FAILURE TO CAPTURE: WHY BUSINESS DOES NOT CONTROL THE RULEMAKING PROCESS

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ABSTRACT

Leading figures on both the political right and the political left have concluded that the agency rulemaking process is captured: that it serves to benefit businesses, at the expense of the general public. This perception appears to be supported by recent theoretical and empirical scholarship and has prompted lawmakers to introduce various proposals to reform the federal rulemaking process.

Yet as I will demonstrate in this Article, the view of the rulemaking process as captured is unwarranted. I will show that the academic literature actually provides little guidance as to the magnitude of business influence—that is, the extent to which businesses are able to achieve their desired regulatory outcomes. Drawing on an extensive and original empirical investigation of the Tank Car Rule, a major rule issued by the Department of Transportation in 2015, I will uncover several key limitations on business influence in the rulemaking process. Taken together, these limitations show that businesses do not routinely exert anything approaching systematic control over the federal rulemaking process.

This conclusion undercuts two prominent concerns associated with the capture account of regulation by showing that the regulatory process may still serve the public interest, and by defusing a possible threat to the democratic legitimacy of agency rules. In addition, it provides reason to disfavor major reforms to the rulemaking process, and suggests that some proposed reforms could even have the opposite effect and serve to augment business influence.

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INTRODUCTION

A growing chorus of prominent voices on both the political right and the political left have concluded that interest groups have captured the administrative state. For instance, Senator Sheldon Whitehouse has written that “agency capture is . . . a threat to the integrity of government,” and warned that the “ever-deepening reach of corporate interests into our environmental regulator will have consequences for this generation and those to come.” Observers have attributed a number of recent catastrophes—ranging from the Great Recession of 2008 to the BP oil spill—to such regulatory capture. Much of this criticism has focused in particular on the role that interest groups—and more specifically, businesses—play in the administrative rule-making process: the process by which federal administrative agencies issue

4. Daniel Carpenter & David A. Moss, Introduction to Preventing Regulatory Capture: Special Interest Influence and How to Limit It 1 (Daniel Carpenter & David A. Moss eds., 2014).
regulations. Senator Elizabeth Warren has written that “[w]hen it comes to undue industry influence, our rulemaking process is broken from start to finish.” The rulemaking process is, of course, enormously consequential: For decades, the vast majority of federal laws have been issued by administrative agencies, and interest groups consider participating in administrative rulemaking to be as important, or more important, than lobbying Congress. Under the regulatory capture view, businesses control the rulemaking process, with the result that regulation serves primarily to benefit them at the expense of the general public.

In response, government policymakers have increasingly investigated allegations of regulatory capture and proposed various reforms to the rulemaking process in order to reduce capture. For example, Senator Warren has introduced a bill which would, among other things, impose additional disclosure requirements, install a public advocate into the regulatory process, and prevent the Office of Information and Regulatory Affairs (“OIRA”) from
communicating with non-executive branch officials. Meanwhile, in 2017, the then-Republican-controlled House of Representatives passed the Regulations from the Executive in Need of Scrutiny Act (“REINS Act”), which would require Congress to affirmatively approve most new major regulations, subjecting them to the same process as legislation. Proponents of the REINS Act have argued that putting more decision-making authority in the hands of Congress would (perhaps counter-intuitively) curb interest group influence by rendering the regulatory process more subject to public scrutiny.

At first glance, a burgeoning body of empirical research in law and political science appears to support the view that the rulemaking process has been captured. This research consistently finds that businesses disproportionately participate in the rulemaking process, and some research even purports to show that this disproportionate participation by business leads to greater influence over the content of the rules that agencies issue.13 At the

