
American Petroleum Institute	399	3	0.8%	614,989	204,996
Evangelical Environmental Network	8	8	100.0%	553,175	69,147
America's Electric Cooperatives	3	2	66.7%	493,222	246,611
Moms Clean Air Force	18	17	94.4%	482,095	28,359

Table 3: The Frequency of Mobilizing Pressure Campaigns by Coalition Type

Coalition Type	No Mass Comment Campaign	Mass Comment Campaign	Total
Private	97	61	158
Public	134	183	317

Figure 12: Number of Comments Mobilized by Public and Private Coalitions in the Hand-Coded Sample of Proposed Rules Open for Comment on Regulations.gov, 2005-2020



rules where both public and private interest coalitions ran campaigns, the average response to the public interest campaign was 119,090. Private interest campaigns averaged 85,534 comments.

Table 4 shows that public interest coalitions mobilized more comments per campaign and more total comments than private-interest coalitions in the hand-coded sample. This supports Hypothesis 2.4, which predicted that public interest coalitions would mobilize more people on average because they have more latent public support on which to draw.

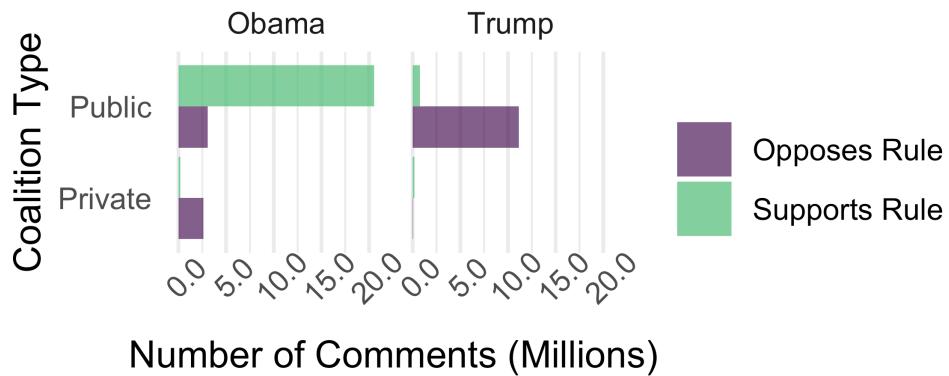
Figure 13 provides further evidence for Hypothesis 2.4, showing that, overall, public interest campaigns mobilized more comments under both the Obama and Trump administrations. Indeed public interest coalitions mobilized both more supportive comments and more opposing comments under both administrations. Figure 13 shows the number of comments in millions (on the x-axis) organized by public and private coalitions under each administration. The color of the bars indicates whether the average hand-coded spatial position of each

Table 4: The Scale of Public Pressure Campaigns by Coalition Type

Coalition Type	Total Comments	Average Comments
Private	3,064,671	50,241
Public	37,548,500	205,183

coalition's members indicated coalition-level support or opposition to the proposed rule on which they were commenting.

Figure 13: Number of Comments Mobilized by Public and Private Coalitions in the Hand-Coded Sample of Proposed Rules Open for Comment on Regulations.gov, 2005-2020



Hypothesis 2.5 predicts that 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.

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 180 coalition-scale pressure campaigns in the hand-coded sample, only 26 private interest coalition ran a pressure campaign when they were

not up against a public interest group’s campaign. Yet 99 public interest coalitions ran a pressure campaign when they were not up against a private interest group’s campaign.

Table 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 14). 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. I argue that public interest group mobilization 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. My theory, specifically Hypothesis 2.6, predicts that in such a case, the utility industry would have incentives to counter-mobilize in response to public interest campaigns in the first policy fight (because policy was on the line), but not the second (where public interest groups were organizing for reasons other than influencing policy). 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 in the first. This mirrors the broader trend.

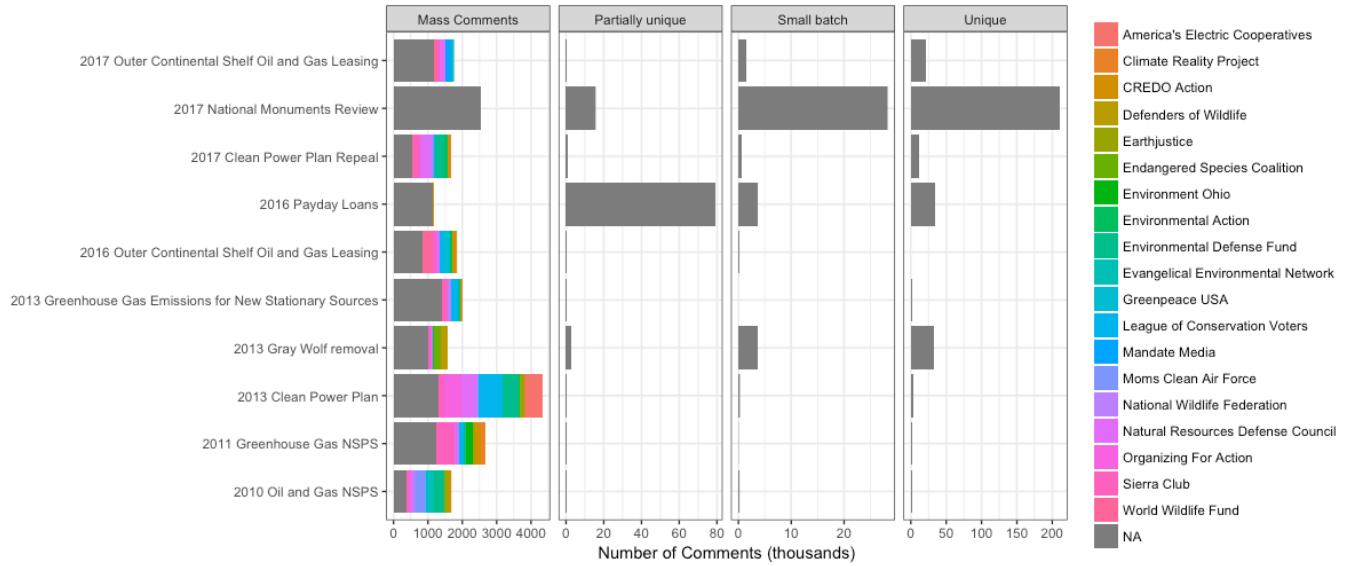
Is civic engagement resulting from public pressure campaigns better understood as “astroturf” or “grassroots” participation? In short, I find more grassroots participation than astroturf.

