Inequality in Administrative Democracy: Methods and Evidence from Financial Rulemaking

Daniel P. Carpenter[*]
Harvard University

Angelo Dagonel
Harvard University

Devin Judge-Lord
Harvard University

Christopher T. Kenny
Harvard University

Brian Libgober[†]
University of California, San Diego

Steven Rashin
University of Texas, Austin

Jacob Waggoner
Harvard University

Susan Webb Yackee
University of Wisconsin, Madison

June 30, 2022

PRELIMINARY DRAFT - DO NOT CITE

Abstract

Research on inequality in American democracy typically focuses on legislative processes, largely overlooking administrative policymaking, where most U.S. law is now made under pressure from vast amounts of money, lobbying, and political mobilization. Leveraging a broad suite of measurements for organizational wealth, participation, and lobbying success during rulemaking, we provide the first large-scale assessment of wealth inequality in agency rulemaking. Drawing upon an original database of almost 30,000 organizational comments on agency rules implementing the Dodd-Frank Act, we document several patterns: (a) wealthier organizations are more likely to participate in the rulemaking process, (b) wealthier organizations generally advance more sophisticated comments, and (c) wealthier organizations enjoy more success in shifting the content of federal agency rules. Our findings show how organizational wealth translates into political power in a country that is increasingly governed by agency regulations.

[*]Authors are listed alphabetically, and the listing does not imply the significance of contribution. We thank Larry Bartels, Christine Desan, Sanford Gordon, Howell Jackson, David Moss, and Eric Talley for their conversations and comments. We acknowledge the Russell Sage Foundation, the Washington Center for Equitable Growth, and the Radcliffe Institute for Advanced Study for research support. Please do not cite without permission.

[†]Corresponding author: blibgober@ucsd.edu.

Keywords: Inequality, Bureaucratic Policymaking, Interest groups, Lobbying, Rulemaking, Financial Regulation

1 Introduction

Studies of political inequality have revealed profound and durable patterns of the disproportionate influence of wealthier citizens on lawmaking processes, which Gilens (2012) calls the influence of affluence. Critical work in American politics by Bartels (2008), Baumgartner et al. (2009), Hacker and Pierson (2010), Gilens (2012), Skocpol (2004), and Schlozman, Verba, and Brady (2012), among others, documents ties between economic and political inequality. Relatedly, Piketty (2014) and others in economics and the social sciences have demonstrated rising capital-based wealth inequality over the twentieth century, especially in the United States (e.g., Saez and Zucman 2020).

In contrast to the large literature on inequality in legislative lawmaking, research on inequality in administrative lawmaking is sparse, especially when one considers the bureaucracy's most powerful policy tool: rulemaking. By writing rules, agencies convert congressional intent into legally binding policies with real human and economic effects (W. F. West 1995; Kerwin and Furlong 2018). After all, "policies mean little to nothing until they are given concrete expression through the bureaucracy" (Moe and Wilson 1994, 4).

Research suggests that firms spend hundreds of millions of dollars lobbying after a bill has been signed into law, including lobbying those agencies tasked with implementing congressional legislation (You 2017; Libgober and Carpenter 2020). Legislators who receive more corporate Political Action Committee (PAC) money from companies are much more likely to lobby federal agencies on behalf of those companies (Powell, Judge-Lord, and Grimmer 2022). Interest groups—particularly business interests—are often the main lobbying participants in most agency rulemakings (Golden 1998; J. W. Yackee and Yackee 2006). Given the scale and importance of bureaucratic policymaking and the large volume of data on business and interest group lobbying, rulemaking presents opportunities to study inequalities in policy influence (D. Carpenter et al. 2020).

As an indicator of the stakes of these developments, consider how media reporting in 2017 illustrated the political priorities of those at the very upper end of the income and power scale in the United States. During that year, major newspapers documented high-level gatherings between CEOs and officials at the Trump White House. For our purposes, what is interesting about these meetings is that the existing inequality literature would likely have predicted America's wealthiest business leaders and allocators of capital would direct their lobbying at congressional lawmaking. Instead, these business leaders and their lobbyists were targeting the rules implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (hereafter Dodd-Frank) (see, e.g., Protess and Davis 2017; Radnofsky and Feintzeig 2017).

When policymaking occurs in the administrative realm, do inequalities in the legislative process persist or morph? Are they magnified or reduced? We develop a suite of measurement and analytic tools to identify organizational commenting, measure commenter wealth and comment sophistication, and assess relationships between wealth, sophistication, and influence.

In this study of financial rulemaking, we draw upon a database of 264,709 comments submitted to U.S. agencies tasked with implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (hereafter Dodd-Frank). Our data cover over eight hundred regulatory actions, such as proposed and final rules on 239 proposed rules.[1] The Dodd-Frank Act spurred significant rulemaking activity and mobilized interests to shape those rules. Beyond its provision of granular data, however, financial policymaking offers another reason for studying inequality — finance is perhaps an unparalleled site of interaction between economic inequality and unequal representation in democratic government.

As an indicator of the stakes of these developments, consider how media reporting in 2017

[1]We define a regulatory action as the publication of a proposed or final rule by one agency. We count a joint rule issued by the SEC and the Federal Reserve as two regulatory actions.

illustrated the political priorities of those at the very upper end of the income and power scale in the United States. During that year, major newspapers documented high-level gatherings between CEOs and officials at the Trump White House. For our purposes, what's interesting about these meetings is that the existing inequality literature would likely have predicted America's wealthiest business leaders and allocators of capital would direct their lobbying at Congress or the president in the hope of indirectly influencing congressional lawmaking. Instead, the business leaders and their lobbyists were, targeting the rules implementing the Dodd-Frank Act (LaCapra and Miedema 2013).

The idea that inequality has affected financial policymaking is far from new. Reports of CEO meetings and financial lobbying on regulatory policy issues raise important yet unanswered questions: how can we know what various interests are asking for in regulation; how can we get a handle on whether they are getting what they ask for; and how can we measure what regulation is worth to them? And, perhaps most importantly, what do answers to these questions tell us about political inequality?

We produce seven main findings, all of which support the conclusion that wealthy organizations are advantaged in the policy process. First, wealthier organizations participate in agency rulemaking at higher rates—a result that holds within various types of for-profit firms and non-profit organizations. Second, for-profit banks are more likely to participate than non-profit banks. Third, organizations that spend more money on political campaigns and lobbying are also more likely to participate in rulemaking. Fourth, conditioned on commenting, organizations that frequently in rulemaking are wealthier than those that participate infrequently. Fifth, wealthier organizations advance more sophisticated comments than less wealthy organizations. Sixth, wealthier organizations are more successful in shifting the content of federal agency rules through their comments. Finally, using causal mediation analysis, we demonstrate that the influence of wealthier organizations on regulatory content is largely driven by the sophistication of their comments.

The substantive differences in wealth between organizations that participate and do not participate are large. Banks, non-profits, and credit unions that comment on proposed rules have much greater assets on average than similar organizations that did not comment. The median credit union that comments had three times the assets of the median credit union that does not. The median non-profit that comments had six times the assets of the median non-profit that does not. And the median bank had 40% more assets than the median bank that did not comment.

As we detail below, the idea that wealth inequality has affected financial policymaking is far from new. Nevertheless, critical questions have remained unanswered. Does wealth inequality drive differential lobbying participation? Do wealthy organizations get what they want more often during rulemaking? And, if so, why? We provide the data and tools to address these questions, and our analysis of financial rulemaking yields initial answers and evidence within a significant policy domain. Such information is critical to inform scholarly research regarding the impact of wealth inequality on American policymaking, as well as further our understanding of modern American governance, lobbying influence, and the role of money in politics within our administrative democracy.

2 Theorical Foundations

The past two decades have witnessed an outpouring of social science research on inequality in the United States and other nations, focusing on national-level policymaking. While several scholars concentrated on the structural and technological determinants of inequality (e.g., Goldin and Katz 2009; Piketty 2014), others examined the political realm as a place where economic inequality shapes political outcomes, which plausibly generates further economic and social inequality.

In *Unequal Democracy*, Bartels (2008) established an important empirical case for political inequality by showing, among other findings, that legislative voting patterns in the U.S. Senate disproportionately reflect the preferences of those individuals at the highest levels of the income distribution. Hacker and Pierson (2010) described a "winner-take-all politics" by which wealthier Americans improved and secured their economic prospects under both liberal and conservative political leadership. In contrast, the prospects of middle- and working-class Americans stagnated. In *Affluence and Influence*, Gilens (2012) further systematized these findings on political inequality using an innovative combination of survey data and legislative voting records. Further studies support and refine their observations (see, e.g., Baumgartner et al. 2009; Winters and Page 2009; Kelly and Enns 2010; Schlozman, Verba, and Brady 2012; Page, Bartels, and Seawright 2013; Gilens and Page 2014; Witko et al., n.d.). These studies mark critical innovations in our understanding, not only of inequality but also of U.S. political processes themselves.

Yet our empirical portrait of the relationship between wealth and political inequality in America remains sorely incomplete. Policymaking does not stop when Congress passes a law. Many critical policy decisions are made by administrative agencies, in part because the legislature delegates significant policymaking authority and discretion to these agencies to make public policy (Epstein and O'Halloran 1999; Huber and Shipan 2002; S. F. Haeder and Yackee 2020). Some agencies have acquired sufficient legitimacy and expertise to gain deference in program initiation, interpretation, and policy proposals (D. P. Carpenter 2001; D. Carpenter 2010). Beyond this, it is well known that moneyed interests spend considerable resources in attempts to influence administrative and executive decision-making (S. Haeder and Yackee 2015; You 2017). These dynamics are often studied under the concept of regulatory capture (D. Carpenter and Moss 2013). Yet, few regulatory capture projects speak to questions of political inequality, and likewise, few studies of political inequality address issues of capture.

This is a major omission, particularly within the financial regulation space. Because financial policymaking affects the aggregation, accumulation, and disposition of wealth and income so directly, its plausible role in increasing inequality is large. Numerous experts in financial policymaking have discussed the idea that political inequality affects financial policymaking. For example, as the 2008 financial crisis unfolded, Johnson and Kwak (2010) and Kwak (2013) pinpointed industry influence in financial regulation, including during the Obama Administration, as one of the main culprits of the crisis and what they saw as the American government's problematic response to it. In their view, the necessity of regulators spending time with banks, combined with the status, sophistication, and resource differentials between bankers and their regulators, resulted in a convergence of the regulator's frames, assumptions, vocabularies, and methods towards those of the regulated industry. Others examine financial firms' lobbying behavior. For instance, Igan, Mishra, and Tressel (2011) find correlations between lobbying behavior and pre- and post- financial crisis loan activity.

Critical research also highlights the revolving-door dynamics often present within financial regulation. This occurs when federal financial agencies hire those from the regulated sector, and/or those who work at these agencies leave to work in banks and non-bank financial firms (Lucca, Seru, and Trebbi 2014; "The Revolving Door and the SEC's Enforcement Outcomes: Initial Evidence from Civil Litigation," n.d.; Cornaggia, Cornaggia, and Xia 2016). Many scholars have examined the development of coalitions between financial and non-financial interests (see, e.g., K. Young 2012; K. Young and Pagliari 2017; K. L. Young, Marple, and Heilman 2017; James, Pagliari, and Young 2021); for example, using network analysis techniques, K. Young, Marple, and Heilman (2017) focused on past and current employment ties between select business firms and the SEC and found that greater direct and indirect ties increase the likelihood of the firm engagement with SEC policy decision-making.

What the literature currently lacks, however, are measures of wealth inequality in organizational participation and influence during one of the most important venues for political lobbying: agency rulemaking. Rulemaking is a critical but understudied part of the American political process. While Congress routinely passes statutes, their implementation almost always requires federal agencies, staffed primarily by civil servants, to devise legally binding standards and procedures (i.e., rules) that make the legislation practically effective [W. F. West (1995); Kerwin and Furlong (2018)). This kind of agency policymaking is pervasive; in 2018, federal agencies finalized over 3,300 rules.

The Administrative Procedure Act of 1946 (APA) governs the rulemaking process. The APA requires federal agencies to solicit public comments on their draft policy proposals (called Notice of Proposed Rulemakings, NPRMs, or proposed rules) and to consider any comments before issuing the agency's legally binding rule (called Final Rules). Agency officials may or may not make changes to the proposed rule text based on the public comments—leaving open the possibility that the commenting process creates an avenue for unequal influence. Given the potential impact of agency-issued regulations, those individuals, firms, and other organizations most affected often attempt to influence regulatory policy content through the submission of public comments. Federal agency restrictions on ex parte (or "off the public record") lobbying after the issuance of a proposed regulation allow researchers to use comments during notice and comment rulemaking to identify interest group mobilization (S. W. Yackee 2012).

Unequal levels of power and access to the government may be especially acute in financial regulation, where Congress tends to rely upon government agencies to develop key regulatory concepts and instruments and, in doing so, to carry out legislative intent. Administrative agencies made many of the most important deregulatory decisions of the past three decades. These include reductions in regulatory capital requirements and the deregulation of mortgage and other consumer loans (Engel and McCoy 2011). While ostensibly re-regulating the financial sector, Dodd-Frank handed considerable authority to federal financial agencies (D. P. Carpenter and Krause 2012; D. Carpenter and Moss 2013). For instance, the law contains over 300 provisions authorizing new agency rulemaking, and each provision could result in multiple rules (Copeland 2010). Each rule yields a fresh opportunity for the financial industry and others to lobby the government agency for policy change.

The traditional literature on bureaucratic politics has often shied away from questions of inequality of influence during rulemaking and financial policymaking. An older literature by McCubbins, Noll, and Weingast (1987) through Balla (1998) examined rulemaking as an important venue of policymaking, often debating whether legislative institutions (i.e., Congress) could use the APA to control administrative agencies. Other high-profile research focused on the legislature's delegation decision while largely ignoring how administrative agencies respond to new grants of policymaking authority in practice (Epstein and O'Halloran 1999; Volden 2002; Huber and Shipan 2002). Other major work focused on the politics of agency decision-making in enforcement or permitting decisions but not in rulemaking (e.g., Wood and Waterman 1994).

These patterns shifted when scholars began focusing more on the role of public comments during rulemaking and attempted to correlate the requests made in comments with regulatory policy change (Golden 1998; W. West 2004; J. W. Yackee and Yackee 2006; S. W. Yackee 2006; McKay and Yackee 2007). This advanced understanding of political inequality during the agency rulemaking process, but without a specific concentration on wealth or on financial regulation.