12. See, e.g., Jonathan H. Adler, Placing “Reins” on Regulations: Assessing the Proposed REINS Act, 16 N.Y.U. J. LEGIS. & PUB. POL’Y 1, 32 (2013) (“The primary effect of the REINS Act would . . . [be] to ensure that those major regulations adopted are those that can command majority legislative support, not merely those that are endorsed by concentrated or highly motivated interests . . . .”); Lee, supra note 3 (“One of the unintended—but indisputable—consequences of Congress recasting itself as the backseat driver of American government has been to move the bulk of lawmaking into the bureaucracy, where the opaque and highly technical decision-making process facilitates regulatory capture by concentrated interests.”); John W. York, REINS Act Opposition Displays Contempt for Consent of the Governed, FEDERALIST (Mar. 17, 2017), http://thefederalist.com/2017/03/17/reins-act-opposition-displays-contempt-consent-governed/ (“By requiring congressional approval for major regulations, the REINS Act threatens this arrangement. If passed, it will cut special interests’ influence, leaving them to fight for Congress’s attention and the public’s approval.”). Even some policymakers who do not support the REINS Act have echoed the idea that the rulemaking process’s lack of transparency renders it more susceptible to interest group influence than the legislative process. See, e.g., Elizabeth Warren, U.S. Senator from Mass., Tilting the Scales: Corporate Capture of the Rulemaking Process, Remarks at the Administrative Conference of the United States: Regulatory Capture Forum 1–2 (Mar. 3, 2016), https://www.acus.gov/sites/default/files/documents/2016-3-3_Warren_ACUS_Speech.pdf (“The tilt in Congress is pretty much out there for everyone to see . . . . But corporate influence works its magic even better in the shadows—and that’s where rulemaking occurs.”).
same time, a resurgence in theoretical scholarship about regulatory capture has brought attention to structural features of the federal regulatory system that may cause even well-intentioned regulators to favor business interests over public interest groups and individual members of the public.14

This Article will argue that the view of the rulemaking process as captured is not warranted—that the rulemaking process is not “broken.” It will show that although recent scholarship finds that businesses participate more and exert more influence in the rulemaking process than other types of interest groups, there are still important unresolved questions about the magnitude of business influence in the rulemaking process. Neither the theoretical literature on agency capture nor the empirical literature on interest group influence in the rulemaking process demonstrates that businesses routinely control regulatory outcomes, nor does this literature undercut the possibility that agencies for the most part are able to pursue public interested regulations in the face of industry pressure.

This Article will uncover several important limitations on business influence through an in-depth empirical case study of the “Tank Car Rule,” a major safety regulation promulgated by the Department of Transportation (“DOT”) in 2015 that aimed to increase the safety of flammable liquids shipped by rail. Drawing on an original analysis of thousands of public submissions to DOT during the Tank Car Rule rulemaking process, as well as interviews with officials and interest group representatives involved in this process, I uncover four key reasons why businesses have less influence than the existing evidence suggests. First, even when business interests are in general agreement that they would like the rule to be less stringent overall, they differ on important issues on a given rule. Second, even when the overall stringency of a rule shifts in the direction that business interests generally desire, they still are unlikely to receive their full desired changes. Third, examining businesses interests’ influence at specific stages of the rulemaking process—most notably, the notice-and-comment period—likely overstates their influence on the rule as a whole. Fourth, by several measures, business interests make more limited and realistic requests during the notice-and-comment period than individual members of the public and public interest groups.


Together, these findings suggest that we cannot infer from the existing evidence that businesses have captured the federal rulemaking process—that it serves primarily to benefit their interests at the expense of the general public. This conclusion in turn insulates the regulatory system against two prominent concerns associated with the regulatory capture view of the rulemaking process: that the regulatory system fails to serve the public interest and that it lacks democratic legitimacy.

First, the conclusion that the regulatory capture view of the rulemaking process is unwarranted suggests that our regulatory system may well still serve the public interest. Although many people might reasonably be disturbed by the evidence that businesses exert disproportionate influence over regulations, this evidence alone does not demonstrate that our regulatory system is primarily benefiting businesses at the expense of the general public. For instance, Professors Daniel Carpenter and David Moss speculate that the existing level of business influence is likely making our regulatory system worse than it otherwise would be, but they speculate that we are still better off with the system we have than we would be without any regulation. Several scholars have gone further, arguing that greater business influence can in some circumstances lead to better regulatory outcomes overall, for example, by encouraging businesses to provide agencies with better information or by creating a powerful political constituency for new regulations.