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 34 percent of comments (19,695,536). Figure 14 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 panel is mass comments (100 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 100) 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 14: Dockets Receiving the Most Comments on Regulations.gov and the top Mobilizing Organizations



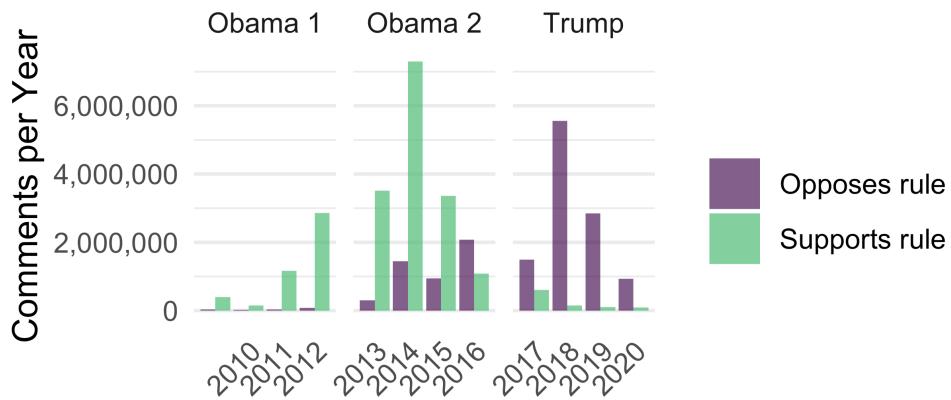
4.5 Partisan Asymmetry

Of the top 100 mobilizing organizations, 87 lobby in public interest coalitions. Only one of these organizations, the National Association for Gun Rights, is a public interest group aligned with the political right. The other twelve top mobilizers are industry associations like the Consumer Energy Alliance (electric utilities) and the American Petroleum Institute (oil and gas companies).

Figure 15 shows that many more comments in the hand-coded sample until 2016 when there is a fairly dramatic reversal in the share of comments supporting and opposing proposed rules. While President Obama was still in office in 2016, the broader trend is almost certainly due to the biases in the groups that organize pressure campaigns. Appendix G includes an alternative version of this figure base on the full sample, machine coded by whether a comment text includes the words “support” or “oppose.” This alternative analysis shows a similarly dramatic shift but in 2018. Comments during the Obama administration were more likely to mention “support,” whereas comments during the Trump administration were more likely to mention “oppose.” This alternative measure validates the pattern we see in the

hand-coded comments is a result of the interaction between the biases of mobilizing groups and the changing regulatory agenda due to the change in the presidential administration.

Figure 15: Hand-coded Comments Supporting and Opposing Draft Rules Posted to Regulations.gov, 2005-2020



5 Conclusion

Public participation in bureaucratic policymaking is overwhelmingly dominated by the lay public voicing opinions. 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 type of information. Because nearly all public participation in agency rulemaking is mobilized as part of a public pressure campaign, levels of public participation reveal information about levels of public support behind different lobbying coalitions.

The political information generated by public pressure campaigns is not a substitute for sophisticated technical information; public pressure campaigns almost always explicitly support a more sophisticated lobbying effort. Coalitions that sponsor pressure campaigns almost always include sophisticated policy lobbying efforts. Moreover, almost all of the organizations that mobilize the most public comments also pursue inside lobbying strategies. Indeed, most of these organizations use pressure campaigns fairly rarely.

Compared to the usual suspects found in lobbying, especially in rulemaking, the organizations that mobilize public pressure campaigns (and thus the people they mobilize) represent broader segments of the public. A few public interest organizations mobilize the vast majority of civic engagement in bureaucratic policymaking. Relatively few campaigns push for narrow private interests. Even fewer are astroturf campaigns, which are often anonym-

mous. This aligns with my theory that mass comment campaigns work by supporting more sophisticated lobbying efforts. Organizations that lobby repeatedly may not want to take the reputational risks of sponsoring astroturf campaigns to create fake political information. However, being anonymous makes it more difficult for astroturf campaigns to provide their intended support to the lobbying efforts that sponsor them. From the perspective of political information, astroturf may not be as valuable as it first appears (or as valuable as it is in more public contexts than comment periods). Because agency officials are unelected and discerning experts who know a great deal about the politics of their policy area, credible political information should be more influential than astroturf. This may explain why astroturf is less common than many observers seem to think. However, in my theory, 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. However, not all large national advocacy organizations use this lobbying tactic. In part, this is due to features of bureaucratic policymaking in the United States; some policy areas, like environmental politics, are more dominated by bureaucratic politics than others. Additionally, some forms of bureaucratic policymaking, including foreign policy and military policy, are rarely open to public comment. However, future research should examine why some policy advocacy groups target agency rulemaking with pressure campaigns while others do not.

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. In short, it matters whether campaigns affect policy.

The distinction between public interest groups and businesses or private interest groups is a coarse distinction. While we can confidently say that pressure campaigns shift participation decisions away from business interests, more research is needed on the groups that dominate high-salience rules. How does this particular subset of public interest groups represent the public?

One way to study the relationship between public interest group lobbying and the broader public would be to identify nationally representative surveys that best align with particular policy debates. For example, Yackee (2019) discusses a Pew Poll that found that Republicans and Democrats become more sympathetic to regulations when asked about more specific policies. Such evidence may allow us to test whether these particular public interest groups actually represent broader constituencies than the private interest groups they lobby against.

If resources shape who is able to mobilize and thus which subset of policies receive public attention, more research on resources requirements for organizing public pressure may help explain why some policies get more public attention than others. What exactly are the organizational capacities that allow organizations to pursue mass mobilizing? Answering this question may involve interviews with mobilizing groups and other seemingly similar groups that do not use this tactic.

Finally, because public participation is mediated through organizations, the normative value of public participation depends on how well these organizations represent the constituents they claim to represent. Future research should explore how well the claims that groups make match the support they are able to demonstrate through public pressure campaigns. For example, while mass comments show that people can be mobilized to support the cause, people may be misinformed about the policy (e.g., the payday loan customer who thinks fees are too high but is persuaded to comment in opposition to regulations on fees. It may also be that commenters are not who they say they are. For example, national audiences may be mobilized to sign a form letter that implies that they represent a specific affected area.

Appendix

A Codebook

This codebook describes the coding of (1) public comments on proposed agency rules, (2) the response to comments, and (3) rule changes from draft to final.

B Coding Comments

A position will eventually be identified for all comments, but the first step is to identify the positions of comments by organizations and elected officials (other comments are generally identified automatically from textual similarity). This scheme (especially the `org_type`, `ask`, and `success` variables) builds on work by Susan Webb Yackee (e.g., Yackee, 2006; Yackee and Yackee, 2006).