When we focus on the handful of existing financial rulemaking studies, we uncover a mixed portrait of the policy impact of wealth inequality. These studies—which tend to focus on a single agency or a single rule—raise important questions for future scholarship. Krawiec (2013) studied public participation patterns early in the rulemaking process in section 619 of Dodd-Frank (commonly known as the Volcker Rule). She found that comments from financial institutions and industry were more detailed, complex, and lengthy during Volcker's pre-NPRM stage than from non-financial firms. Ban and You (2019) focused on lobbying and agency rulemaking on a sample of SEC rules after Dodd-Frank. They concluded that the resources that an organization devotes to lobbying appeared to influence the likelihood that the SEC would list an organization's name in its final rule. S. D. Rashin (2020) examined thousands of public comments on SEC rules and found that organizational resources do not appear to be correlated with a commenter's efficacy in securing policy changes. In doing so, Rashin's account appears to align with Nixon, Howard, and DeWitt's (2002) older analysis of SEC rule changes, which did not suggest a severe bias toward what they called "privileged" interests. Finally, Gordon and Rosenthal (2020) find that a diverse coalition of actors can come together to counter the role of larger and more established regulated entities in credit risk retention regulation (see also Ziegler and Woolley 2016). However, K. Young, Marple, and Heilman (2017) found that participants outside the affected firms are less likely to mobilize in the financial sector, especially when a rule is technically complex. Thus, the existing literature yields a mix of conclusions on the impact of wealth inequality during rulemaking and thereby leaves critical hypotheses regarding the plausible effects of wealth inequality during agency rulemaking in financial regulation.

Thus, the existing literature yields a mix of conclusions on the impact of wealth inequality during rulemaking and thereby leaves open critical hypotheses regarding the plausible effects of wealth inequality during agency rulemaking in the financial regulation space.

2.1 Wealth Inequality Hypotheses

We investigate the role that wealth inequality may play during the development of financial regulations. We group our arguments under two categories, which represent the two kinds of potential bias in U.S. rulemaking: (1) bias in participation and (2) bias in influence. We develop six hypotheses.

2.1.1 Differential Lobbying Participation

Previous work suggests that wealthier organizations, such as business firms, will participate in agency rulemaking via the submission of comments at a greater rate than other less wealthy organized interests, such as labor and public interest organizations (J. W. Yackee and Yackee 2006). Past research theorizes that the high costs associated with public comment submission are one reason for this bias. Rossi (1997) writes of the need to monitor the bureaucracy's rulemaking activities, which can be complex and arcane, to know when and how to participate in regulation is being formulated (see also, Kerwin and Furlong 2018). S. W. Yackee (2019) implies that these high participation costs may be paid more readily by business interests, which often have hired lobbyists and government affairs offices to monitor agency rulemaking on their behalf (see also, Jewell and Bero 2006).

While past research has focused on differences in lobbying participation across different organizational types (i.e., business firms versus public interest groups), we go a step further to also address the effects of wealth differentials *within* organizations of a similar type. For example, we theorize that, even among banks, wealthier banks will participate in rulemaking via the submission of comments to financial rules more often than banks with fewer assets to draw upon. The theoretical reasons for this expectation are the same as articulated above—wealthy organizations are better able to pay the up-front costs of lobbying and often have more concentrated stakes in policy outcomes. By comparing similar organizations, however, we can better isolate whether wealth inequality (rather than other differences across organizations) drives differential lobbying participation in rulemaking.

> *Differential Participation Hypothesis (H1):* Organizations that comment on financial rules will be wealthier than organizations that do not comment on financial rules.

A separate rational driving differential participation by wealthy organizations focuses on the concentrated costs and benefits of lobbying on government regulations (see broadly, Lowi 1964; Olson 1965; Wilson 1989). Wealthy, profit-seeking organizations, such as publicly-traded companies and for-profit banks, tend to have a narrow stake in financial regulations than organizations with more diffuse and varied constituencies, such as public interest groups. Wealthy, profit-seeking companies have especially strong incentives to lobby in rulemaking (Libgober and Carpenter 2020; Libgober 2019).

> *Profit-motivated Participation Hypothesis (H2):* Profit-seeking organizations will be more likely to comment.

Moreover, we theorize that wealth inequalities in lobbying participation will persist even among those organizations that are able to pay the initial costs of rulemaking participation. Stated differently, when focused on those entities that have submitted at least one comment to a Dodd-Frank regulation, we argue that more wealthy organizations will, again, hold an advantage over less wealthy organizations by participating across a larger number of rules. For instance, among the non-profit organizations that submit comments on financial regulations, we hypothesize that the wealthier non-profits will comment on more regulations than those less wealthy.

> *Differential Frequency of Participation Hypothesis (H3):* Among organizations commenting on financial rulemaking, organizations with greater wealth will comment on a larger number of financial rules.

2.1.2 Differential Lobbying Success

Existing research hints at a differential lobbying benefit attached to wealth during rulemaking. For instance, S. Haeder and Yackee (2015) find more policy movement on federal regulations during rulemaking when business interests are more active than other types of organizations, such as public interest groups. Yet, such research does not provide a clean test of wealth inequality. After all, some businesses are large while some are small; some non-profits hold major financial assets while others are poor. We thus seek to understand whether wealth is a common factor driving organizational influence during rulemaking. As a result, we theorize that, among similar organizations, wealthier ones will see greater lobbying success during financial rulemaking. For example, we expect the comments of more wealthy large banks will be more impactful on the content of final financial rules than those of less wealthy large banks.

> *Differential Lobbying Success Hypothesis (H4):* Comments from wealthier organizations will be more successful in shifting the content of agency rules.

Research suggests that wealthier organizations are more influential because they can better deploy sophisticated legal arguments and technical information than less well-off entities (Wagner, Barnes, and Peters 2011). Put differently, large organizations are disproportionately able to marshal the legal and technical expertise necessary to write sophisticated comments for rules. We theorize that more sophisticated comments will be associated with greater lobbying success during rulemaking. Our argument builds on Jewell and Bero (2006) findings that agency officials pay greater attention to abstract and technical arguments, such as those often in comments from business organizations while tending to minimize common moral and personal arguments to less sophisticated comments from individuals. Similarly, Krawiec (2013), in her study of the pre-proposal stage of the Volcker rule, concludes that non-industry comments often lacked the specificity and the detail that agencies needed to change policy, and S. W. Yackee (2015) theorizes that impactful comments often provide technical information. Consequently, we hypothesize that wealthier entities will utilize their resources to produce comments that hold greater sophistication than less prosperous groups, and these comments will be more impactful.

> *Differential Sophistication Hypothesis (H5):* Wealthier organizations will use more technical and sophisticated language when commenting on proposed rules.

> *Dividends of Sophistication Hypothesis (H6):* Comments from wealthier organizations will be more successful in affecting the content of agency rules because of comment sophistication.

Together, these hypotheses test for two major kinds of potential bias in policymaking: that the wealthy are better able to participate and that even when less wealthy groups participate, the wealthy are likely to have their demands met. Additionally, they test a major theorized mechanism of lobbying influence: the ability of the wealthy to mobilize lawyers and experts to make sophisticated and thus influential arguments on their behalf.

3 Data and Methods

To assess the extent of inequality in financial rulemaking, we assembled data on draft and final rules, comments on those rules, and organizational wealth and lobbying expenditures. Data sources included the Federal Register, Regulations.gov, Wharton Research Data Services, the Center for Responsive Politics, Federal Financial Institutions Examinations Council (FFIEC), the Internal Revenue Service (IRS), the Consumer Financial Protection Bureau

(CFPB), Commodity Futures Trading Commission (CFTC), the Federal Deposit Insurance Corporation (FIDC), Federal Reserve (FRS), National Credit Union Administration (NCUA), Office of the Comptroller of the Currency (OCC), the Securities and Exchange Commission (SEC). This expansive data collection effort includes data on agency administrative data, public comment and rule texts, and measures of organizational wealth.

3.1 Agency Rules & Public Comments

From the Federal Register, we collected the text of all rules promulgated under authorities granted in Dodd-Frank between its enactment on July 20, 2010, and July 8, 2018 by the seven primary financial regulators tasked with writing rules under the Dodd-Frank Act: FRS, CFPB, SEC, CFTC, FDIC, NCUA, and OCC. We also collected all public comments and comment metadata available on these rules from each agency's website or regulations.gov. In doing so, we collected key information, including the name of the organization submitting the comments and the comment submission date. We also collected the text of all comments from comment submission forms and file attachments. These data include 264,709 comments on 239 separate rulemaking dockets, covering 802 regulatory actions issued by one or more of these seven agencies.[2]

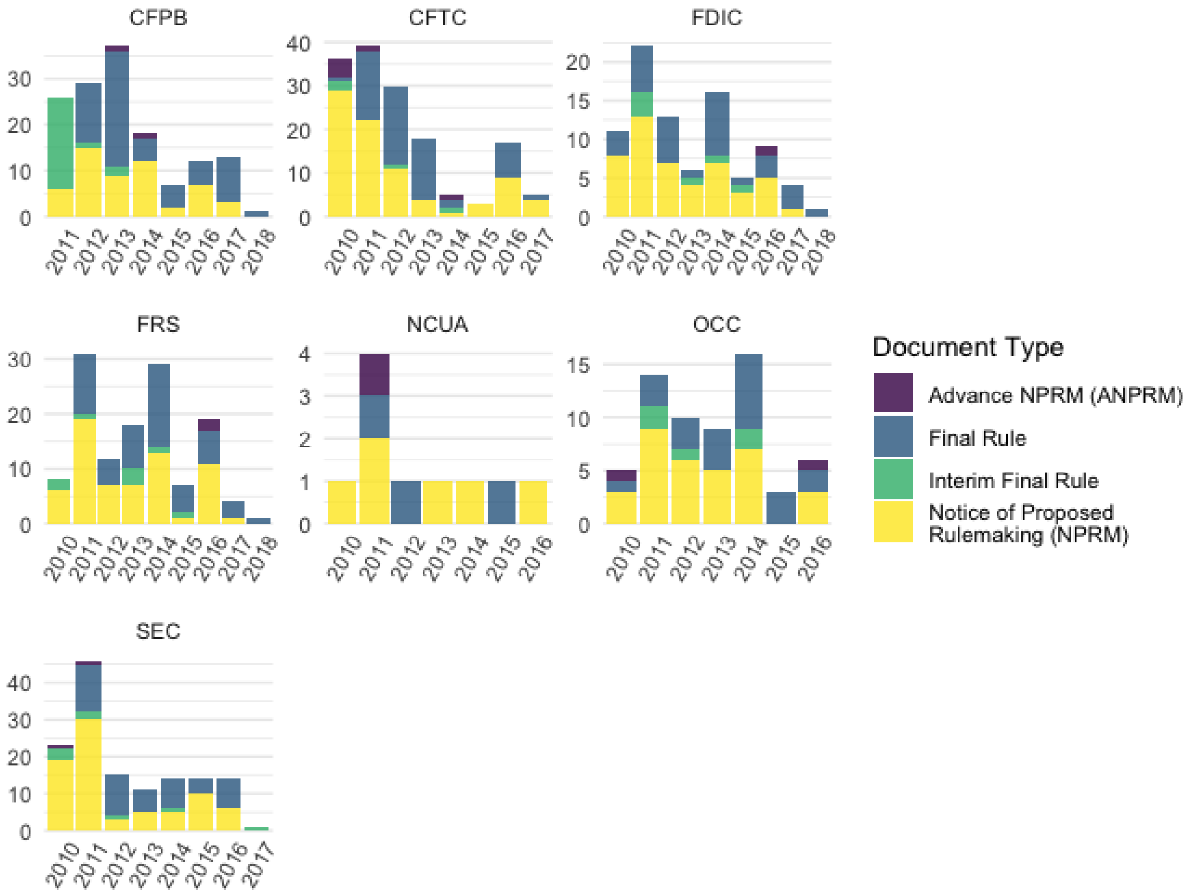
Figure 1 shows significant variation in regulatory activity across these agencies. The largest agency in our sample by regulatory volume is the CFPB, while the smallest is NCUA. The figure also shows considerable variation in the range of regulatory actions, including advanced notices of proposed rulemaking (ANPRMs), proposed, interim, final, and final rules.

3.2 Organization Comments on Proposed Rules

We identify 21,352 comments submitted by organizations that appear in one or more of the datasets described below. Although we collected the text for all comments on Dodd-Frank

[2]The law firm Davis Polk LLP maintains a list of Dodd-Frank-related rules. Each rule in our sample may be considered a set of connected regulatory actions, which must include a proposed and/or final rule and are connected by a Regulation Identifier Number (RIN). We count a joint rule issued by the SEC and FRS as two rules because both agencies collected comments separately.

Figure 1: Dodd-Frank Act Implimenting Actions by Agency



Dodd-Frank regulatory actions from the Consumer Financial Protection Bureau (CFPB),
Commodity Futures Trading Commission (CFTC), Federal Deposit Insurance Corporation (FIDC),
Federal Reserve (FRS), National Credit Union Administration (NCUA),
Office of the Comptroler of the Currency (OCC), and Securities and Exchange Commission (SEC)

rules, our main analyses focus on comments from organizations that we could link to measures of organizational wealth and lobbying activity. Past research suggests that organizations and individuals tend to submit different types of comments to rules (Jewell and Bero 2006). We go one step further and compare commenting behavior among similar types of organizations. For example, we compare the commenting behavior of large banks to other large banks. Thus, we control many known sources of variance in commenting behavior, yielding cleaner tests of our hypotheses. Practically, acquiring wealth information for all commenters—including thousands of individuals who submit form comments as part of mass comment campaigns (with no little identifying information)—would have been impossible. Moreover, because nearly all individual commenters are mobilized by an organization, form comments are best conceptualized as supporting the more sophisticated organizational comments that we focus on here (Judge-Lord 2019).

There was considerable variation in the organizational comments received to rules across the seven financial regulators. For example, the largest number of organizational comments was received by the CFPB on rules regulating payday loans, which received 3898 comments from organizations that we were able to match to asset data. At the same time, many low-salience rules received few comments, in several cases none from organizations with publicly-available wealth data. However, for all rules that received more than 25 comments, we matched at least two organizations to asset data. The agency with the largest median number of organizational comments was the CFPB at 21.

3.3 Organization Wealth

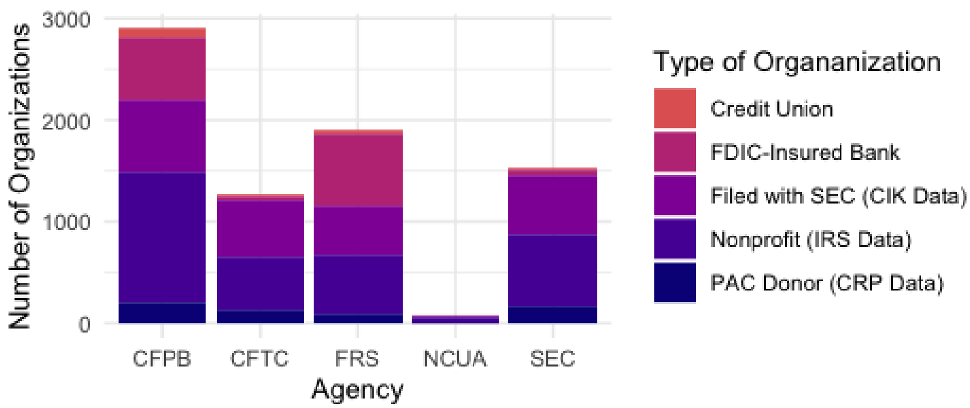
We developed several new tools to test our wealth inequality hypotheses, including ones that allowed us to compare the wealth of organizations that commented on financial rules in our sample to the wealth of similar organizations that did not comment on these rules. No single database provides wealth data on all such organizations. As a result, we cast a wide net and identified multiple databases of organizations that might participate in financial rulemaking.