Second, this conclusion also helps to insulate the regulatory system against the concern that rulemaking lacks democratic legitimacy. Agency rules’ legitimacy derives not only from Congress’s passage of their authorizing legislation, but also from the public’s effective participation in the administrative process. By the same token, the perceptions that the public has been prevented from participating in regulatory decisions, or that such participation is ineffectual, serve to undermine agency rules’ legitimacy. To

15. Carpenter & Moss, supra note 4, at 11–12.
16. See, e.g., Laurence Tai, Harnessing Industry Influence, 68 ADMIN L. REV. 1 (2016) (arguing we should aim to encourage—rather than discourage—industry influence over regulations in order to incentivize industry to provide more information to agencies); David Thaw, Enlightened Regulatory Capture, 89 WASH. L. REV. 329 (2014) (examining a case where regulatory capture by an advisory committee comprising private interests advanced public goals); Matthew Wansley, Virtuous Capture, 67 ADMIN. L. REV. 419 (2015) (arguing there are some cases in which regulatory capture serves to advance the public interest).
17. See, e.g., Kerwin & Furlong, supra note 5, at 168 (“The legitimacy of the rulemaking process is clearly linked to public participation.”); Furlong & Kerwin, supra note 7, at 354 (“The legitimacy of rules is derived from two sources, with the first being the authorizing statutes noted above. The second source of legitimacy is the process by which unelected officials develop the rules. . . . [T]he most important procedural element is the central, indeed indispensable, role of public participation in the development of rules. Public participation serves, in effect, as a substitute for the electoral process that bestows constitutional legitimacy on legislation.”).
the extent that businesses do in fact control regulations, agency rulemaking would appear to lack legitimacy; yet to the extent that businesses do not exert such control, this source of legitimacy would seem to remain intact.

In addition, this conclusion has important implications for how to improve the regulatory process to limit excessive interest group influence. If it were in fact the case that businesses primarily controlled the regulatory process, then that might warrant deregulating or radically restructuring our regulatory regime.19 Of course, even if business interests do not control the rule-making process, one may still reasonably be concerned that they have too many advantages relative to other interest groups and individuals and that reforms are necessary to level the playing field.20 But such a conclusion would seem to justify more incremental reforms, rather than radically restructuring the process by which agencies issue rules.

Part I will describe the theory of regulatory capture and how this theory has evolved, review the empirical literature on interest group participation and influence in the rulemaking process, and explore what questions still remain unanswered. Part II will describe the Tank Car Rule and the case study methodology, and explore several limitations of interest group influence on the formulation of this rule. Part III will examine the implications for the utility of the regulatory system, for its democratic legitimacy, and for regulatory reform.

All this is not to deny that there are problems with the federal regulatory system or that businesses wield important influence in the development of regulations. One important caveat is that while this study focuses only on business interests’ direct participation and influence in the rulemaking process, businesses have numerous other tools at their disposal to influence regulatory policy. For example, “[b]usiness interests can persuade members of

19. Judge Richard Posner implies that such a prescription may have been warranted in the late 1970s, when industry-specific regulatory agencies such as the Interstate Commerce Commission and the Civil Aeronautics Board were deregulated. Richard Posner, The Concept of Regulatory Capture, in PREVENTING REGULATORY CAPTURE: SPECIAL INTEREST INFLUENCE AND HOW TO LIMIT IT, supra note 4, at 75; see also Carpenter & Moss, supra note 4, at 5 (“All too frequently, moreover, casual claims of capture are associated with demands that the regulatory policy or agency in question be not merely reformed but abandoned.”).

20. See, e.g., Bull, supra note 18, at 627–28 (arguing that more balanced participation in the rulemaking process will result in agencies receiving more accurate information and a “sense of investedness on the part of public participants”).
Congress to pressure agencies not to regulate or adopt weak regulations, and can influence the White House to appoint administrators hostile to an agency’s mission." Business interests may also wield influence through the “revolving door” between regulated industries and government positions. There are numerous examples of business interests using these tools to their own advantage.