Initially, we code position on the main dimension of conflict (it may be a challenging interpretive task to identify the main dimension of conflict raised by a comment).

`position =`

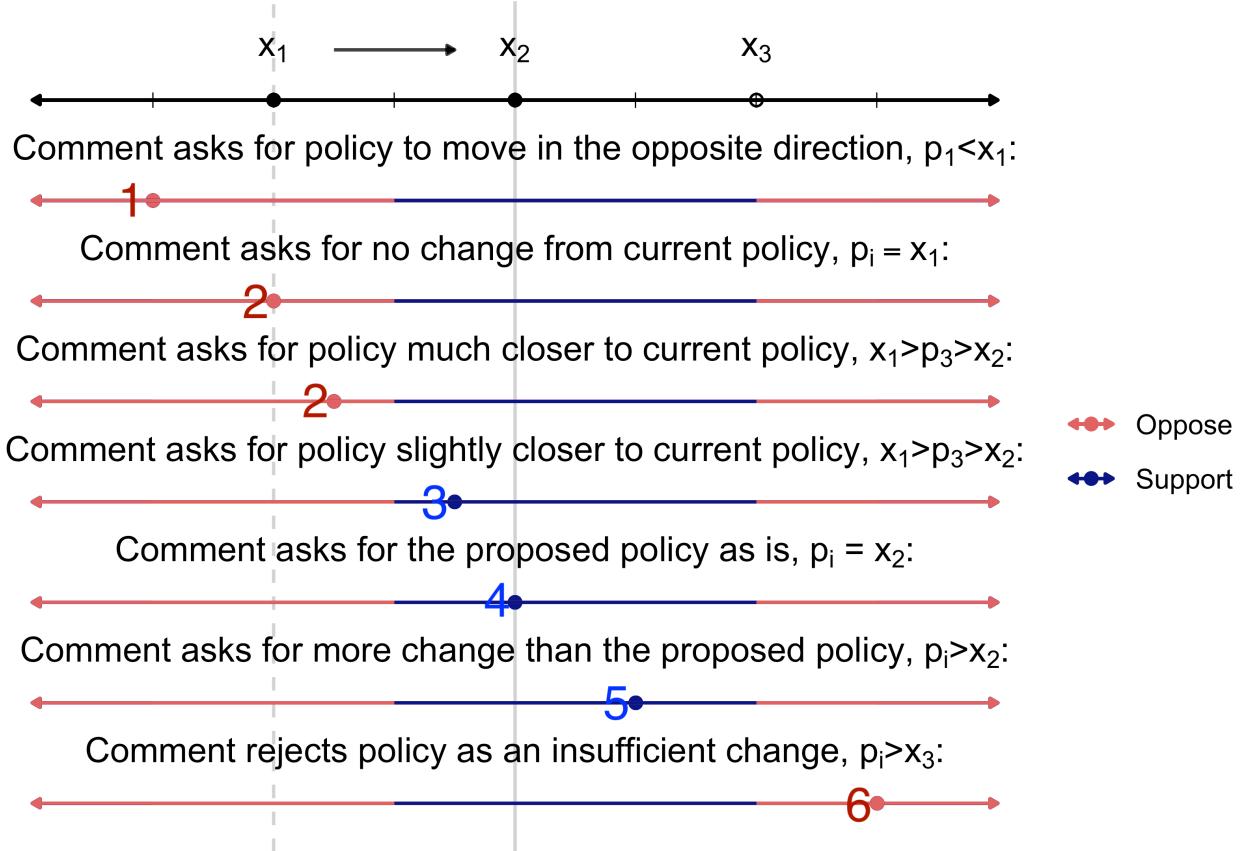
- “1” Opposed to the rule change for moving in the wrong direction (e.g., “We need stronger, not weaker regulations” or “These regulations are already bad for our business, we should not make them even more strict”)
- “2” Opposed to the change, prefers no change, though they might be ok with some change
- “3” Supports the rule change, but asking for less (e.g., “we applaud EPA’s efforts to regulate . . . , but would prefer less severe limits” or “The Guild recognizes the need to have uniform regulations which the proposed rules address. Still, the Guild takes issue with some of the proposed changes”)
- “4” Supports the rule change as is
- “5” Supports the rule change but asking for more
- “6” Opposed to the rule change for not going far enough (e.g. " While the proposed rule may improve current protections to some degree, it is utterly inadequate... If the agency fails to revise the rule to incorporate such measures, then they should withdraw the proposed rule completely" <https://www.regulations.gov/comment/NOAA-NMFS-2020-0031-0668>)
- “0”. Only if there is really no position of any kind on the policy

Note that a commenter can support a rule that is moving in a deregulatory direction. This means that they oppose regulation and thus support the rule (because the rule is rolling back regulation). What matters here is their position on the change from the status quo (current

policy) to the proposed rule, not on regulation in general. These positions correspond to a commenter's ideal policy (their "ideal point" in the policy space). If a commenter's ideal policy is at position 1 in the figure below, the proposed rule change is moving policy in the opposite direction they want it to move, hence their position is "opposed to the rule change for moving in the wrong direction." Similarly, if the current policy (the status quo) is a commenter's ideal policy, their ideal point is at or near the current policy (x_1), position 2, and they are opposed to the proposed rule change.

Figure 16: Instructions for Coding the Position of a Comment Given Current Policy, X_1 , and proposed policy, X_2

Position of Commenter i (p_i) on Proposed Policy x_2 , Given Current Policy x_1



If the commenter's ideal policy is at positions 3, 4, or 5, these ideal policies are closer to the new policy, X_2 than the current policy X_1 , and thus they are likely to support the rule change. If the commenter's ideal policy is at position 6, the change from X_1 to X_2 is insufficient for them to support it (even though it is technically moving in the direction they would like). This is rare, but commenters do occasionally reject proposed rules for doing too little. Their hope is that by rejecting this proposed policy (even though it moves policy in their preferred direction), they might get a better policy later.

`position_certainty =`

“1” = fairly certain (may also be left blank), “2” = unsure, “3” = totally unclear

`coalition_comment =` Is this commentator lobbying alongside other commenters in a fashion that suggests they are a coordinated coalition? If so, put the name of one of the other main organizations in the coalition here and use this for all comments with compatible asks. Coalitions may be implicit (compatible asks, even if they don’t mention the other orgs) or explicit (e.g. “In terms of specific reservations about the proposed changes, we associate ourselves with the letter from ACLU”). There may often be only one coalition commenting on a rule (especially for rules with few comments). It is harder to identify the sides of a debate where only one side shows up, but we must be careful not to artificially break up essentially aligned interests just to have a conflict between commenters. The conflict that matters is generally on the main dimension(s) of conflict at issue in the policy. If everyone is 3s and 4s (or 1s and 2s) they will more often all be one big coalition pushing generally in the same direction with compatible asks than several smaller ones pushing in different incompatible directions. Position and coalition are not synonymous, but they are highly correlated.