These databases include:

1. All publicly traded companies listed on U.S. exchanges during our analysis time frame from the Wharton Research Data Service's Compustat database, including financial data, such as market capitalization.
2. All corporations that filed disclosures with the SEC and are thus listed in the SEC's Central Index Key (CIK) database.
3. All bank and bank-like entities covered by the FDIC, which reports each bank's classification and total assets under management.
4. All credit unions from consolidated call report published by the NCUA, which include the total assets under management for each credit union.
5. All non-profit organizations reported by the IRS 990 forms, including each non-profit's total assets and annual revenue.
6. All organizations reporting Political Action Committee (PAC) donations, as compiled by the Center for Responsive Politics. We then calculate the average annual PAC contributions for each organization.

Next, we used a probabilistic matching algorithm to match comments to organizations in these databases. This step took considerable innovation because the names that organizations use to submit comments and the names by which they appear in various databases often differ. Our matching procedure involved several steps. We first identified comments that were likely from an organization, excluding those that were likely from an individual or a mass commenting campaign. We then linked these comments to the organization with the best matching name or to no organization when our matching algorithm did not identify a high-probability match in any of the above databases. We then spot-checked our processes for false positive matches by inspecting organizations that matched many comments and false negatives by inspecting especially long, sophisticated, or efficacious comments that did not match a known organization. We then improved the matching algorithm through dozens of iterations. This procedure ultimately resulted in a dataset of over 6,377 distinct organizations that submitted 21,352 unique comments on one or more Dodd-Frank rules. We use these data to compare the wealth of commenting organizations to 491,956 similar organizations in one of the above wealth databases that did not comment on financial regulations.

Figure 2: Number of Organizations by Type and Agency to which they Commented, Including the Consumer Financial Protection Bureau (CFPB), Commodity Futures Trading Commission (CFTC), Federal Reserve (FRS), National Credit Union Administration (NCUA), and Securities and Exchange Commission (SEC)

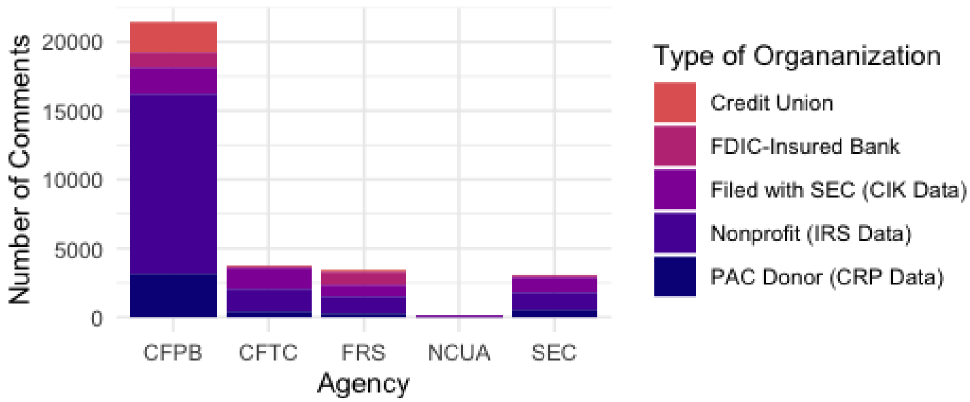


Each database contains qualitatively different types of organizations; we can compare patterns of commenting within each type and across types. The remainder of this section describes the distribution of these data, which are not equally distributed across agencies, rules, and commenter types. Figure 2 shows the number of unique commenting organizations matched to each database by the agency or agencies to which they submitted comments. Across all agencies except for the Federal Reserve (FRS), most commenting organizations are non-profits. The next most common type of commenter was federally-insured (FDIC-insured) banks (hereafter "banks"). Organizations that report to the SEC and donors to PACs were less common. Figure 3 shows the number of comments submitted to each agency by an organization matched to each database described above.

3.4 Comment Sophistication

We measure comment sophistication by counting the technical and legal terms in each comment. To capture sophistication with respect to the use of finance and banking jargon, we

Figure 3: Number of Comments by Authoring Organization Type and Agency, Including the Consumer Financial Protection Bureau (CFPB), Commodity Futures Trading Commission (CFTC), Federal Reserve (FRS), National Credit Union Administration (NCUA), and Securities and Exchange Commission (SEC)



use the Oxford Dictionary of Finance and Banking, which includes 5260 finance and banking terms. To capture sophistication concerning legal jargon, we use the Merriam-Webster law dictionary, which includes 10,172 legal terms. As there are words with both financial and legal meaning (e.g., "underwrite"), and we do not want to double count overlapping terms, we calculate the sophistication of each comment by summing the legal and financial terms and then subtracting the subset of those that appear in both dictionaries. When an organization submits a comment with multiple attachments, we measure sophistication by summing up the technical terms and legal citations across all submitted documents. This approach follows the intuition that attachments with additional technical language reflect additional sophistication. For example, the most sophisticated organizations often submit a cover letter, a marked-up version of the proposed rules, and studies supporting their arguments.

As a second measure of legal sophistication, we count the number of citations to the U.S. Code, Supreme Court cases, appellate and district court cases, the code of federal regulations, and the federal register. **TOO: MORE ON THIS**

3.5 Lobbying Success

After reviewing an agency's proposed rule, organizations typically use their comments to articulate the changes they want to see the agency make in the final rule. To approximate the extent to which commenters requested changes are made, we measure the overlap between the text of each organization's comment and the text added to the final rule. Importantly, we exclude the text of the agency's proposed rule in this calculation, so we do not include phrases quoting the proposed rule as having informed the final rule. This measure follows the intuition that an organization whose comment text is repeated by the agency in changes to the final rule is more influential in shifting regulatory content in their desired direction than an organization whose comment is not reflected in changes in the final rule. If this intuition is correct, greater text overlap suggests greater policy influence.

To construct this measure, we first link proposed rules to final rules by their Docket or Regulatory Identification Numbers — agency identifiers that uniquely identify a series of rulemaking actions. For rules with more than one proposed rule, we match comments to proposed rules by publication date; if a comment comes after the publication of a second proposed rule, it is assumed to be on the second proposed rule. We then tokenize each draft and final rule and each comment in groups of ten words. Ten-word phrases are long enough that they rarely co-occur by chance and are thus a well-validated measure of textual similarity [Wilkerson, Smith, and Stramp (2015); Casas, Denny, and Wilkerson (2019); Judge-Lord (2017); S. Rashin (2018)). Finally, we count the number of words in phrases of 10 or more that appear in the comment and final rule but do not appear in the draft rule. For rules with multiple final rules, we take the sum of the comment's alignment with both final rules. When an organization submits a comment with multiple attachments, we include only the highest scoring document as the primary comment. We do this because organizations that submit multiple attachments often have one primary comment and a bunch of supporting material. We are only interested in the effect of the comment, not the supporting material.

However, this measure of lobbying success does not necessarily indicate that a causal relationship is present between lobbying and rule change. For instance, the organizational commenter and the agency may have copied the phrase from some third source. It is also possible that the processes that lead organizations to include particular phrases in their comments are endogenous to the policy changes agencies make during the financial rulemaking process. We deal with this potential endogeneity by excluding the text of the proposed rule when we measure lobbying success. Doing so removes the phrases and text that are most likely to be naturally repeated and thus drive endogeneity. In doing so, our measurement approach mitigates this concern. Despite its limitations, our measure can capture "success" in the sense that it measures the alignment between specific requests made in an organization's comment and specific subsequent policy changes.

In dealing with endogeneity, one methodological choice merits elaboration: we excluded text from the proposed rule when measuring lobbying success but not when measuring sophistication. This choice rests on the underlying concepts we are attempting to measure. In measuring text reuse, we aim to capture ideas that are not yet in the policy. Thus, text copied from the agency's proposal must be excluded. Indeed text that appears in both the draft and final rule is what did *not* change. If a commenter attached a marked-up version of the proposed rule, we aim to exclude all but their suggested changes.

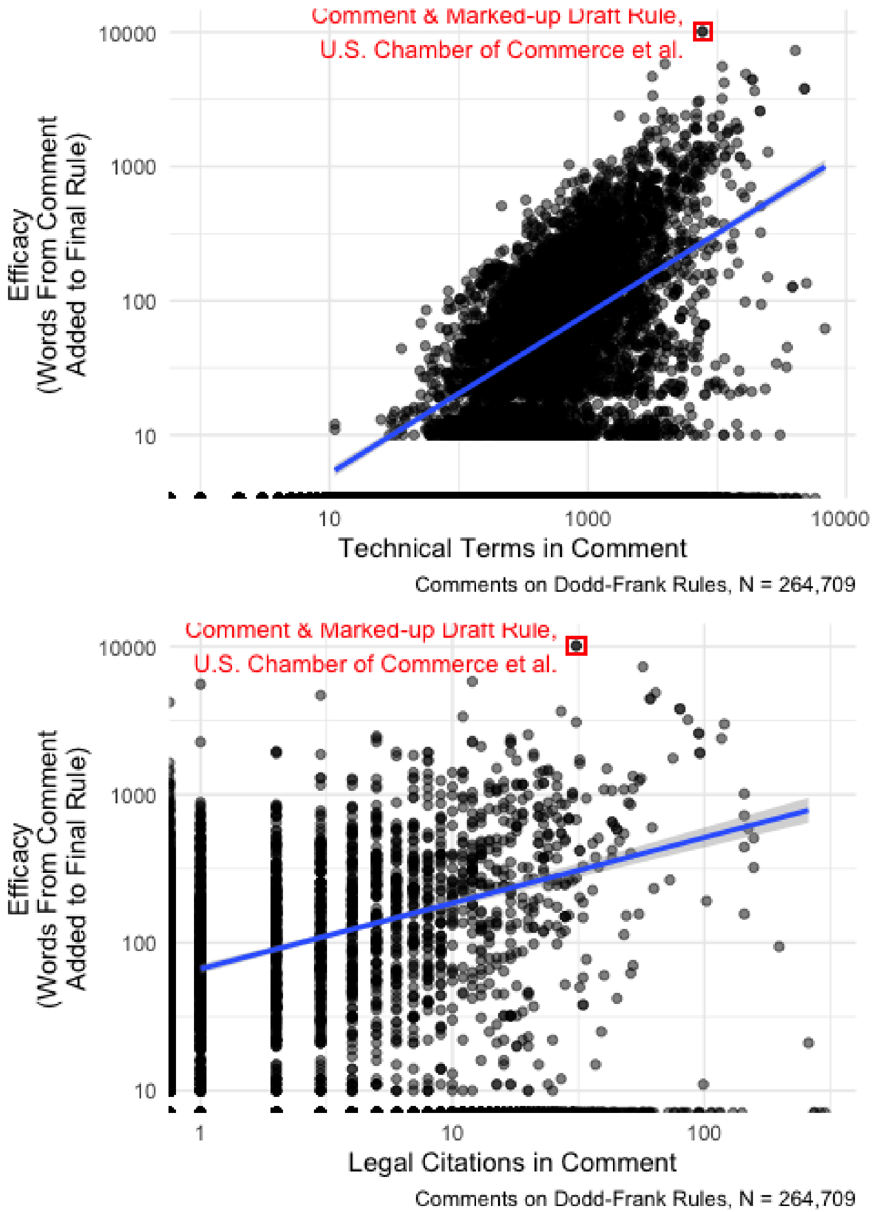
In contrast, in measuring sophistication, we aim to assess how much the commenter utilizes expertise to engage in legal and technical policy debates. Here, attaching a marked-up version of the proposed rule captures the underlying concept of sophistication. Thus, our counts of legal and banking terms and bluebook citations do not exclude the text of the draft rule. Even if they are the agency's terms and citations, engaging with the agency's texts indicates sophistication. For example, the comment with the most bluebook/legal terms from a bank contained a 4-page comment and 112 pages of attachments, 105 of which were the full proposed rule. These 105 pages were excluded from our measure of text reuse but included in the legal and banking terms count.

Descriptively, our measures of lobbying sophistication and lobbying success are highly correlated. Our measure of commenter lobbying success increases with the wealth of the commenting organization. Figure 4 shows that the number of words from the comment added to the final rule is correlated with both the number of technical words (top) and the number of legal citations (bottom). Both plots highlight the comment the with the highest score on our measure of lobbying success, a comment to the SEC prepared by the law firm White & Case, LLP for the U.S. Chamber of Commerce, Americans for Limited Government, Ryder Systems, Inc., the Financial Services Institute, Inc., and Verizon. This highly-sophisticated comment included a 19-page cover letter with many legal and technical citations underscoring the Chamber's "very serious concerns on the impact [the rule's] whistleblower requirements will have on… companies' responsibilities to act in the best interests of their shareholders." This comment also included a marked-up draft of the SEC's proposed rule, suggesting specific changes, several of which were adopted by the SEC. Other comments with high efficacy scores include an 84-page comment from Standard & Poor's Global Ratings credit rating agency to the SEC, a 59-page comment from the Futures Industry Association to the CFTC, and several marked-up versions of proposed SEC rules from investment companies. Overall, 4 shows a positive correlation between the number of legal and banking terms in a comment and the amount of text it shares with the final rule. Using these data (organizational comments, their sophistication, and their efficacy), the following section assesses our hypotheses about the relationship between wealth, political participation, lobbying sophistication, and lobbying success. Notably, Section 4.2.5 further explores the correlation between sophistication and lobbying success by assessing comment sophistication as a mediator in the relationship between wealth and success.

4 Results

We assess our hypotheses about the relationship between wealth inequality and policy influence using descriptive and statistical evidence, including t-tests, multivariate models, and causal mediation analyses. The results below take each hypothesis in turn, exploring

Figure 4: Lobbying Success by Comment Sophistication



inequalities in which organizations participate in financial rulemaking and then inequalities in influence among organizations that do participate. We thus test our hypotheses about wealth and access to the policy process using two broad types of variation: (1) variation between commenters and similar organizations that did not participate in Dodd-Frank rulemaking and (2) variation among organizations that did participate in the frequency, sophistication, and impact of their participation.

4.1 Wealth Inequality in Lobbying Participation: Variation Across Commenters and Non-Commenters

First, we compare levels of resources among commenting organizations and similar organizations that did not comment.

4.1.1 Wealthier organizations are more likely to participate

Our *Differential Participation Hypothesis (H1)* posits that organizations that comment on financial rules will be wealthier than organizations that do not comment. To assess this, we compare organizations that did and did not comment on Dodd-Frank rules. Because our data included data on a full population of similar organizations that could reasonably be expected to submit comments (e.g., all banks and all non-profits), only some of which did submit comments, we can draw important new conclusions about the relationship between wealth inequality participation in the policy process.

Overall, we find strong support for the *Differential Participation Hypothesis*: organizations that comment are much wealthier on average than similar organizations that did not comment. We can see these results clearly in descriptives. Figure 6 shows distributions of logged organizational wealth by whether the organization commented on any Dodd-Frank rule. Organizations that comment are higher on the wealth distribution than similar organizations that did not comment. Differences within non-profits, banks, and public-traded firms are significant at the .01 level in a Welch Two Sample t-test. While differences in credit unions are large, the smaller sample lacks the power to achieve statistical significance. Logistics regression results confirm these differences in means, including statistically significant differences among credit unions. Figure 5 (Appendix Table 4) shows the results of logit models predicting the log odds of commenting on a Dodd-Frank rule by assets for banks, credit unions, and non-profits. These models show that wealthier organizations of all three types are significantly more likely to comment. Of these three types of organizations, the marginal effect of assets on the log odds of commenting is the largest for banks.