Yet by painting an exaggerated portrait of these problems, the capture account risks further undermining public trust in government and leading to unnecessary or unwise regulatory reforms, some of which could even augment business influence in the regulatory process. In a legal system that relies on regulations as a principal source for ordering business activity, understanding the nature and extent of business influence is essential to deciding whether—and how—to reform the regulatory system.

I. THEORIES AND EVIDENCE OF INTEREST GROUP INFLUENCE

A. Regulatory Capture and Its Progeny

The modern literature on interest group influence in the administrative rulemaking process has been shaped by, and to a large extent reflects, the theory of regulatory capture. The scholarly literature on regulatory capture dates back to the early 1950s (and its intellectual antecedents go back much further), but it gained prominence with the ascendance of the Chicago school of economics, and in particular with George Stigler’s influential 1971 essay, The Theory of Economic Regulation. In his essay, Stigler famously...
posited that regulation is a product subject to the laws of supply and demand, and that as a result of these market forces, “as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit.”

Unlike previous theories, which largely assumed that regulators try to act in the interest of the general public, the standard version of the “capture” account assumes that regulators act in their own material self-interest. At the same time, concentrated interests such as businesses are in a better position than other interest groups to advance their own interests through the regulatory process because they have more at stake in most regulatory issues and are well-organized; by contrast, groups that aim to promote the general public’s interests are less influential because the individuals they represent usually have less at stake and are harder to organize. In combination, these two factors are supposed to explain how businesses control the regulatory process.

In the capture account, businesses may exert influence through several potential channels. Initially, capture theorists proposed that capture operated through an “iron triangle,” in which industries lobbied Congress to exert pressure on agencies through legislation or oversight. Subsequent scholarship explored other means by which industry may motivate regulators to act in its interest: such as offering explicit “quid pro quo” arrangements or creating more tacit incentives such as the possibility of future employment in the regulated industry.

28. See Levine & Forrence, supra note 8, at 169 (“Opposing the ‘public interest’ theory is the ‘capture,’ or ‘special interest’ theory (also known as the ‘economic,’ or ‘government services’ theory) of regulatory behavior, which describes actors in the regulatory process as having narrow, self-interested goals—principally job retention or the pursuit of reelection, self-gratification from the exercise of power, or perhaps postofficeholding personal wealth.” (footnote omitted)).
32. Written Statement of Nicholas Bagley, supra note 30, at 3–4; see also Ernesto Dal Bó, Regulatory Capture: A Review, 22 Oxford Rev. Econ. Pol’y 203, 211–212 (2006); Kwak, supra note 14, at 75.
Although the capture theory of regulation has proven enormously influential, in recent years it has been criticized on a number of different grounds, including that it offers a highly unrealistic description of how most regulatory agencies operate, its empirical underpinnings are flimsy, and it is impossible to empirically prove or disprove. In perhaps the most comprehensive rebuttal of this account, Professor Steven Croley argues that administrative procedures serve to bolster agencies’ autonomy, insulate them against interest group influence, and level the playing field for less well-resourced interest groups to compete with better-resourced ones. Croley notes, for example, that interest groups use information, rather than votes or the promise of campaign contributions, to lobby agency regulators; agencies’ decision-making processes are more open than those of legislative committees; agency personnel have job security which insulates them from political pressure; and the threat of judicial review levels the playing field by forcing regulators to give adequate consideration to all the perspectives on the rule. To bolster his thesis, Croley presents case studies of several important regulatory initiatives in which federal agencies appeared to advance the interests of the general public in the face of organized industry opposition.

More recent scholarship has re-conceptualized capture in ways that address some of these criticisms. Most notably, these theories articulate new possible mechanisms for capture that do not depend upon the assumption that

33. See, e.g., Written Statement of Nicholas Bagley, supra note 30, at 4 (“Although agency capture offers a compelling story about how some agencies operate some of the time, it is also a crude stereotype about agency behavior. Some agencies succumb to industry group pressure, but most resist it admirably.” (footnote omitted)).