`coalition_type =`

The key distinction here is typically whether the lead organizations will profit from the coalition’s advocacy (even if some of the orgs in the coalition are nonprofits)

- “public” if this coalition is primarily lobbying on behalf of some idea of the public interest (two organizations lobbying on the same rule may have opposing ideas of the public interest, but oftentimes public interests conflict with private interests)
- “private” if this coalition is mainly on behalf of private interests (even if not their own or if using language evoking the public interest, as most lobbying does)

`comment_type =`

- “org” any kind of organization making substantive suggestions
- “elected” Is this comment from an individual elected official (e.g., U.S. House or Senate). Add a specific type of elected official after a semicolon "elected; house, elected; senate, elected; governor, elected; state senate, county commissioner, etc.

- “individual” an individual who is writing in their personal capacity, not on behalf of an organization or office (even if they use an organization’s letterhead), and is not part of an organized petition-like campaign
 - “corp campaign” a form letter used by many (often small) businesses (`org_name` and `org_type` will still be the org (e.g. the name of the small business and “`corp;small business`”))
 - “mass” a petition-like campaign
 - “`mass;grassroots`” - individuals who genuinely care
 - “`mass;astroturf`” campaigns are intended to create a deceptive appearance of public support. The group organizing the campaign is only doing so because they are being paid. 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, and individuals are mobilized based on some pre-existing interest or belief. While grassroots campaigns may involve simplification, spin, and even mild deception, it is not decisive to the campaign. If you find yourself thinking “why are these people supporting this company/industry?” it might be astroturf.
 - “`mass;corp campaign`” - genuine support/opposition from a large number of businesses, often small businesses.
-

B.1 If `comment_type` = “org”:

`org_name` = the name of the organization. This column will often be filled in automatically with an algorithm’s best guess. Please revise these names to be the clearest, standardized, and unique version of the organization’s name.

If more than one org signed the comment, try to pick the main organizer (e.g., the one whose letterhead is used). If unclear, go with an org we have seen before (this will increase the chances it is linked to the right set of lobbying coalitions). If still unclear, go with the

first signatory. When more than one org signed the comment, add “; coalition” to the end of whatever `org_type` codes you give it.

`org_type` = the type of organization, “corp”/“corp group”/“gov”/“ngo” etc. (create additional codes as needed). Definitions:

- “corp” = individual business (add subtypes as applicable, corp;small business, corp;coop, corp;law firm;bank;financial firm)
- “corp group” = “business interests” (members or representatives of a trade association);
- “gov” = government interests (“gov;state” “gov;local” “gov;federal” “gov;tribal” ‘gov;regional” or “gov;foreign”) within the United States. If states (e.g. Governors or Attorneys Governor), list out all states in `org_name`.
- “ngo” = non-business and non-government interests.

Use a semicolon to indicate subtypes, such as:

“Ngo;advocacy”

“Ngo;legal”

ngo;professional (e.g. an association of doctors or other professionals)

“Ngo;philanthropy”

“Ngo;union”

“ngo;credit union”

ngo;pressure group (a group mobilizes pressure campaigns)

“ngo;membership organization” (org that has members)

“ngo;university”

“Ngo;thinktank” (an organization that does policy-oriented research)

“Ngo;church”

- “ngo;ej” Does this org represent an Environmental Justice/frontline community? I.e. are they based in an affected community (see description of “second-order representation” here: <https://judgelord.github.io/dissertation/ej.html#interest-groups-and-second-order-representation>) There are many additional sub-types of ngo, including advocacy groups, membership groups, professional associations, foundations, charities. These are not mutually exclusive. Use a semicolon to separate multiple tags. Some 501c3s are industry associations; they should be coded as a “corp group.” However many ngos that are not clearly a corp group still advocated for private interests. For example, the Chamber of Commerce

represents business interests generally and thus ends up being a member of many private-interest coalitions, even though they may not explicitly be commenting on behalf of a regulated industry as an industry association would.

- “other” = If the org is really in no way in any of the above (e.g. a foreign government)

ask =

The text of the comment (e.g., a sentence) that best captures the overall ask.

ask1, ask2, ask3 =

The text of the comment’s top three (if there are three) specific asks or objections (e.g., the proposed rule text they object to or would like to be changed.) If a comment responds to several issues within a rule, try to select the main ask from each of the top 3 issues, not just the first 3 issues they address. For example, if the organization “opposes” or “supports” several proposed changes, but “strongly opposes” or “strongly supports” other proposed changes, that may indicate which issues they care most about. Ultimately, you must put yourself in the organization’s shoes, think about their mission and their members, and decide which of the issues they raise are most important to them. Identify the clearest statements of their top 3 aims and include all surrounding text that is on topic for that ask.

If there is only a general sentiment, **ask1** can be the same **ask** (with **ask2** and **ask3** left blank, as they are any time there is not more than one detailed request).

success, success1, success2, success3 (corresponding to **ask, ask1, ask2, ask3**)

- “2” if, overall, the final rule ended up mostly where requested
- “1” if, overall, the rule ended somewhat close to that requested
- “0” if no adverse changes, but also no requests met, or if the request is moot. A request may become moot if superseded by another request. For example, if a group requests that the rule is withdrawn, but if not, changed, then withdrawal makes the requested changes moot. Note: If no changes were requested (they requested the rule be published as is), then no adverse changes is actually a 2)
- “-1” if the rule ended up somewhat different/opposite than requested
- “-2” if the rule ended up significantly different/opposite than requested

Note that “-1” and “-2” can include rules being published without requested changes or withdrawn when the group would prefer the rule not to be withdrawn.

`success_certainty =`
“1” = fairly certain (may also be left blank), “2” = unsure, “3” = totally unclear

IMPORTANT NOTE: Asks and success should focus on the change from the proposed to the final rule. For example, if an org likes a rule, but asks that it goes further, and then the rule is rolled back somewhat, this would be an adverse change and thus a -1. If a rule that an org liked was withdrawn, it would be a -2. If they ask for it to be published as is and it is published as is, success is a 2. If they ask for it to be strengthened and it is published as is that is a 0. If their asks are a mix of “stay the course” and “strengthen” and the rule is published without change, we might code that a 0 or a 1 depending on how important the changes demanded were. If their main emphasis was on keeping policy provisions in the proposed rule, no change is a moderate success.