Figure 5: Log Odds of Participating in Dodd-Frank Rulemaking by Assets

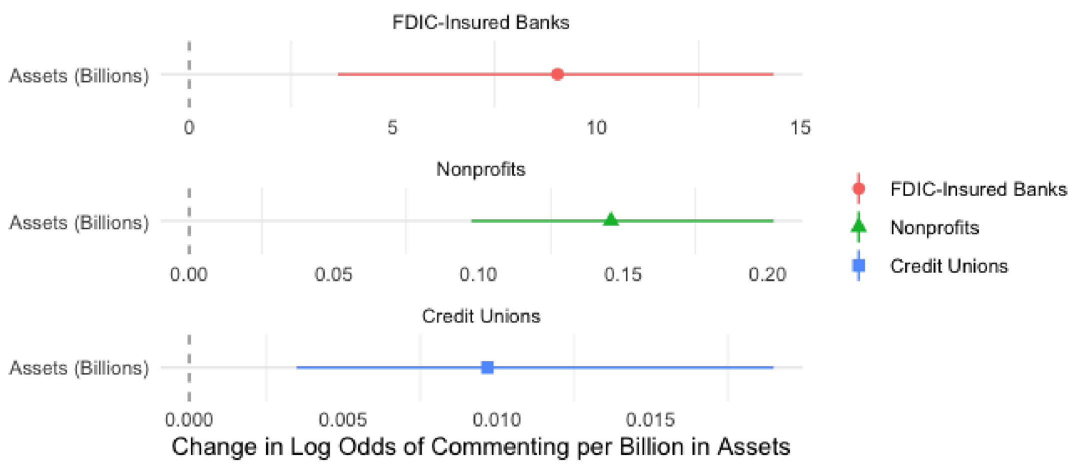
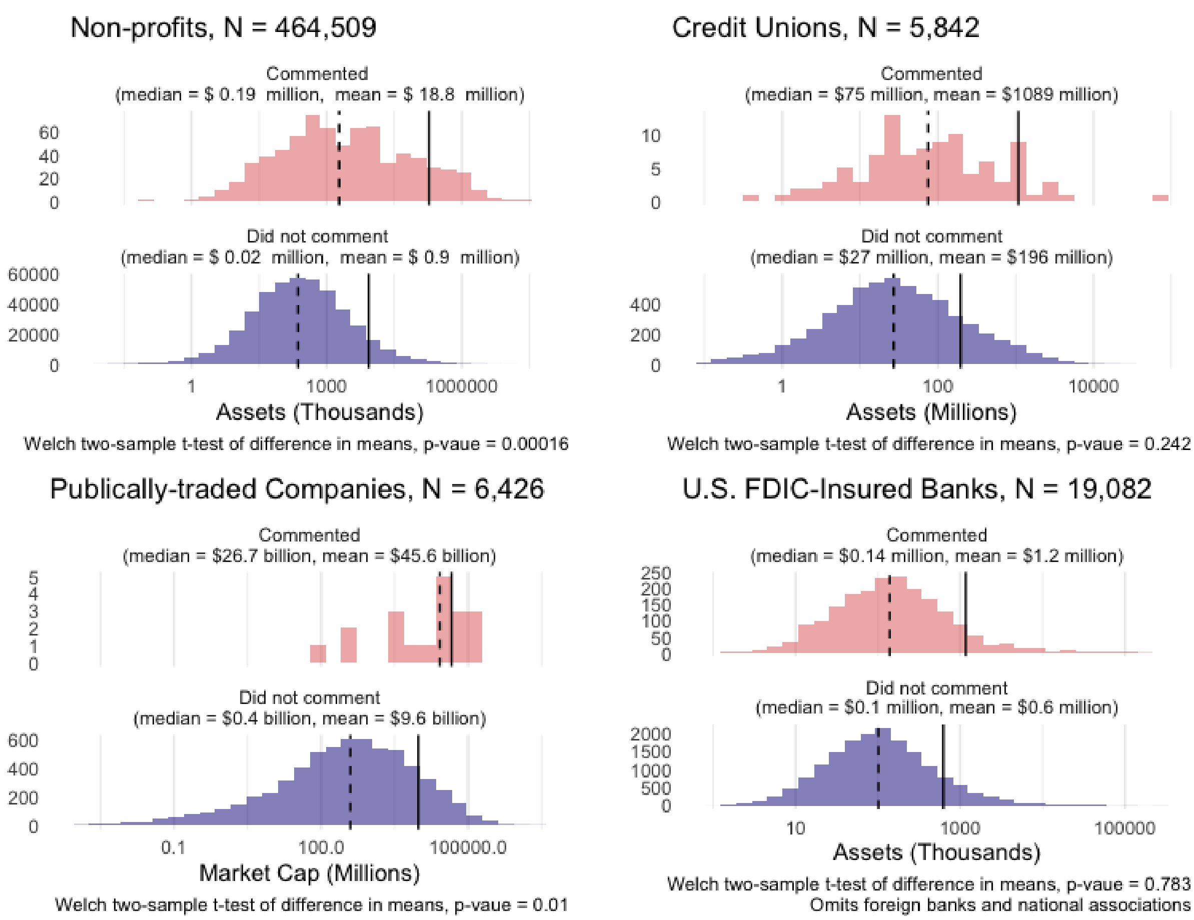


Figure 6 shows the distribution (on a log scale) of organizations' financial resources for commenting organizations that matched in our comment database compared to similar organizations.

Non-profits. The top left panel in Figure 18 shows that non-profits that comment on proposed financial regulations tend to be significantly better-resourced than we would expect from a random sample of non-profits. The average assets of commenting non-profits were ten times larger than non-profits that did not participate; the average non-profit that did not comment had about $7.5 million in assets, whereas the average non-profit that did comment had approximately $75 million in assets. Thus, the average assets of commenting non-profits were ten times larger than non-profits that did not comment. This shows that the *Differential Participation* Hypothesis (H1) holds within non-profit organizations.

Figure 6: Financial Resources of Organizations that Did and Did Not Comment



Credit Unions. Similarly, the top right panel in Figure 18 shows that credit unions that comment on proposed financial regulations also tend to be significantly better-resourced than we would expect from a random sample of credit unions. The average credit union that did not comment has about $27 million in assets, whereas the average credit union that did comment has $75 million in assets. The average commenting credit union is thus three times larger than the average credit union that did not comment. This shows the *Differential Participation* Hypothesis (H1) among credit unions.

Publicly-traded companies. The bottom left panel in Figure 18 shows similar distributions over market capitalization for publicly traded companies. Companies that comment on proposed financial regulations are better-resourced than we would expect from a random sample. Specifically, they have much more capital, as measured by the total value of their stock. The median market capitalization of companies that commented was almost 70 times that of the media company that did not comment.

Banks. The bottom right panel in Figure 18 shows that, on average, banks that comment on proposed financial regulations are better-resourced than we would expect from a random sample of banks. The x-axis shows assets in thousands of dollars. Banks that participated in financial rulemaking had almost 40% greater median assets and nearly double the average assets.

When we look within categories of banks, we see that the wealthier banks within each class are also more likely to submit comments on financial rules than similar banks with less wealth. Figure 7 shows that, within each class of bank (Commercial Banks, Savings Banks, State Banks, and Savings Associations), wealthier the banks participating in financial rulemaking are the wealthier ones.[3] Differences in means among for-profit Commercial Banks are significant at the .1 level in a Welch Two Sample t-test. While the differences with

[3]There are over seventeen different types of institutions that the U.S. government defines as banks (see https://www.ffiec.gov/npw/Help/InstitutionTypes). This paper focuses on Commercial Banks, thrifts (savings institutions), and credit unions. In general, Commercial Banks are publicly traded corporations that make loans to businesses and individuals. Credit Unions are non-profit banks. Savings institutions (thrifts) are non-profits primarily involved in mortgages.

other types of banks (State Banks, state-chartered Savings Banks, or non-profit Savings Associations) are large, there are too few of these types of banks for differences in average wealth among them to reach statistical significance.

Figure 7 shows wealth distributions for four prominent classes of banks: Commercial Banks, Savings Banks, State Banks, and non-profit Savings Associations. The top-left panel of Figure 7 shows that Commercial Banks that comment are wealthier than those that did not comment. The modal Commercial Bank that commented was 40 percent more assets than the modal Commercial Bank that did not comment. The top-right panel of Figure 7 shows that Savings Banks banks that comment are wealthier than those that did not comment. The modal Savings Bank that commented has nearly twice the assets of the modal Savings Bank that did not comment. The bottom-left panel of Figure 7 shows that State Banks that comment are wealthier than those that did not comment. The average assets of State Banks that commented were three times the average assets of the State Banks that did not comment. While Savings Associations are less likely to comment than more profit-oriented banks (see Figure 9), the bottom-right panel of Figure 7 shows that, when Savings Associations do comment, it tends to be the wealthier ones.

4.1.2 Organizations that make larger campaign donations and spend more on lobbying are more likely to comment

The final two ways that we investigate *Differential Participation* Hypothesis (H1) Figure 8 shows that organizations that comment on Dodd-Frank rules also donate more to political campaigns via political action committees. This aligns with the *Differential Participation* Hypothesis (H1). Among organizations that donate to campaigns, the average campaign spending per two-year cycle was $80,000 for those that did not comment, and the average for a donor organization that did comment on a Dodd-Frank rule was $95,000. The difference in average campaign spending between organizations that commented and do not comment is significant at the 0.01 level in a Welch Two Sample t-test.

Figure 7: Financial Resources of FDIC-Insured Banks that Did and Did Not Comment

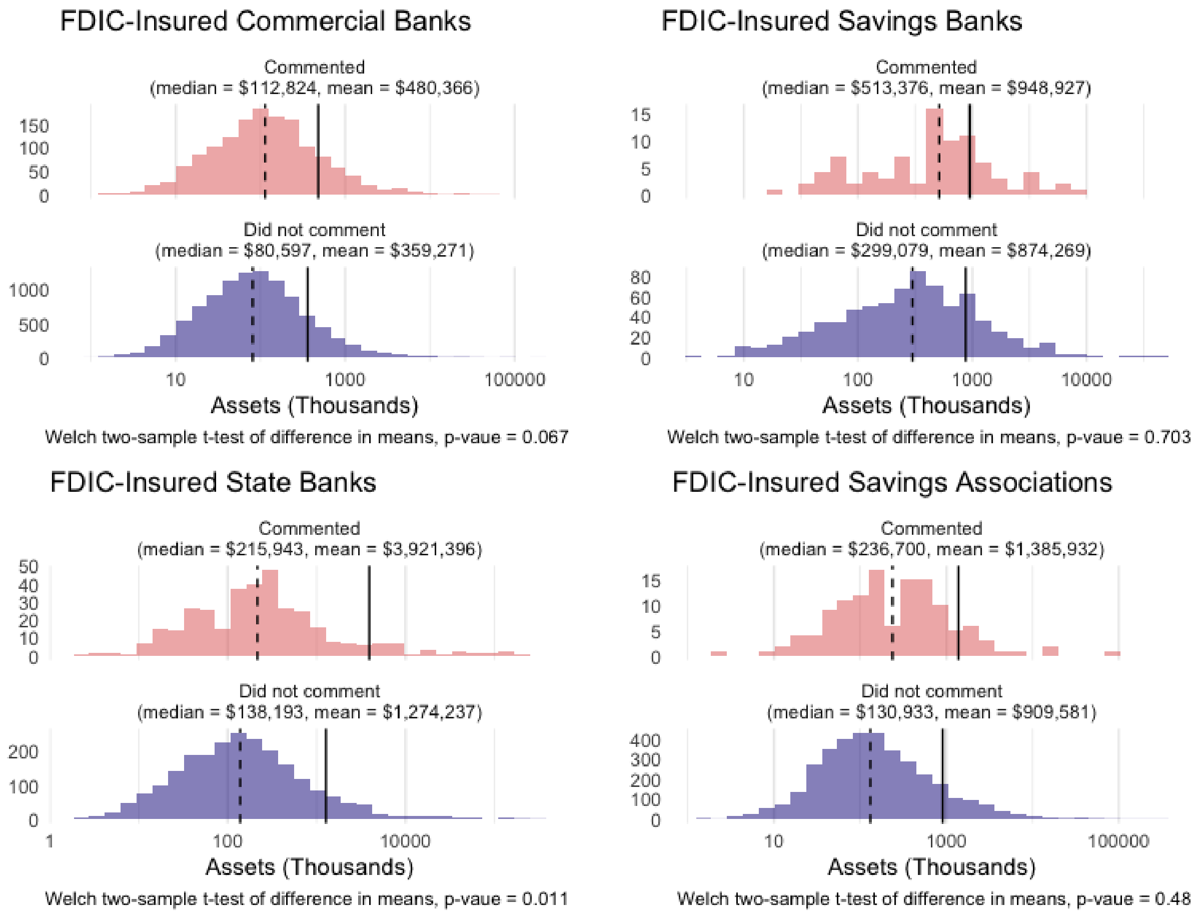
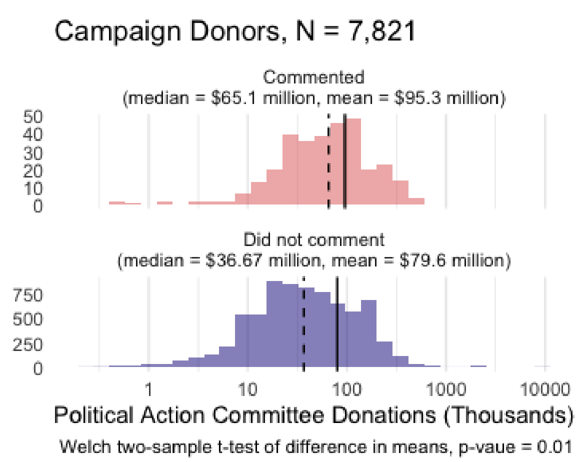


Figure 8: Campaign Spending of Organizations that Did and Did Not Comment



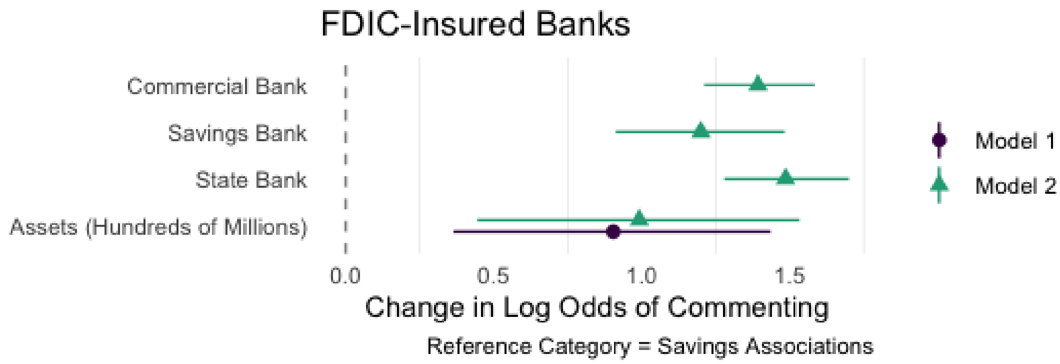
4.1.3 Profit-driven organizations are more likely to comment than non-profits

Our *Profit-motivated Participation* Hypothesis (H2) posited that for-profit organizations would be more likely to comment than non-profit organizations. We find strong support for this hypothesis, both overall (comparing banks with non-profits) and among for-profit and non-profit banks. Twelve percent of Commercial Banks commented on Dodd-Frank rules. In contrast, only three percent of non-profit Savings Associations, two percent of credit unions, and 0.2 percent of other non-profits commented. This means that Comercial Banks were six times more likely to comment on a Dodd-Frank rule than the average credit union and 60 times more likely to comment than the average non-profit.