34. STEVEN P. CROLEY, REGULATION AND PUBLIC INTERESTS: THE POSSIBILITY OF GOOD REGULATORY GOVERNMENT 305–06 (2008) (“The public choice account of regulation is idea rich, but evidence poor. It is easy to state, difficult to disprove, and resonates with deep-rooted and indeed often well-founded negative visions of politicians and politics. But its empirical record, charitably tabulated, does not vindicate its deregulatory policy prescriptions. Some regulation has undermined social welfare; much important regulation has not.”); Daniel Carpenter, Detecting and Measuring Capture, in PREVENTING REGULATORY CAPTURE: SPECIAL INTEREST INFLUENCE AND HOW TO LIMIT IT, supra note 4, at 57. (“In short, the evidentiary standards of the capture literature are rather low . . . .”); Carrigan & Coglianese, supra note 26, at 1 (“[I]ts empirical evidence failed to rule out competing explanations, including the very possibility of the public interest theory that he sought to challenge.”).

35. See Written Statement of Nicholas Bagley, supra note 30, at 5 (“The central problem with agency capture is that it is neither easily identifiable nor readily falsifiable.”).


37. CROLEY, supra note 34, at 135–42.

38. Id. at 157–212.
regulators always act in their own material self-interest. For example, Professor James Kwak explores how cultural factors, such as regulators’ identities, social status, and relationships can cause even well-intentioned regulators to inadvertently favor the regulated industry. Contra to Croley, Professor Wendy Wagner shows that the structures of administrative law empower interest groups to capture regulators by inundating them with complex information. For example, she documents how the rise of the “hard look” review doctrine, in which courts closely scrutinize agencies’ rulemakings to ensure that the agencies have adequately responded to all material comments, encourages interest groups to submit “highly specific, very detailed, [and] extensively documented comments on every conceivable point of contention, and to back up their comments with the threat of litigation.”

Yet unlike in traditional capture theory, which asserts that regulators “as a rule” will advance the interests of the regulated industry, these newer variants of capture do not necessarily imply that industry is always able to shape regulatory policy to achieve its desired ends. Kwak emphasizes that cultural capture is not necessarily controlling and does not preclude the possibility that public-interested regulators will overcome these challenges to act in the general public’s interest. Wagner argues that information capture “allows some parties to control or at least dominate regulatory outcomes using information.” In a similar vein, Professor Ganesh Sitaraman writes that regulatory capture “does not mean that regulations in the public interest are never possible but only that, when looked at in the aggregate, the system leans in a direction that tends to help powerful special interests rather than the public interest.”

39. See, e.g., Wagner, supra note 14, at 1392 (noting that “[c]ommitted EPA staff is likely to be an extremely important force in pushing back against unilateral pressure from one group, particularly industry”).


41. Wagner, supra note 14, at 1328 (arguing that “variety of doctrinal and statutory incentives unwittingly encourage regulatory participants to load the administrative system with more and more information in ways that ultimately undermine pluralistic oversight by creating unfair advantages for those advocates who have the resources to engage in these excessive processes”).

42. Id. at 1362–63.

43. Professors Christopher Carrigan and Cary Coglianese point out that Stigler himself “did not believe that all regulation is acquired by industry... [though] he did seem to think that a lot of regulation came into existence solely to serve industry’s interests.” Carrigan & Coglianese, supra note 26, at 6 (emphasis added).

44. Kwak, supra note 14, at 79, 94.

45. Wagner, supra note 14, at 1328 (emphasis added).

46. GANESH SITARAMAN, REFORMING REGULATION POLICIES TO COUNTERACT CAPTURE AND IMPROVE THE REGULATORY PROCESS 2 (2016).
Although these newer variants of capture avoid some of the unrealistic assumptions of traditional capture theory, their implications as to the magnitude of business influence are less clear. These theories provide compelling reasons to think that agencies are biased in favor of business, but they offer less guidance as to what extent businesses actually control regulations. Whether businesses in practice succeed in controlling the rulemaking process is, therefore, an empirical question.