`response =`
Paste the text of the agency’s response to the comment. The `final_url` column contains the link to the final rule (where agencies often respond to some comments) in the federal register.

B.2 If `comment_type` = “elected”:

Note: this is only for individual elected officials. If a governor or attorney general writes on behalf of the state government that is a “gov” type organization.

`org_name` (or `elected_name`, if your sheet has it) is the official’s full name. If there is more than one official, record the first one, unless they are from the US House or Senate, in which case, record all names separated by “;”

`org_type` (or `elected_type`, if your sheet has it) is the official’s position. For U.S. Senators and Representatives, this should be “Chamber-[STATE ABBREV]” (e.g. “Senate-WI” or “House-NY”). For state representatives, please start with the state to avoid confusion (“Wisconsin Assembly District 4”).

Make sure to code `coalition` and `coalition_type`!

The `ask` and `success` variables are coded as described for `comment_type` = “org”

B.3 If `comment_type` = “mass”:

Code `org_name` and `org_type` as the organization mobilizing the comment campaign, if known.

Make sure to code `coalition_comment` and `coalition_type`! Every mass comment must be assigned a coalition!

Keep your eye out for “astroturf” campaigns that appear to advocate for public interest but are really mobilized by private interests. Recall the types of mass comment campaigns from the above description of `comment_type`:

- “mass;grassroots” = individuals who genuinely care
- “mass;astroturf” = individuals who were mobilized by a well-resourced group to create an impression of public support/opposition

And the related `comment_type` if the form letter is signed by businesses rather than individuals:

- “mass;corp campaign” = genuine support/opposition from a large number of businesses, often small businesses.

Leave `ask`, `success`, and `response` columns blank.

Check that the `number_of_comments_received` column matches the number of comments/signatures submitted. If it does not, correct it.

If your sheet has a `transparency` column, code whether the campaign was transparent about its

“sponsor”, “signers”, “both”, or “neither”. If your sheet does not have this column, record transparency comments in the `notes`.

Generally, it is obvious from the letter who they are and how we might verify that. A bunch of names with no contact information is not very transparent, but if they say “these are members of our organization,” that should be enough if we needed to verify. Agencies occasionally post one representative comment for a campaign; this should not be held against an organization if they also provided the others, we could get them if needed. If a sponsor gives their phone number but not their organization, that is not enough. If you have to research to find the org name, that is not transparent. If they submit under a misleading org name, that is also not transparent. I have mostly seen this in corp campaigns, where they try to disguise who paid for the campaign.

If your sheet has a `platform` column, record the tech platform(s) used to generate comments: “VoterVoice” “Care2” “SalesForce” If your sheet does not have this column, record any platform used to generate comments in the `notes`.

If your sheet has a `fraud` column, record any indication of fraud, for example, “DMARC validation failed.” Otherwise, leave this column blank. If your sheet does not have this column, record evidence of fraud in the `notes`.

B.4 If `comment_type` = “individual”:

Only code `position`, `coalition`, `coalition_type`, if it is immediately obvious, otherwise, record `comment_type` as “individual” and move on. If an individual comment is very technical—perhaps from a professor—do your best to code the coalition and read carefully to see if the person is writing on behalf of a group. “individual” is only for people writing in their personal capacity.

Leave `org_name`, `org_type`, `ask`, and `success` variables blank, unless the individual’s org also submitted comments on behalf of the org, in which case `org_name` can be helpful for identifying the individual’s coalition, but it is not necessary.

C Coding Responses to Comments

The `final_url` column contains the link to the final rule (where agencies often respond to some comments) in the federal register.

`accept_phrases`: Any text that the agency uses in the response to comments to note they are granting a request made by this commenter.

`compromise_phrases`: Any text that the agency uses in the response to comments to indicate compromise/partial agreement with this commenter.. A compromise is on the main dimension of conflict.

`concession_phrases`: Any text the agency uses in the response to comments to indicate a concession that is neither agreement nor disagreement with this commenter.. A concession is off the main dimension of conflict (includes delays).

`reject_phrases`: Any text the agency uses to indicate the rejection of a suggestion made by this commenter.

NOTE: `accept`, `compromise`, `concession`, and `reject` are mutually exclusive. `commenter_agreement`, `commenter_conflict`, and `pressure` are not. Where more than one type applies to a phrase, separate them with a semicolon.

`commenter_agreement_phrases`: Any text discussing agreement among commenters (to identify dimensions of conflict) involving this commenter.

`commenter_conflict_phrases`: Any text discussing disagreement among commenters (to identify dimensions of conflict) involving this commenter.

`pressure_phrases`: Any text that the agency uses that references the scale or intensity of public engagement, such as the number of comments, on the side of this commenter.

D Coding Rules

At the rule level (see the `proposed_url` and `final_url` columns for the links to proposed and final rules in the federal register), code the proposed policy change and the final result in terms of whether they make regulation more or less stringent. For more on defining regulatory stringency see Judge-Lord, McDermott and Cashore (2020).

Figure 17: Concepts of Regulatory Stringency from Judge-Lord et al. 2020

	Program Level	Issues Level
Policy Ends	How comprehensive is the scope of issues addressed?	What are the specific requirements (i.e. policy settings) on each issue? (e.g. the specific size of stream buffer zones, specific best practices)
Policy Means	In aggregate, across all issues, how prescriptive is the regulation? To what extent (e.g. on what portion of issues) are mandatory and substantive thresholds used?	1. How prescriptive is the requirement? 2. What specific ways are they applied ?* (e.g. auditing processes) <i>*Beyond the scope of this paper.</i>

`proposed_direction =`

The change from the *status quo*

1. Proposed rule change rolls back regulation
2. Small overall deregulatory changes
3. No clear change in the overall regulatory scope of stringency (e.g., a qualitative change in funding criteria)
4. Small overall increases in regulatory scope or stringency
5. Proposed rule change increases overall regulatory scope or stringency

`final_direction =`

The change from the *status quo*

1. Rule rolls back regulation
2. Small overall deregulatory changes

3. No clear change in the overall regulatory scope of stringency (e.g., a qualitative change in funding criteria)
4. Small overall increases in regulatory scope or stringency
5. Proposed rule change increases overall regulatory scope or stringency

`final_relative_direction =`

The relative to the *proposed rule* (as if it is the new status quo)

1. Change rolled back regulation relative to the proposed rule
2. Small deregulatory changes from the proposed rule
3. No change
4. Small overall increases in regulatory scope or stringency from the proposed rule
5. Rule change increased regulatory scope or stringency relative to the proposed rule

`coalitions =`

A list of all coalitions identified in the rule, separated by semicolons, with an estimated percent of all comments belonging to each coalition (including for comments that are not in the org_comments sheet). For each rule, include the percent for each coalition after a dash, with each coalition separated with a semicolon, e.g. “ACLU - 70%; AFP - 25%; AMA - 5%” (it will almost always be more lopsided than this).