To further test this hypothesis among banks, we estimate the odds of commenting across different types of banks; we find that for-profit banks (Commercial Banks) are significantly more likely to comment than non-profit Savings Associations and credit unions, further supporting the link between lobbying activity and profit. Commercial Banks are often large multinational corporations managed by a board selected by shareholders. In contrast, Savings Associations are chartered with the narrow purpose of providing affordable residential mortgages. Both types of banks may hold large volumes of assets, but they have very different clients. Commercial Banks and Savings Associations serve different clients. Figure 9 (Appendix Table 5) shows that banks serving corporations and wealthier and profit-motivated clients were disproportionately represented in Dodd-Frank rulemaking and that Savings Associations were less represented, even controlling for asset differences. This supports the *Profit-motivated Participation* Hypothesis (H2). Likewise, assets remain a significant predictor of whether an organization comments, even controlling for differences in the type of institution. This further supports the *Differential Participation* Hypothesis (H1).

Further supporting the *Profit-motivated Participation* Hypothesis (H2), non-profits and credit unions are significantly less likely to comment than Banks, even when controlling for differences in assets. Table 1 shows the results of logit models predicting the log odds of commenting by organization type (credit union, non-profit, or bank) and total assets.

Figure 9: Log Odds of Participating in Dodd-Frank Rulemaking by Type of FDIC-Insured Bank



In specifications estimating the constant effect of assets (Model 1) and different effects by organization type (Model 2), non-profits are less likely to comment than for-profit organizations.

The main takeaway from this analysis is that organizational resources correlate with commenting behavior. That is, wealthy organizations are represented more than less wealthy organizations. If representation is largely about who shows up to participate in the policy process, companies with high market capitalization, organizations that give more to political campaigns, and banks, credit unions, and non-profits with more assets are represented better than those with lower market capitalization, less lobbying spending, and fewer assets. Both within and across different types of organizations, wealthier organizations are more likely to be at the table when important policy decisions are made.

4.2 Wealth Inequality in Lobbying Frequency, Sophistication, Success

We now turn to hypotheses about inequalities within the population of organizations participating in the policy process. Hypothesis 3 posits that, among commenters, wealthy organizations will participate more frequently. Focusing on variation among organizations that all commented on at least one Dodd-Frank rule gives us even more confidence that we are comparing similar organizations with similar interests. Despite their similarities, however, some organizations commented more frequently, used more sophisticated language, or were

Table 1: Log Odds of Commenting on Any Dodd-Frank Rule

	Model 1	Model 2
Dependent Variable	**Commented**	**Commented**
Assets (in Billions)	0.013***	0.904***
	(0.002)	(0.267)
Credit union	−1.969***	−1.948***
	(0.105)	(0.106)
Non-profit	−4.322***	−4.315***
	(0.044)	(0.044)
Assets x Credit union		−0.894***
		(0.267)
Assets x Non-profit		−0.889***
		(0.267)
Num.Obs.	489 433	489 433
Log.Lik.	−12 337.456	−12 332.171

Reference catagory = Banks

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

more successful in having their policy demands met than others. We explore whether each of these types of variation is related to wealth.

4.2.1 The "usual suspects" are wealthier than those who participate less frequently

To investigate Hypothesis 3, that frequent commenters tend to be wealthy organizations, we count the number of Dodd-Frank rules on which each participating organization commented. Figure 10 shows that organizations that comment on more rulemaking dockets tend to be wealthier.[4]

The top-left panel of Figure 10 shows that most of the non-profits in the top one percent of most frequent commenters had assets over \$10 million. In contrast, non-profits in the

[4] Note that commenting on *more rules* is not the same as submitting *more comments*. Many wealthy organizations only submit one comment per rulemaking docket. Some organizations also submit many comments on the same rule as a form of public pressure. Pressure campaigns are mostly organized by public interest groups but are also occasionally organized by regulated companies (Judge-Lord 2019). For example, Axcess Financial (a payday lending company) and Advance Financial (a credit union) both mobilized over 1000 comments from their stores on the Consumer Financial Protection Bureau's Payday Loan Rule. Mobilizing public pressure on one rule is different from lobbying. Our analysis here focuses on the breadth, not the amplitude of lobbying.

Table 2: OLS Predicting the Number of Dodd-Frank Rules On Which an Organization Commented

	Banks	Non-profits	Credit Unions	Public Companies	PAC Donors
Dependent Variable	**Number of Rules**	**Number of Rules**	**Number of Rules**	**Number of Rules**	**Number of Rules**
Assets (in Billions)	12.054***	0.026	0.232***		
	(1.963)	(0.204)	(0.050)		
Market Capitalization (Billions)				0.003	
				(0.004)	
Campaign Donations (Millions)					0.335***
					(0.077)
Num.Obs.	1157	1916	99	147	205
Log.Lik.	−1850.961	−5968.465	−270.410	−408.365	−685.648
F	37.726	0.016	21.253	0.557	18.983

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

bottom 99 percentiles (the least frequent commenters, most commenting on only one rule) had assets under $10 million.

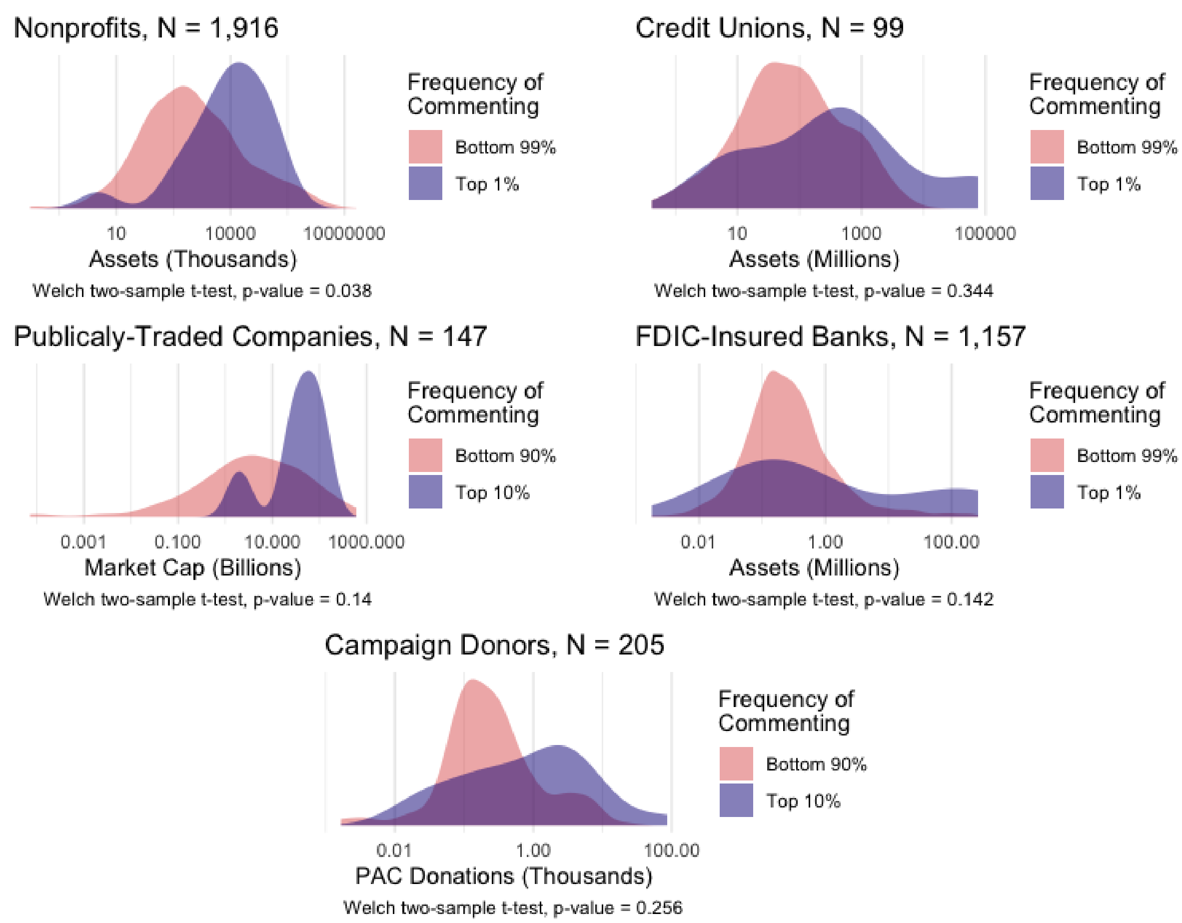
The middle-left panel of Figure 10 shows that, among publicly-traded companies, most of the top ten percent of most frequent commenters had market capitalization over $10 billion. In contrast, most companies in the bottom 99 percentile had under $10 billion in market capitalization.

The middle-right panel of Figure 10 shows that, even among banks, a large share of the top one percent of most frequent commenters (the select few that commented on more than five rules) had assets over $1 million; many over $100 million. Yet, nearly all banks in the bottom 99 percentiles of most frequent commenters (most of which only commented on one rule) had under $1 million in assets.

The bottom panel of Figure 10 shows that most of the campaign donors in the top ten percent of most frequent commenters donated over $1,000. In contrast, most campaign donors in the bottom 99 percentile donated less than $1,000. While differences in average wealth between organizations that comment and those that do not are only statistically significant at the .05 level for non-profits, frequent commenters are systematically wealthier for all organization types. This supports Hypothesis 2; frequent commenters tend to be wealthy organizations.

Further supporting Hypothesis 2, OLS models presented in Table 2 show statistically significant relationships between wealth and frequency of commenting on Dodd-Frank rules

Figure 10: Frequent and Infrequent Commenters (By Percentile of the Number of Dockets on Which each Organization Commented) by Resources (Log Scale)



for banks, credit unions, and campaign donors. For every additional billion dollars in assets under management, banks commented on about 12 additional Dodd-Frank rules on average. Likewise, each additional three million in campaign donations correlates with commenting on one additional rule.

4.2.2 Wealthier commenters are more influential

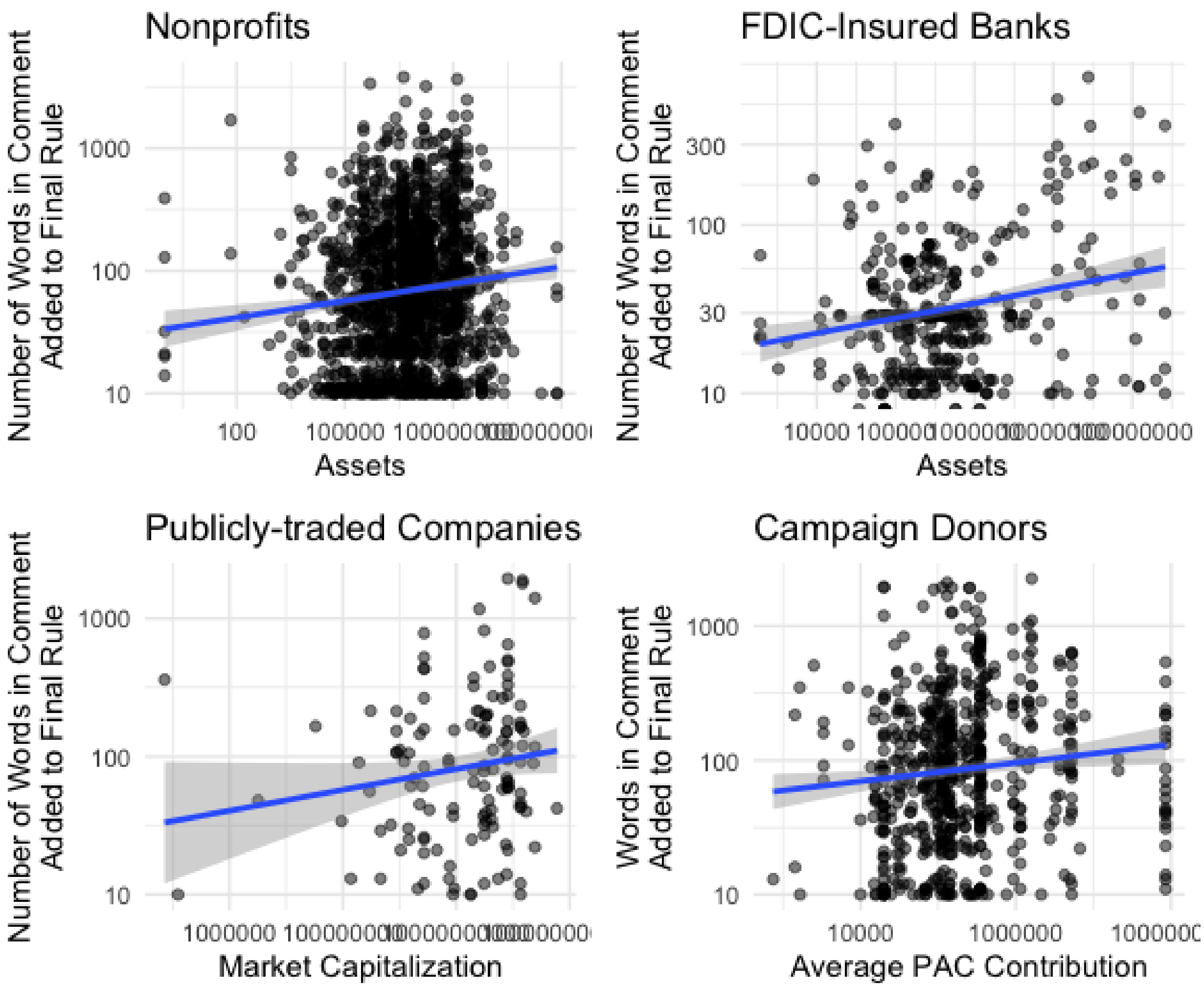
Our final three hypotheses focus on biases associated with lobbying influence during financial rulemaking.

In Hypothesis 4, we argue that wealthy organizations will be more successful in their regulatory lobbying. The final two hypotheses sort out why we may see this pattern emerge.