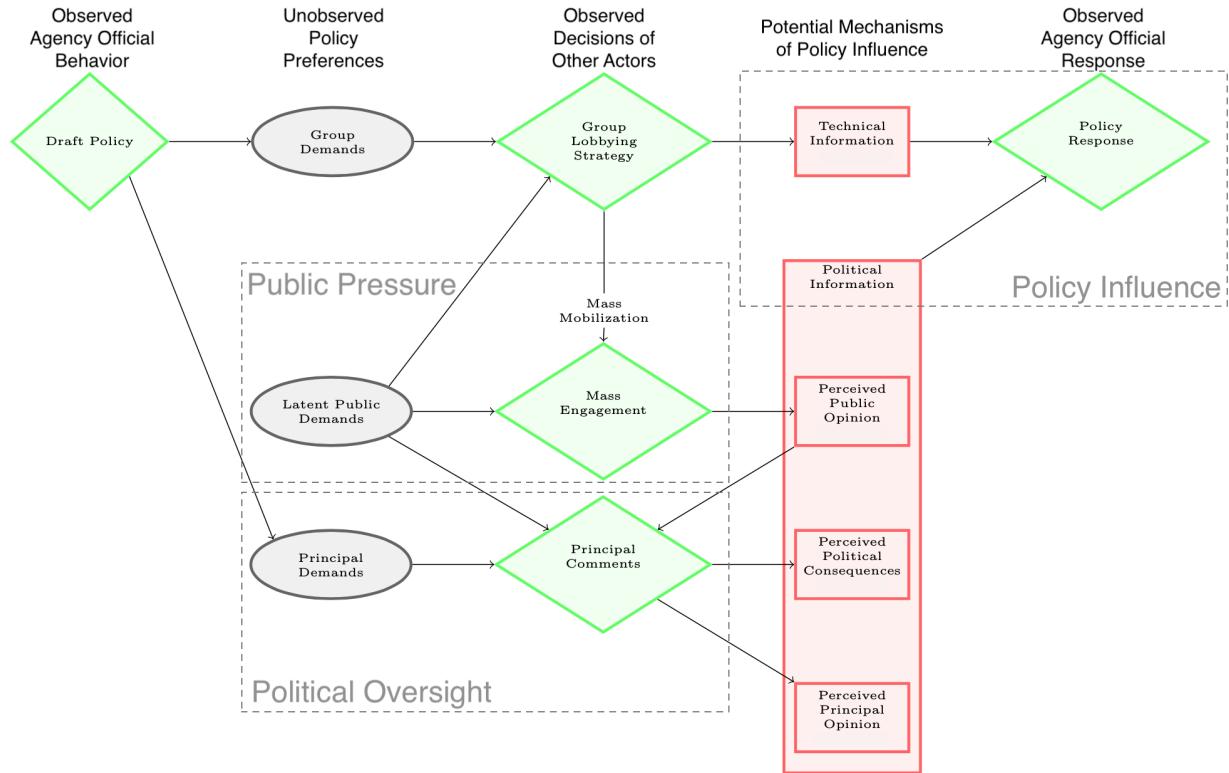
`issues =`

The top three topics of debate in the rulemaking (this may include commenter asks that did not make it into the rule)

E An Expanded Model of Bureaucratic Policymaking

Assembling the models presented in Judge-Lord (2021b) and Judge-Lord (2021a), Figure 18 presents a full picture of the role of public pressure campaigns in bureaucratic policymaking.

Figure 18: Incorporating Political Information into Models of Bureaucratic Policymaking



F Formalizing the Theory

In Section ??, I briefly addressed the relationship between my argument and one leading formal model of commenter influence in agency rulemaking. Here, I offer an expanded version of that discussion.

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 (either directly indirectly through, for example, changing the behavior of members of Congress) creates uncertainties about policymakers’ political positions and incentives for lobbying organizations to attempt to affect them by providing political information.

It was not the aim of this dissertation to develop or 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. My aim is to illustrate a few of the implications of my argument 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 ??.

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

where x_f is the spatial location of the final policy, u_i is the preference of “potential commenter” i , and α is a vector of “allocational bias”—i.e., how much the agency decisionmakers care about their preferences α_0 relative to accommodating the preferences of others $\alpha_{i=1:N}$. Bureaucrats balance their own understanding 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 interpret α_0 (the policymakers’ understanding of their own preferences) to be affected by technical information. Including political information in this model 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 α_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 by α_d . This parameter captures persuasion on normative grounds and beliefs about which segments of society (i.e., which potential commenters) deserve the benefits or government policy or should be responsible for bearing the costs. Policies allocate costs and benefits across groups. If an organization makes a persuasive argument for distributional justice or shows that it represents 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 α_t . Having decomposed the policymaker’s allocative bias into three parts (their fixed tastes α_t , shifting strategic environment

α_s , and potential to be convinced α_{d0}), the policymaker's utility function is now Equation ??.

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

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, α_s and α_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 policy changes. For policy-seeking organizations to lobby but fail to influence policy requires that they are either uncertain or wrong about an agency's allocative bias or their ability to shift it. Incorporating political information allows change and thus uncertainty in an agency's biases.

Even if we assume that policymakers' allocative preferences are known, allowing them to be influenced by commenters means that one commenter's incentives to comment now depend on other commenters' lobbying strategies. This characterization of rulemaking aligns much more closely with empirical studies that show organizations providing technical information as a means of persuading policymakers. Likewise, this characterization of rulemaking aligns with my theory that groups mobilize public pressure campaigns to generate political information that could persuade agency officials to change their position for political reasons.

Incorporating political information allows us to begin formalizing intuitions about mechanisms of influence and thus the motivations for commenting. For example, Libgober (2018) asks, "What proportion of commenting activity can be characterized as informing regulators about public preferences versus attempting to attract the attention of other political principals?" (p. 29). Adding political information to the model allows us to formalize this question: Under what conditions do the decision to comment depend on an organization's beliefs about α_t versus beliefs about α_s ? Empirically, we may often be able to infer that the difference in commenting can be attributed to group i 's beliefs about α_{si} if the behavior of political principals varies but other observed parameter values are similar across rules at a given agency.