Figure 11 provides descriptive evidence regarding Hypothesis 3. The strong positive correlation between an organization's wealth and its comment's similarity to text added to the final rule aligns with the *Differential Lobbying Success* Hypothesis (H5): wealthier organizational commenters tend to be more successful in shifting the content of final rules than other similar but less wealthy organizations. The y-axis of all plots in Figure 11 indicates the number of words that appear in 10-word phrases in both a comment and the final rule but were not present in the draft rule. This measure captures the extent to which text added to final policy documents contains exact phrases used or suggested by a particular organizational commenter. The x-axes of each plot in Figure 11 represent different indicators of organizational wealth.

Across the four panels of Figure 11, we uncover strong positive correlations between an organization's wealth and lobbying success. As a result of the greater alignment between the comments of wealthier organizations and changes made to rules, there is a much stronger similarity between the text of comments submitted by wealthy entities and the agency's final rule than there for poorer entities. We find this positive correlation between wealth and lobbying success among non-profits, among publicly traded companies, banks, and among organizations that donate to political campaigns.

Figure 11: Amount of Text Repeated in Final Rules by Commenter Resources



4.2.3 Wealthier companies are more sophisticated at lobbying

We theorize in our *Differential Sophistication Hypothesis* (H5) that wealthier organizations submit more sophisticated comments—especially in terms of their use of legal and technical language—than less well-off entities. Figure 12 provides evidence of just such a relationship. It shows that the comments from wealthier organizations tend to include more legal citations (the left column of plots) and more technical language used in finance and banking (the right column of plots). We see this pattern among organizations of several types: banks, publicly traded companies, and campaign donors. Nearly every comment from a company with market capitalization over $50 billion contained over 100 technical terms, while many less capitalized companies submitted less sophisticated comments. Likewise, most of the comments from publicly traded companies with ten or more legal citations were submitted by companies with over $50 billion in market capitalization.

4.2.4 More sophisticated comments are more influential

We theorize in our *Dividends of Sophistication* hypothesis (H6) that comments from wealthier organizations will be more successful in shifting the content of financial rules because wealthier organizations submit more sophisticated comments. We investigate this proposed mechanism for unequal influence by first assessing the relationship between legal and technical sophistication and lobbying success. We find that legal citations and technical terms correlate with lobbying success. Figure 4 shows that comments that use more sophisticated legal and technical language are more likely to contain text that was added to the final rule. To the extent that this similarity in language reflects lobbying success, this aligns with the *Dividends of Sophistication* Hypothesis (H6).

Further supporting the *Dividends of Sophistication* Hypothesis (H6), Figure 14 shows estimates of lobbying success from linear regression models where the predictor is the number of technical terms or legal citations in a comment. Both models suggest a statistically significant relationship. Substantively, ten additional technical finance or banking term used

Figure 12: Amount of Legal and Technical Language by Assets (Among Comments from FDIC-Insured Banks on Dodd-Frank Rules)

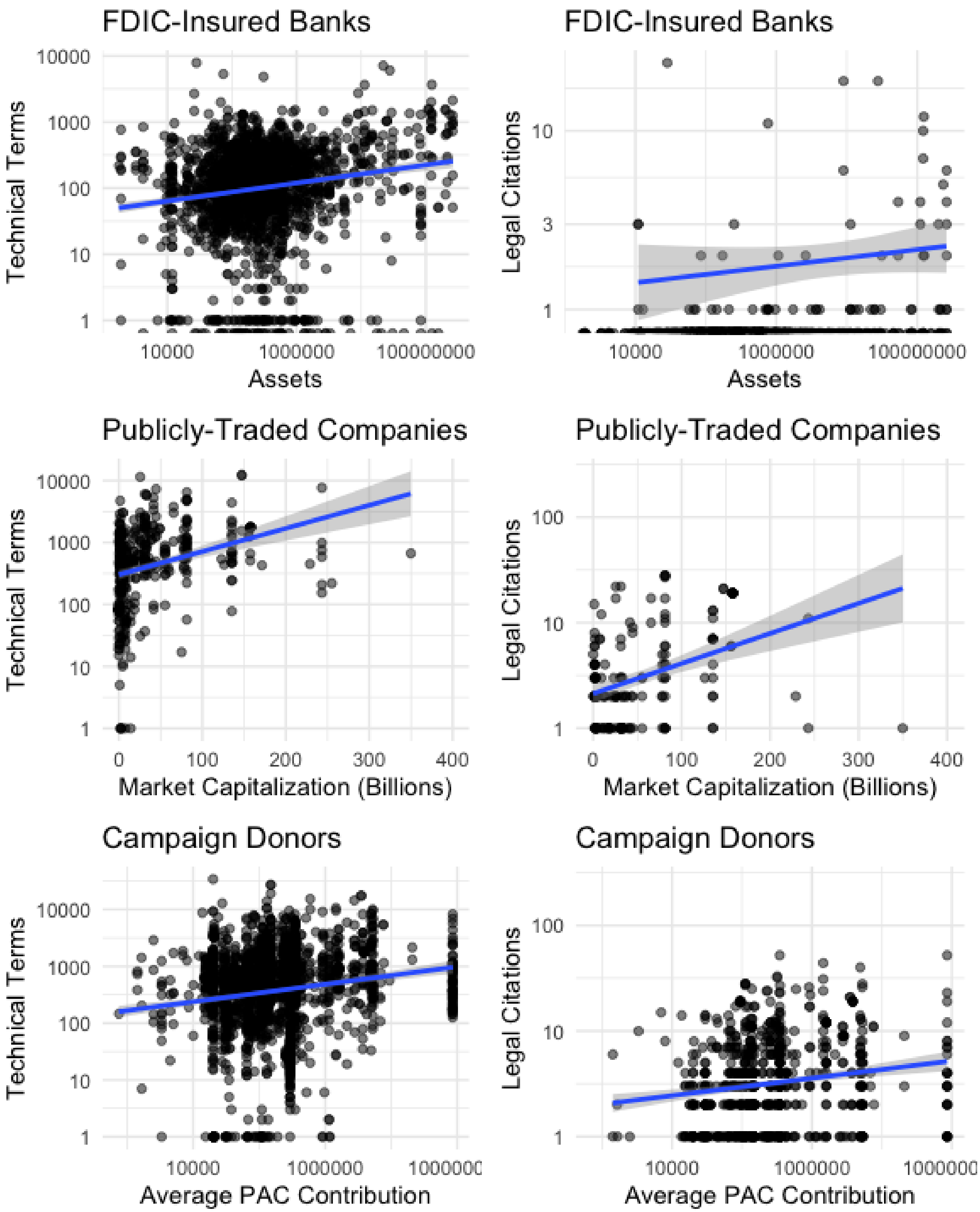


Figure 13: Amount of Legal and Technical Language by Market Capitialzation (Among Comments on Dodd-Frank Rules)

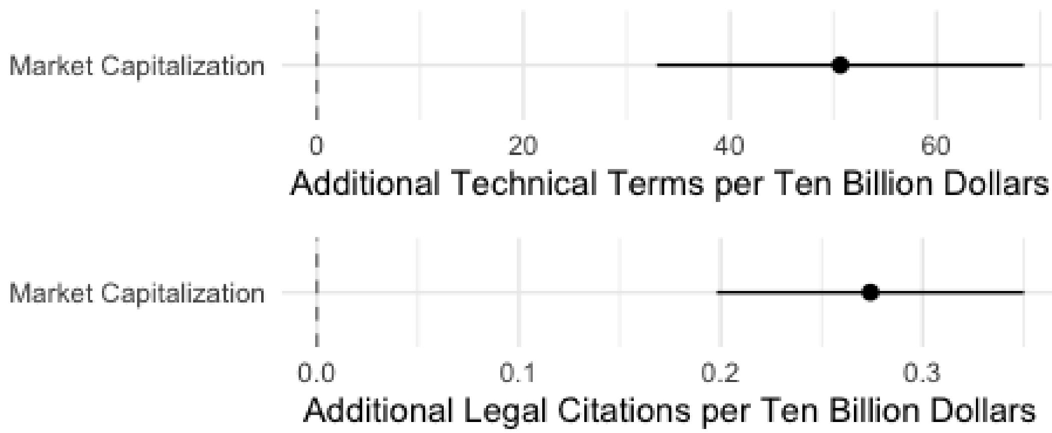
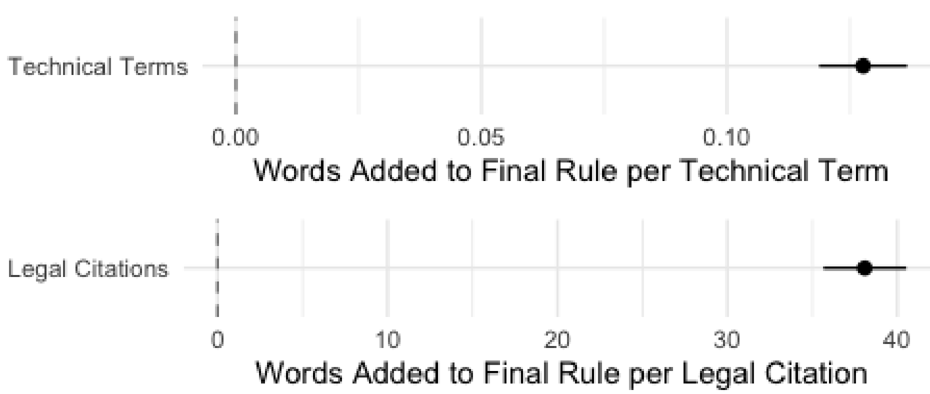


Figure 14: OLS Models of Lobbying Success by Legal and Technical Language



in an organization's comment is associated with an additional word added to the text of the final rule that was originally found in the organization's comment. Similarly, each additional legal citation in an organization's comment is associated with 34 additional words in the final rule.

4.2.5 Legal and Technical Sophistication Explains the Efficacy of Wealthy Companies

Finally, to draw firmer conclusions regarding the *Dividends of Sophistication* Hypothesis (H6), we use mediation analysis to estimate the extent to which the sophistication of the organizational comments explains the relationship between organizational wealth and lobbying success. Here we concentrate our analyses on publicly traded companies that submitted comments to our Dodd-Frank rules. Because the correlation between wealth and lobbying success was highest in these companies (see Figure 12), this subset offers the best test of a mediated effect. The company's market capitalization is the key predictor variable, lobbying success is the dependent variable in the main models, and the number of legal citations and technical terms are the proposed mediators (the dependent variable in the mediator model).

We find that the bulk of the relationship between wealth and efficacy can be attributed to wealthier organizations using more technical language and legal citations. Market capitalization is highly correlated with using technical terms, which are associated with efficacy. Thus, we can conclude that much of the effect of market capitalization on lobbying success results from using technical and legal terms. In a model with legal citations as the mediator (Figure 15), the Average Conditional Marginal Effect is nearly identical to the Total Effect of market capitalization on efficacy. This means that legal citations explain almost all of the greater success of wealthier companies (the estimated direct effect of wealth, controlling for the number of legal citations, is near zero). In a model with technical terms as the mediator (Figure 16), the Average Conditional Marginal Effect is a large share (69.4%) of the Total Effect of wealth on lobbying success. The conditional effects of both legal citations and technical language are significant at the .05 level.

Figure 15: Legal Citations as a Proposed Mediator Between Wealth and Efficacy

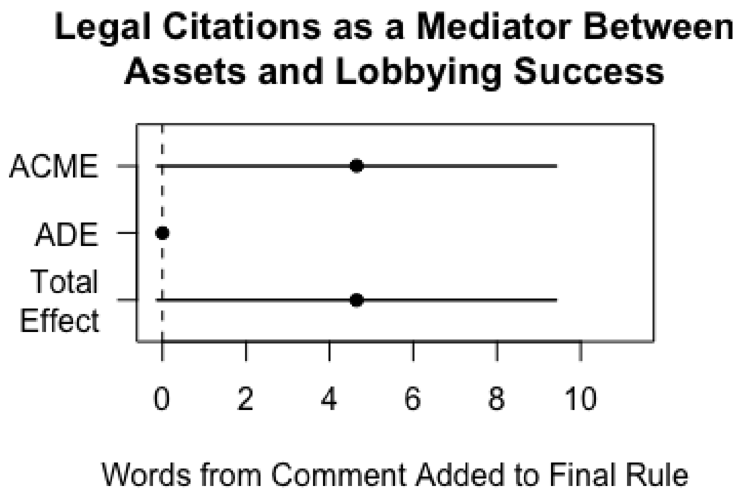
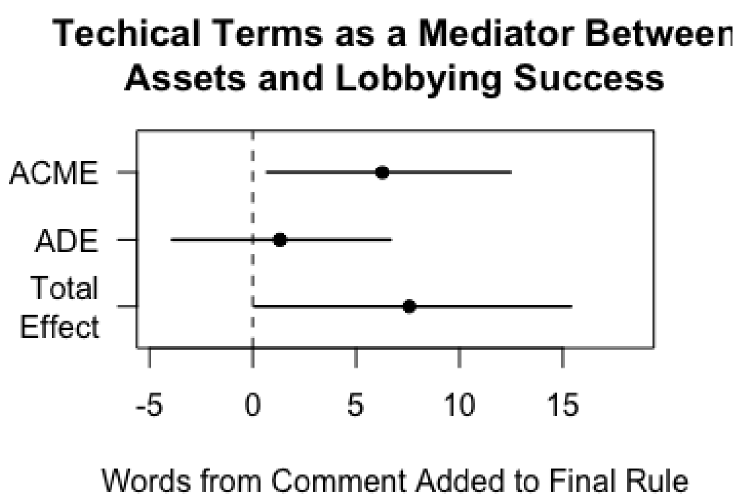


Figure 16: Technical Language as a Proposed Mediator Between Wealth and Efficacy



5 Conclusion

This paper offers a new and systematic perspective on inequality in bureaucratic policymaking by combining multiple methods and data sources. Our systematic approach, covering all rules across multiple agencies implementing the same landmark piece of legislation (the Dodd-Frank Act) and rich data on multiple participants, allows unique comparisons within and across agencies and types of organizations. This new dataset allows us to assess the relative level of access and lobbying success that different types of organizations enjoy across policymaking institutions.

We find support for theories that predict that societal inequality leads to inequality in the policy process. Vastly unequal levels of resources among organizations lead to inequalities in participation, frequency of participation, lobbying sophistication, and lobbying success. Further, we offer evidence that differences in lobbying success across wealthy and less wealthy organizations are a result of lobbying sophistication and that participation is profit-motivated.

We have shown that commenting is disproportionately concentrated among wealthier organizations. Many organizations do not have the baseline level of resources to engage in sophisticated lobbying. Our finding that wealthier companies generally advance more sophisticated comments suggests that wealth correlates with the lobbying behavior that past studies found to be most influential. Sophisticated and technical lobbying strategies are effective. Indeed this has been a common explanation for why businesses enjoy unique levels of access and influence in agency rulemaking (J. W. Yackee and Yackee 2006). Our results lend support to this theory. Where previous studies generally assume that businesses are wealthier, we show that businesses are wealthier and that within and across types of organizations—including businesses—organizations with more engage in more sophisticated and technical lobbying efforts.