Rational-choice explanations of why organizations comment on proposed rules build on an intuition that potential commenters will comment only when the benefits exceed the costs of doing so. This intuition ought to apply to other lobbying strategies such as public pressure campaigns as well. Adding public pressure campaigns as a lobbying strategy to

Libgoeber's model is straightforward. In this model, a potential commenter has negative quadratic preferences centered on their ideal policy p_i and $u_i = -(x_f - p_i)^2$ where x_f is the final policy chosen by the agency decisionmakers. An organization will comment if the cost of doing so is less than the difference between their utility when agency decisionmakers select a policy having been informed about the organization's ideal point p_i versus when they select a policy after having made a guess about the organization's ideal point, z_i . If c_i is organization i 's cost of commenting, then i will comment if it expects to be better off providing information than abstaining:

$$E[u_i|p_i] > E[u_i|z_i] + c_i \quad (1)$$

Similarly, an organization will go public when it expects that the cost of sponsoring a pressure campaign to be less than the difference in utility when agency officials select a policy having been informed about the intensity of broader public preferences p_{public} versus when agency officials select a policy having made a guess about the intensity of the attentive public's preferences, z_{public} . While organizations often make dubious claims to represent broad segments of the public, a petition or mass comment campaign may provide information about p_{public} that agency officials see as more credible. If $c_{campaign,i}$ is organization i 's cost of running a mass mobilization campaign, then i will launch a campaign if

$$E[u_i|p_{public}] > E[u_i|z_{public}] + c_{campaign,i} \quad (2)$$

This suggests that public pressure tactics should be more common when agency officials are either poorly informed or distant from public opinion and potentially influenced by the types of political information created by public pressure campaigns.

In addition to informing agencies about public preferences, pressure campaigns may alter the strategic decision environment for agencies. The extent to which changes to the decision environment help or harm an organization's cause may affect their decision to sponsor a public pressure campaign. Public pressure campaigns may shift the strategic environment in at least two ways. First, the general level of public attention may "politicize" a rulemaking. That is, it may make political factors more salient and technocratic factors less salient, perhaps by attracting the attention of political appointees, the White House, or members of Congress. Some organizations will do better and others worse in a more political decision environment. Second, the specific level of public support for an organization's lobbying coalition may affect bureaucrats' decisions to different degrees, depending on how politicized the rulemaking is.

To formalize these two intuitions, let β_i be the effect of the level politicization γ of rule j

on organization i 's utility, $E[u_{ij}|\gamma_j]$. Second, let δ represent a general increase in utility for any organization i for an additional unit of public support on rule j given the rule's level of politicization. Let ω_{ij} represent a one-unit increase in support (e.g. an additional petition signature or form letter) for organization i on rule j . More public support may only matter in more politicized decision environments. In more technocratic environments, support may be disregarded. This has several implications:

- Organizations that gain from politicization $\beta_i > 0$ may be double-rewarded for mobilizing pressure because they benefit both from how their campaign increases general politicization β_i and the specific support δ for their position.
- Organizations that receive negative utility from politicization β_i will not sponsor campaigns at low levels of overall politicization.

At some level of politicization, γ , organizations facing an opposing public pressure campaign may have more to gain by counter-mobilizing than they stand to lose by further politicizing the policy process.

Additionally, an organization may comment or run a mass mobilization campaign if it benefits in ways that are independent of policy outcomes. Strategies such as “going down fighting” can be incorporated by adding exogenous benefit parameters to the utility function of the potential commenter/mobilizer. Let v_i be the benefit of commenting, independent of its effect on the policy outcome, such as pleasing members or reserving the right to sue. Let w_i be the benefit of running a mass mobilization campaign independent of its effect on the outcome of the policy at hand, such as fulfilling expectations of existing members or recruiting new members. An organization's utility function would then be

$$u_i = -(x - p_i)^2 + v_i + w_i \quad (3)$$

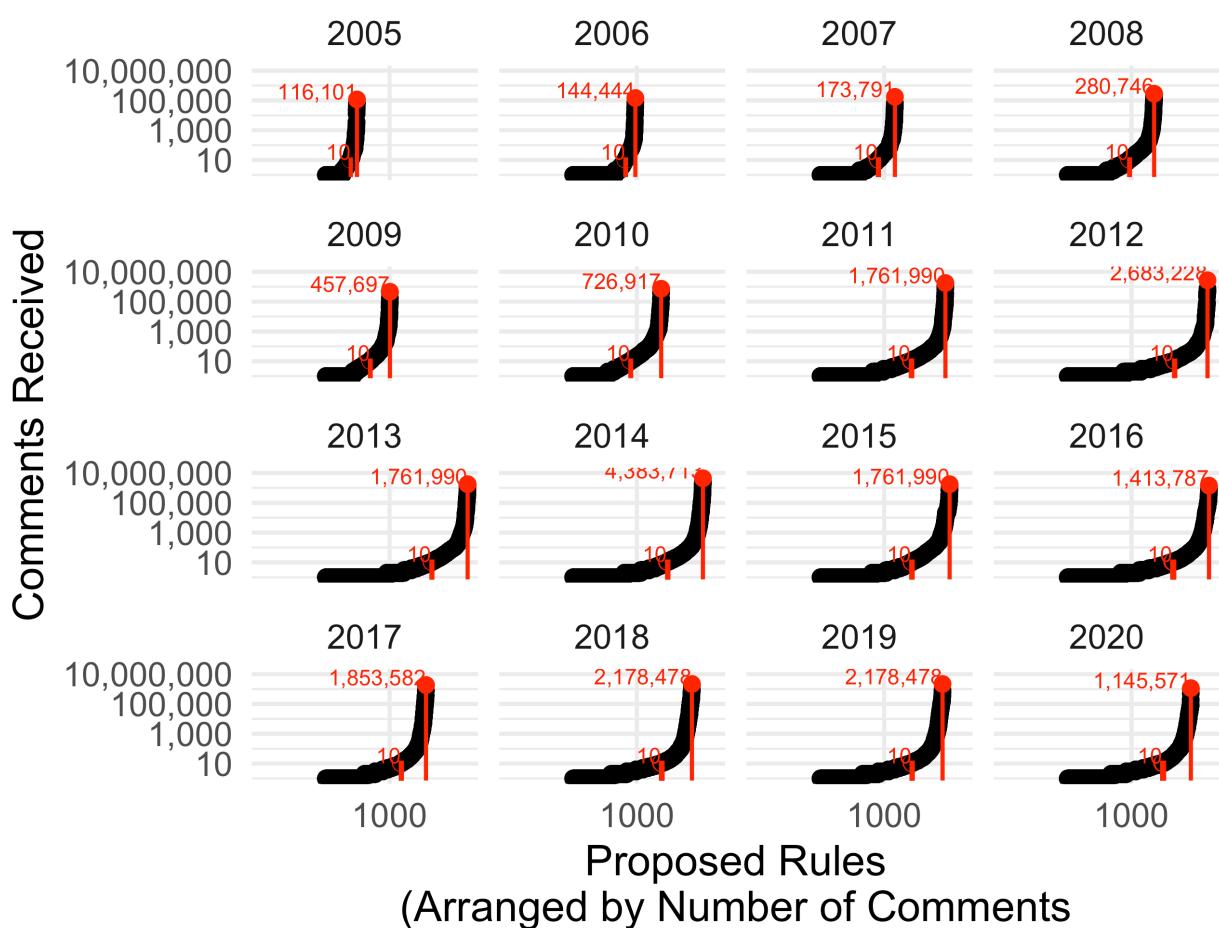
Again, the observed behavior of commenting without policy change becomes a possible result if commenters are allowed a the strategy of “credit claiming” or “going down fighting” and incentives to do so.