We have also shown that corporate wealth is positively correlated with the best available quantitative measures of commenter lobbying success. Wealth (measured by market capitalization) is strongly correlated with efficacy among publicly-traded firms. Market capitalization is also highly correlated with using technical terms, which are associated with efficacy, and causal mediation analysis suggests that much of the effect of market cap on efficacy is a result of the use of technical and legal terms. Given previous research and our analysis of commenter sophistication, this finding may not be surprising, but the magnitude of these relationships has implications for future research and policy reforms.

The study also has several limitations. For instance, our analyses of wealth focus on organizational commenters, setting aside the views of individual participants, including those submitted via form commenters. Additionally, our tools and findings are focused on the notice and comment rulemaking process and thus, must be combined in the future with observations drawn from the legislative policymaking process to provide a full picture of how inequality may manifest across policymaking in America's key political institutions.

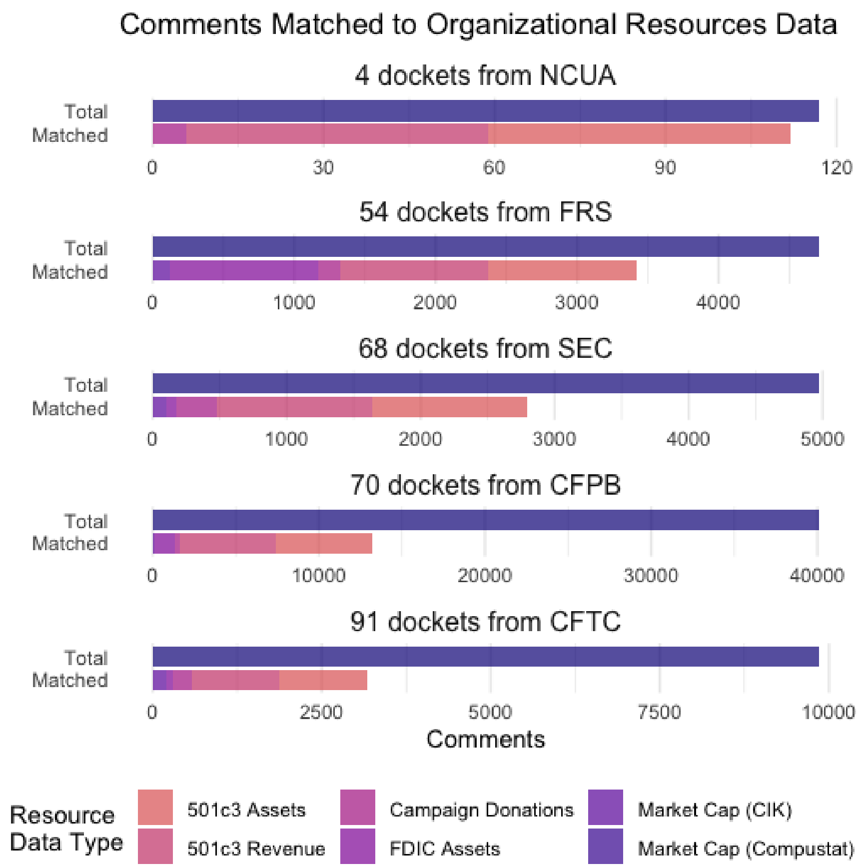
Finally, this study presents a model for studying inequality in the new center of U.S. policymaking. With the rise of the administrative state, scholars have documented the importance of agency rulemaking. Landmark studies have documented institutional bias towards businesses (J. W. Yackee and Yackee 2006) and the massive gains that businesses gain by lobbying agencies (Libgober and Carpenter 2020). However, systematic study of these many diverse and complex policy processes is difficult. Because of this, our limited understanding of the biases in the process has not been matched with systematic data on the forces behind these biases. The methods we used to document inequality in financial rulemaking are designed to be scalable and reproducible so that future work can compare levels of inequality across other policy domains. Agency rulemaking dominates many policy domains. Companies and other interest groups spend much of their lobbying efforts on agency rulemaking. These methods open up to systematic study the biases of administrative democracy.

Table 3: Comments, Comment Attachments, Comment Sophistication, Comment Efficacy, and Commenter Wealth Data on Rules Implimenting the Dodd-Frank Act

Agency	Attachments	Comments	Efficacy and Sophistication Measures	Wealth Measures
CFPB	70,778	231,589	231,589	11,813
CFTC	8,496	37,675	37,675	3,087
FRS	7,146	7,116	7,116	3,383
NCUA	53	66	66	78
OCC	11,926	12,017	12,017	0
SEC	6,998	9,368	9,368	2,991
FDIC	0	807	807	0

Appendix

Figure 17: Dockets and Comments Matched to Asset Data by Agency



QUESTION Do we prefer density plots to the count plots in Figure 6? The ones in the pape body take up a bit more space than these, which are simpler, but the histograms have the means and medians on the plot. Is the added detail of the ones we have in the paper worth the extra space? Or would these density plots make the point clearer?

Figure 18: Financial Resources of Organizations that Did and Did Not Comment

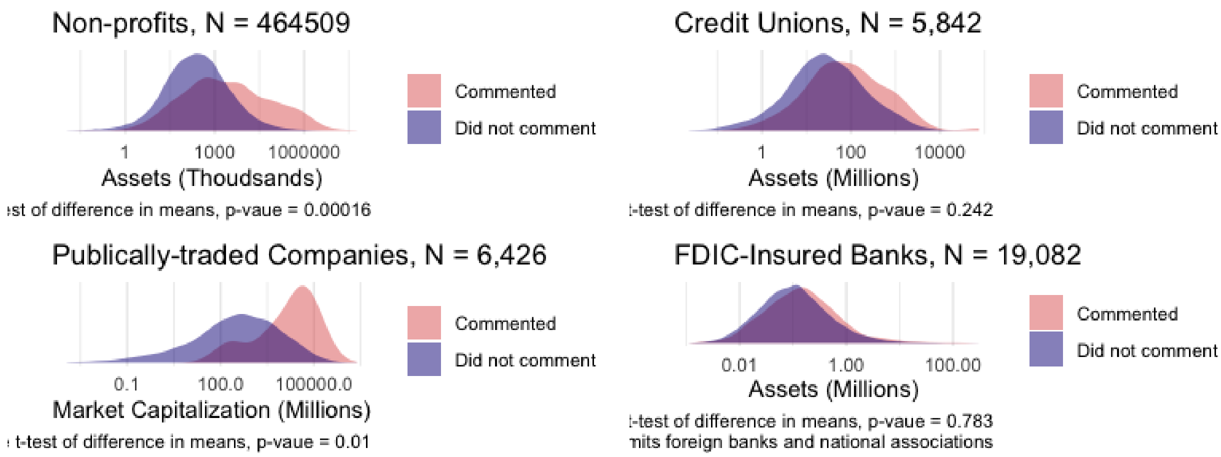


Figure 19: Number of Dockets on Which Each Type of Organization Commented

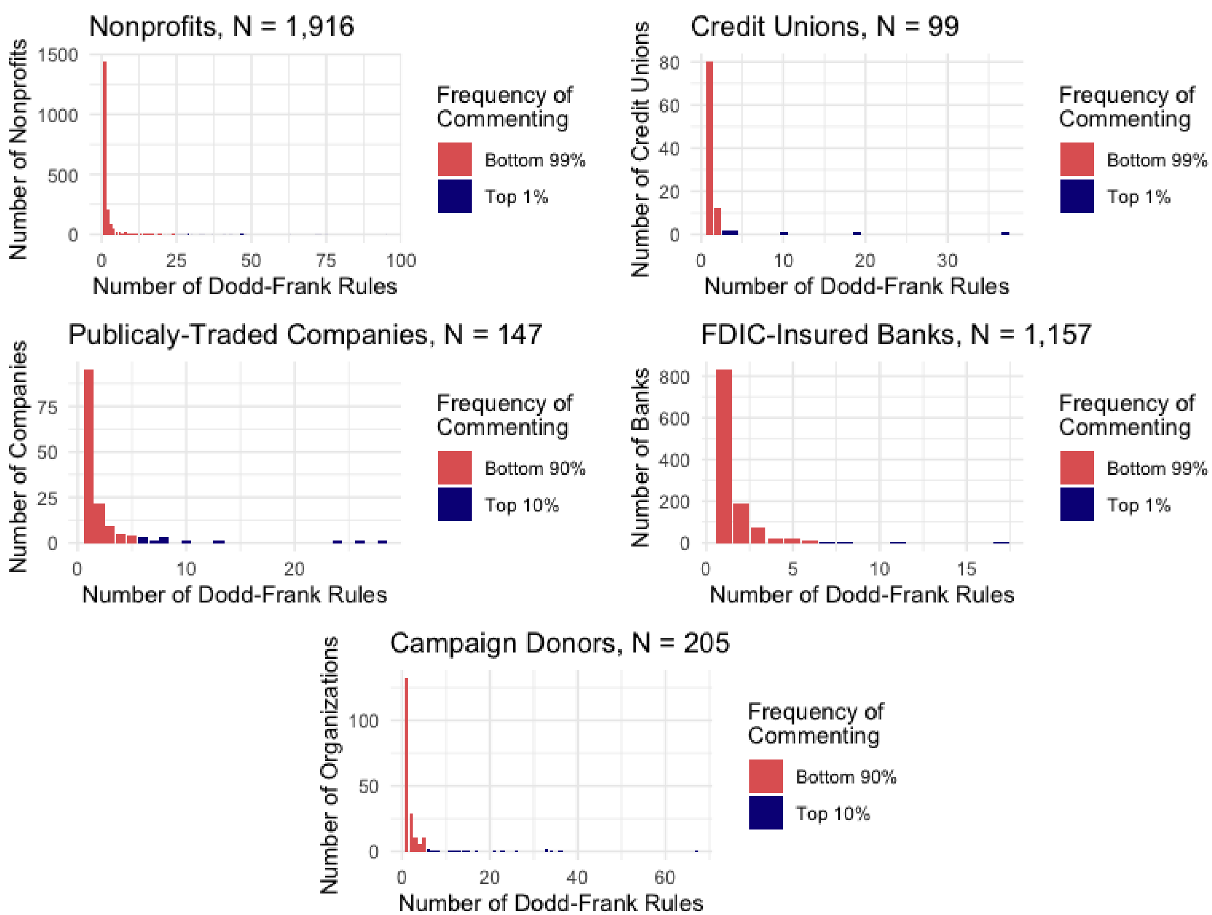


Figure 20: Frequent and Infrequent Commenters (By the Number of Dockets on Which each Organization Commented) by Resources (Log Scale)

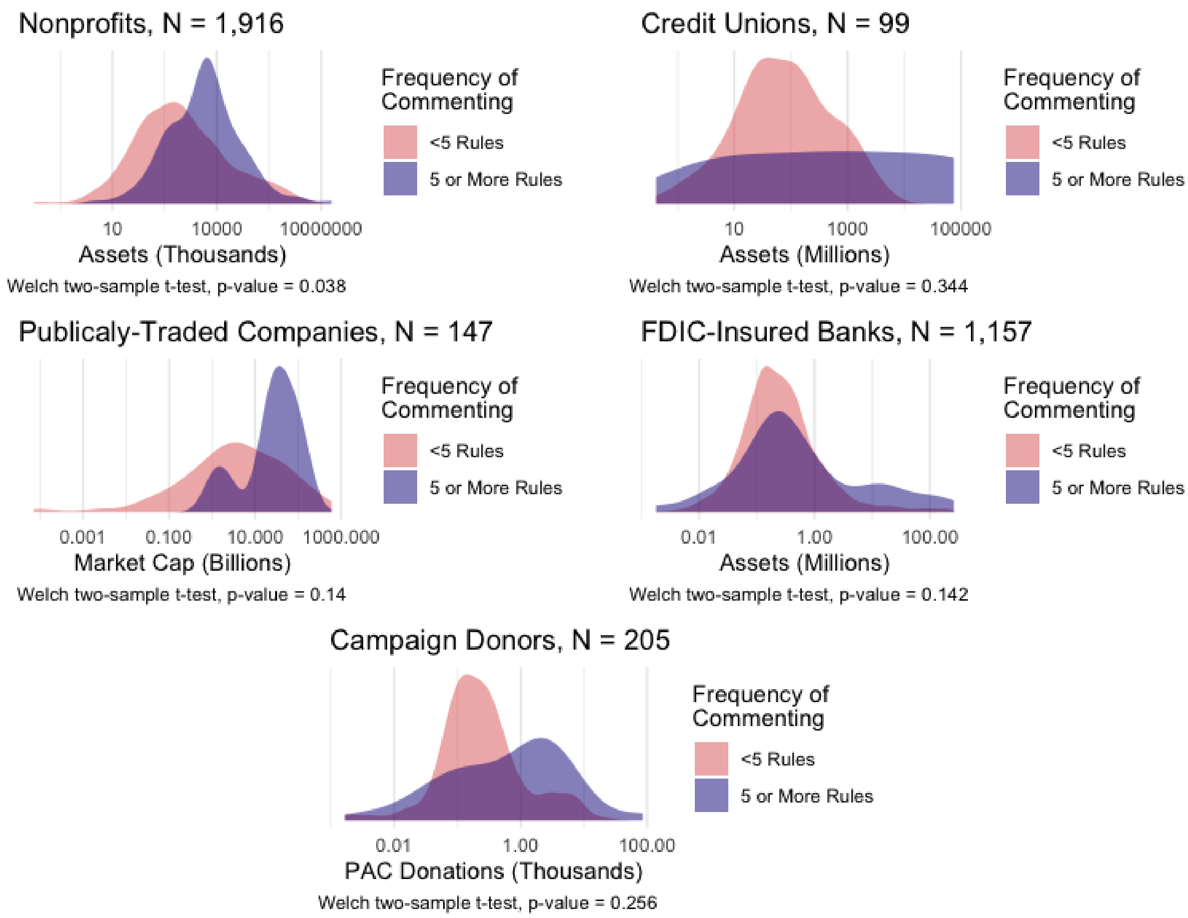


Table 4: Log Odds of Commenting on Any Dodd-Frank Rule

	FDIC-Insured Banks	Nonprofits	Credit Unions
Dependent Variable	**Commented**	**Commented**	**Commented**
Assets (Billions)	9.040***	0.146***	0.010*
	(2.672)	(0.027)	(0.004)
Num.Obs.	19 082	464 509	5842
Log.Lik.	−6418.955	−5416.122	−497.095

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

Table 5: Log Odds of Commenting on Any Dodd-Frank Rule by Bank Type

	Model 1	Model 2
Dependent Variable	**Comment**	**Comment**
Assets (Hundreds of Millions)	0.904***	0.992***
	(0.267)	(0.272)
Commercial Bank		1.393***
		(0.095)
Savings Bank		1.200***
		(0.145)
State Bank		1.486***
		(0.107)
Num.Obs.	19 082	19 082
Log.Lik.	−6418.955	−6255.521

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

Table 4 presents the full the regression table for models shown in Figure 5.

Table 5 presents the full the regression table for models shown in Figure 9.

Refrences

10 Balla, Steven. 1998. “Administrative Procedures and Political Control of the Bureaucracy.” *American Political Science Review* 92 (3, 03): 663–73.

Ban, Pamela, and Hye Young You. 2019. “Presence and Influence in Lobbying: Evidence from Dodd-Frank.” *Business and Politics* 21 (2): 267–95. https://doi.org/10.1017/bap.2018.27.

Bartels, Larry M. 2008. *Unequal Democracy: The Political Economy of the New Gilded Age*. STU - Student edition. Princeton University Press. http://www.jstor.org/stable/j.ctt7t9ks.

Baumgartner, Frank, Jeffrey Berry, Marie Hojnacki, David Kimball, and Beth Leech. 2009. *Lobbying and Policy Changes: Who Wins, Who Loses, and Why.* University of Chicago Press.

Carpenter, Daniel. 2010. *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA*. Princeton University Press.

Carpenter, Daniel P. 2001. *The Forging of Bureaucratic Autonomy: Reputations, Networks, and Policy Innovation in Executive Agencies, 1862-1928.* Princeton University Press.

Carpenter, Daniel P., and George A Krause. 2012. “Reputation and public administration.” *Public Administration Review* 72 (1): 26–32.

Carpenter, Daniel, Devin Judge-Lord, Brian Libgober, and Steven Rashin. 2020. “Data and Methods for Analyzing Special Interest Influence in Rulemaking.” *Interest Groups & Advocacy* 9. https://doi.org/10.1057/s41309-020-00094-w.

Carpenter, Daniel, and David Moss. 2013. *Preventing Regulatory Capture: Special Interest Influence and How to Limit it.* Cambridge University Press.

Casas, Andreu, Matthew J Denny, and John Wilkerson. 2019. “More Effective Than We Thought: Accounting for Legislative Hitchhikers Reveals a More Inclusive and Productive Lawmaking Process” 64: 5–18.

Copeland, Curtis W. 2010. “Rulemaking Requirements and Authorities in the Dodd-Frank Wall Street Reform and Consumer Protection Act.” Congressional Research Service; CRS. http://www.llsdc.org/assets/DoddFrankdocs/crs-r41472.pdf.

Cornaggia, Jess, Kimberly J. Cornaggia, and Han Xia. 2016. “Revolving Doors on Wall Street.” *Journal of Financial Economics* 120 (2): 400–419. https://EconPapers.repec.org/RePEc:eee:jfinec:v:120:y:2016:i:2:p:400-419.

Engel, Kathleen C., and Patricia A. McCoy. 2011. *The Subprime Virus Reckless Credit, Regulatory Failure, and Next Steps.* Oxford University Press.

Epstein, David, and Sharyn O’Halloran. 1999. *Delegating powers: a transaction cost politics approach to policy making under separate powers.* Cambridge University Press. https://books.google.com/books/about/Delegating%7B/_%7DPowers.html?id=kczTG%7B/_%7DftaC8C.

Gilens, Martin. 2012. *Affluence & Influence: Economic Inequality and Political Power in America.* Princeton University Press.

Gilens, Martin, and Benjamin I. Page. 2014. “Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens.” *Perspectives on Politics* 12 (03): 564–81. https://doi.org/10.1017/S1537592714001595.

Golden, Marissa. 1998. "Interest Groups in the Rule-Making process: Who Participates? Whose Voices Get Heard?" *Journal of Public Administration Research and Theory* 8 (2): 245–70.

Goldin, Claudia, and Lawrence F. Katz. 2009. "The Future of Inequality." *Milken Institute Review* Q3.

Gordon, Sanford C., and Howard Rosenthal. 2020. "Cross-Ideological Coordination by Private Interests: Evidence from Mortgage Market Regulation Under Dodd-Frank." *Business and Politics* 22 (2): 383–411. https://doi.org/10.1017/bap.2019.17.

Hacker, Jacob, and Paul Pierson. 2010. *Winner Take All Politics*. Simon; Schuster.

Haeder, Simon F., and Susan Webb Yackee. 2020. "Policies That Bind? The Use of Guidance Documents by Federal Agencies." *Journal of Health and Human Services Administration* 43: 87–100.

Haeder, Simon, and Susan Webb Yackee. 2015. "Influence and the Administrative Process: Lobbying the U.S. President's Office of Management and Budget." *American Political Science Review* 109 (3): 507–22. https://doi.org/10.1017/S0003055415000246.

Huber, John D., and Charles R. Shipan. 2002. *Deliberate discretion : the institutional foundations of bureaucratic autonomy*. Cambridge University Press. http://www.cambridge.org/ca/academic/subjects/politics-international-relations/comparative-politics/deliberate-discretion-institutional-foundations-bureaucratic-autonomy?format=PB%7B/&%7Disbn=9780521520706%7B/#%7DoLj9BJk19UIhQhSW.97.

Igan, Deniz, Prachi Mishra, and Thierry Tressel. 2011. "A Fistful of Dollars: Lobbying and the Financial Crisis." *NBER Macroeconomics Annual* 26.

James, Scott, Stefano Pagliari, and Kevin L. Young. 2021. "The Internationalization of European Financial Networks: A Quantitative Text Analysis of EU Consultation Responses." *Review of International Political Economy* 28 (4): 898–925. https://doi.org/10.1080/09692290.2020.1779781.

Jewell, and Bero. 2006. "Public Participation and Claimsmaking: Evidence Utilization and Divergent Policy Frames in California's Ergonomics Rulemaking." *Journal of Public Administration Research and Theory* 17 (4): 625–50. https://doi.org/10.1093/jopart/mul023.

Johnson, Simon, and James Kwak. 2010. *13 Banker*. Pantheon Books.

Judge-Lord, Devin. 2017. "Measuring Change and Influence in Budget Texts." In. The Society for Political Methodology Annual Conference.

———. 2019. "Why Do Agencies (Sometimes) Get so Much Mail? Lobbying Coalitions, Mass Comments, and Political Information in Bureaucratic Policymaking." In. Southern Political Science Association Annual Conference.

Kelly, Nathan J., and Peter K. Enns. 2010. "Inequality and the Dynamics of Public Opinion: The Self-Reinforcing Link Between Economic Inequality and Mass Preferences." *American Journal of Political Science* 54 (4): 855–70. https://doi.org/https://doi.org/10.1111/j.1540-5907.2010.00472.x.

Kerwin, Cornelius M., and Scott R. Furlong. 2018. *Rulemaking: How Government Agencies Write Law and Make Policy*. 5th ed. Washington, DC: CQ Press.

Krawiec, Kimberly D. 2013. "Don't 'Screw Joe the Plummer': The Sausage-Making of Financial Reform." *Arizona Law Review* 55: 53–103.

Kwak, James. 2013. "Cultural Capture and the Financial Crisis." In *Preventing Regulatory Capture*, edited by Dan Carpenter and David Moss.

LaCapra, Lauren Tara, and Douwe Miedema. 2013. "INSIGHT-Resigned to Reform, Wall St Tries a Different Tack in DC." *Reuters*, July. https://www.reuters.com/article/dodd-frank-lobbying/insight-resigned-to-reform-wall-st-tries-a-different-tack-in-dc-idINL1N0FP16620130721.

Libgober, Brian. 2019. "Meetings, Comments, and the Distributive Politics of Rulemaking." *Quarterly Journal of Political Science*.

Libgober, Brian, and Dan Carpenter. 2020. "What's at Stake in Rulemaking? Financial Market Evidence for Banks' Influence on Administrative Agencies." %7Bhttps://libgober.files.wordpress.com/2018/09/libgober-and-carpenter-unblinded-what-at-stake-in-rulemaking.pdf%7D.

Lowi, Theodore J. 1964. "American Business, Public Policy, Case-Studies, and Political Theory." *World Politics* 16 (4): 677–715. https://doi.org/10.2307/2009452.

Lucca, David, Amit Seru, and Francesco Trebbi. 2014. "The Revolving Door and Worker Flows in Banking Regulation." *NBER Working Paper*. https://doi.org/10.3386/w20241.

McCubbins, Mathew D., Roger G. Noll, and Barry R. Weingast. 1987. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, & Organization* 3 (2): 243–77. https://doi.org/10.1093.

McKay, Amy, and Susan Webb Yackee. 2007. "Interest Group Competition on Federal Agency Rules." *American Politics Research* 35: 336.

Olson, Mancur. 1965. *The Logic of Collective Action*.

Page, Benjamin I., Larry M. Bartels, and Jason Seawright. 2013. "Democracy and the Policy Preferences of Wealthy Americans." *Perspectives on Politics* 11 (1): 51–73. https://doi.org/10.1017/S153759271200360X.

Piketty, Thomas. 2014. *Capital in the Twenty-First Century*. Harvard University Press. https://doi.org/doi:10.4159/9780674369542.

Powell, Eleanor Neff, Devin Judge-Lord, and Justin Grimmer. 2022. "Legislator Advocacy on Behalf of Constituents and Corporate Donors: A Case Study of the Federal Energy Regulatory Commission." In *Accountability and Public Policy: Voters and Governance in the Contemporary United States*, edited by Brandice Canes-Wrone, Gregory Huber, Sanford Gordon, and Charles M. Cameron. Cambridge University Press. https://judgelord.github.io/research/ferc/.

Protess, Ben, and Julie Hirschfeld Davis. 2017. "Trump Moves to Roll Back Obama-Era Financial Regulations." *New York Times*, February. https://www.nytimes.com/2017/02/03/business/dealbook/trump-congress-financial-regulations.html.

Radnofsky, Louise, and Rachel Feintzeig. 2017. "Donald Trump Turns to CEOs to Help Shape Economic, Health Policy; President Listens to Corporate Leaders' Feedback on Travel Ban." *Wall Street Journal (Online)*. http://ezproxy.lib.utexas.edu/login?url=https://www.proquest.com/newspapers/donald-trump-turns-ceos-help-shape-economic/docview/1864893873/se-2?accountid=7118.

Rashin, Steven. 2018. "'Private Influence over the Policymaking Process'." In. Southern Political Science Association Annual Conference.

Rashin, Steven Daniel. 2020. "Essays on Private Influence on the Policymaking Process." New York University.

Rossi, Jim. 1997. “Participation Run Amok: The Costs of Mass Participation for Deliberative Agency Decisionmaking.” *Northwestern Law Review* 92 (1). https://papers.ssrn.com/sol3/papers.cfm?abstract%7B/_%7Did=571127.

Saez, Emmanuel, and Gabriel Zucman. 2020. “The rise of income and wealth inequality in America: Evidence from distributional macroeconomic accounts.” *Journal of Economic Perspectives* 34 (4): 3–26. https://doi.org/10.1257/JEP.34.4.3.

Schlozman, Kay Lehman, Sidney. Verba, and Henry E. Brady. 2012. *The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy.* Princeton University Press.

Skocpol, Theda. 2004. “Voice and Inequality: The Transformation of American Civic Democracy.” *Perspectives on Politics* 2 (1): 3–20. https://doi.org/10.1017/S1537592704000593.

“The Revolving Door and the SEC’s Enforcement Outcomes: Initial Evidence from Civil Litigation.” n.d. *Journal of Accounting and Economics 60(2):65-96.* https://doi.org/10.1016/j.jacceco.2015.07.010.

Volden, Craig. 2002. “A Formal Model of the Politics of Delegation in a Separation of Powers System.” *American Journal of Political Science* 46 (1): 111–33. https://doi.org/10.2307/3088417.

Wagner, Wendy, Katherine Barnes, and Lisa Peters. 2011. “Rulemaking in the Shade: An Empirical Study of EPA’s Air Toxic Emissions Standards.” *Adminstrative Law Review* 63 (1): 99–158.

West, William. 2004. “Formal Procedures, Informal Processes, Accountability, and Responsiveness in Bureaucratic Policy Making: An Institutional Policy Analysis.” *Public Administration Review* 64 (1): 66–80. https://doi.org/10.1111/j.1540-6210.2004.00347.x.

West, William F. 1995. *Controlling the Bureaucracy: Institutional Constraints in Theory and Practice.* New York, NY: Routledge. https://doi.org/https://doi.org/10.4324/9781315482453.

Wilkerson, John, David Smith, and Nicholas Stramp. 2015. “Tracing the Flow of Policy Ideas in Legislatures: A Text Reuse Approach.” *American Journal of Political Science* 59 (4): 943–56. https://doi.org/10.1111/ajps.12175.

Wilson, James Q. 1989. *Bureaucracy: what government agencies do and why they do it.* Basic Books. https://books.google.com/books/about/Bureaucracy.html?id=jg-HAAAAMAAJ https://books.google.com/books/about/Bureaucracy.html?id=1aR54vBa2E4C.

Winters, Jeffrey A., and Benjamin I. Page. 2009. “Oligarchy in the United States?” *Perspectives on Politics* 7 (4): 731–51.

Witko, Christopher, Jana Morgan, Nathan J. Kelly, and Peter K. Enns. n.d. *Hijacking the Agenda: Economic Power and Political Influence.* Russel Sage Foundation.

Wood, B. Dan, and Richard W Waterman. 1994. *Bureaucratic Dynamics.* Boulder, CO: Westview Press.

Yackee, Jason Webb, and Susan Webb Yackee. 2006. “A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy.” *The Journal of Politics* 68 (1): 128–39. https://doi.org/10.2307/3449611.

Yackee, Susan Webb. 2006. “Sweet-Talking the Fourth Branch: The Influence of Interest Group Comments on Federal Agency Rulemaking.” *Journal of Public Administration Research and Theory* 16 (1): 103–24. https://doi.org/10.1093/jopart/mui042.

———. 2012. “The Politics of Ex Parte Lobbying: Pre-Proposal Agenda Building and Blocking during Agency Rulemaking.” *Journal of Public Administration Research and Theory* 22 (2): 373–93. https://doi.org/10.1093/jopart/mur061.

———. 2015. “Participant Voice in the Bureaucratic Policymaking Process.” *Journal of Public Administration Research and Theory* 25 (2): 427–49. https://doi.org/10.1093/jopart/muu007.

———. 2019. “The Politics of Rulemaking in the United States.” *Annual Review of Political Science* 22 (1): 37–55. https://doi.org/10.1146/annurev-polisci-050817-092302.

You, Hye Young. 2017. “Ex Post Lobbying.” *The Journal of Politics* 79 (4): 1162–76. https://doi.org/10.1086/692473.

Young, Kevin. 2012. “Transnational Regulatory Capture? An Empirical Examination of the Transnational Lobbying of the Basel Committee on Banking Supervision.” *Review of International Political Economy* 19: 663–88.

Young, Kevin L, Tim Marple, and James Heilman. 2017. “Beyond the Revolving Door: Advocacy Behavior and Social Distance to Financial Regulators.” *Business and Politics* 19 (2): 327–64.

Young, Kevin, Tim Marple, and James Heilman. 2017. “Beyond the Revolving Door: Advocacy Behavior and Social Distance to Financial Regulators.” *Business and Politics* 19 (2): 327–64. https://doi.org/10.1017/bap.2017.10.

Young, Kevin, and Stefano Pagliari. 2017. “Capital United? Business Unity in Regulatory Politics and the Special Place of Finance.” *Regulation & Governance* 1.

Ziegler, J. Nicholas, and John T. Woolley. 2016. “After Dodd-Frank: Ideas and the Post-Enactment Politics of Financial Reform in the United States.” *Politics & Society* 44 (2): 249–80. https://doi.org/10.1177/0032329216638061.