G Supplementary Figures

H The Number of Comments Per Rule Over Time

As discussed in Judge-Lord (2021b), the number of agency rules receiving a large number of public comments has increased over time. Figure 19 breaks out the data presented in Figure 7 by year. Red numbers show the number of comments received on the proposed rule with

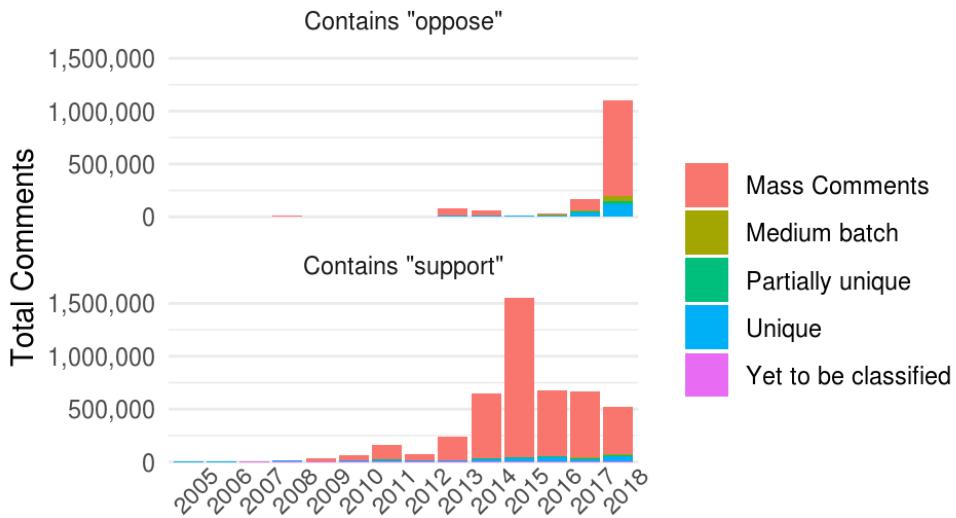
Figure 19: Number of Comments (log scale) per Proposed Rule 2005-2020



the most comments (the one furthest to the right) for each year. For reference, a rule with ten comments is also marked, showing that in every year from 2005 to 2020, the majority of proposed rules open for comment on regulations.gov received less than ten comments.

I Mentions of Support and Opposition

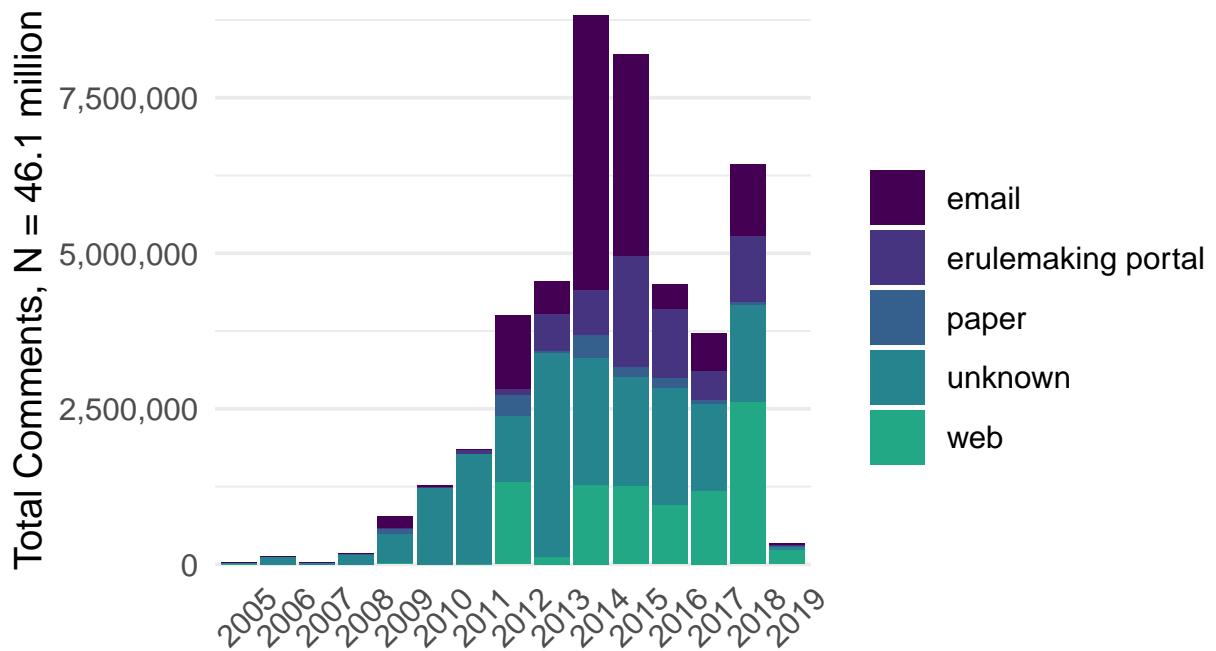
Figure 20: Comments Containing “Support” or “Oppose” on Draft Rules Posted to Regulations.gov, 2006-2018



In line with findings from the hand-coded data presented Figure 15 in 4, a search for “Support” and “Oppose” in comment text (Figure 20) shows a dramatic reversal in support and opposition with the change from the Obama administration to the Trump administration. Mentions of “support” or “oppose” may be 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.

J Descriptive Data About Public Comments

Figure 21: Sources of Comments Posted to regulations.gov



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