B. The Empirical Literature

Like the theoretical literature on regulatory capture, the empirical literature on interest group influence in the rulemaking process by and large supports the notion that businesses play an outsized role in the regulatory process, relative to other types of interest groups. Yet also like the theoretical literature, the empirical literature does not yield definitive conclusions as to the magnitude of this influence—the extent to which interest groups are able to achieve their desired policy outcomes. This literature focuses on a few main questions: Who participates in the rulemaking process? How much influence do they exert over regulatory outcomes? And what are the determinants of influence in the rulemaking process?

1. Participation and Participants

There are several stages of the rulemaking process and multiple formal opportunities for individuals and organizations to participate. The “best known and indeed archetypal” of these is the notice-and-comment process. Under the Administrative Procedure Act (“APA”), federal agencies are required to publish a Notice of Proposed Rulemaking (“NPRM”) in the Federal Register and provide the public an opportunity to comment before they issue a final rule (subject to certain exceptions). Agencies must then “process and then respond to, all significant comments.” In some cases, before an agency has issued a proposed rule, it may choose to issue a preliminary document called an Advance Notice of Proposed Rulemaking (“ANPRM”) to “[announce] that [the] agency is considering a regulatory action . . . before it develops a detailed proposed rule.” If an agency chooses to issue an

47. This agnosticism aligns with that expressed by Professors Wendy Wagner, Katherine Barnes, and Lisa Peters in their 2011 study. Wagner, Barnes, & Peters, supra note 13, at 152 (“Ultimately, even if interest group participation . . . is badly skewed, and even if this leads to rule changes that favor the dominant group, it is not clear what the substantive implications of this imbalance might be.”).
48. Furlong & Kerwin, supra note 7, at 362.
50. Wagner, supra note 14, at 1354 (citing 5 U.S.C. § 553(c)).
ANPRM, then the public is given an opportunity to comment on that document as well.\textsuperscript{52}

Most empirical studies of participation in the notice-and-comment process find that businesses participate with greater frequency and intensity than public interest groups and members of the public, though public interest groups usually have at least some representation. One early study is the U.S. Senate Committee on Governmental Affairs’s 1977 report, \textit{Public Participation in Regulatory Agency Proceedings}. The Senate Committee asks a number of different agencies to identify the ten most significant of each agency’s last thirty rulemakings and adjudications and examine the regulatory dockets. It finds that there was no public interest representation in more than half of formal agency proceedings and almost none at informal proceedings.\textsuperscript{53}

Similarly, Professor Cary Coglianese examines interest group participation on the twenty-five significant rules that were issued by the Environmental Protection Agency (“EPA”) under the Resource Conservation and Recovery Act (“RCRA”) between 1989 and 1991 and finds that “industry groups are by far the most active participants of all,” with businesses participating in 96% and industry associations participating in 80% of the rules he examined.\textsuperscript{54} By contrast, other types of interest groups and individual members of the public have much lower levels of participation. For instance, state governments participated in only 52% of the rules, national environmental groups participated in only 44%, and individuals participated in only 40%.\textsuperscript{55} Nearly 60% of the participants were business interests, and only 4% were from the environmental community.\textsuperscript{56}

Subsequent studies largely corroborate these findings, though with some exceptions.\textsuperscript{57} Professor Marissa Golden examines eleven federal rules at the Environmental Protection Agency (“EPA”), National Highway Traffic Safety Administration (“NHTSA”), and Department of Housing and Urban Development (“HUD”). Two of the regulatory agencies (EPA and NHTSA)

\begin{itemize}
\item \textsuperscript{52} \textit{Id.}
\item \textsuperscript{53} \textit{See} \textit{COMM. ON GOVERNMENTAL AFFAIRS, PUBLIC PARTICIPATION IN REGULATORY AGENCY PROCEEDINGS, S. DOC. NO. 95-71, at vii (1977).}
\item \textsuperscript{55} \textit{Id. at 73.}
\item \textsuperscript{56} \textit{Id. at 70–71.}
\item \textsuperscript{57} Yackee, \textit{Reconsidering Agency Capture, supra} note 13, at 323 (conducting a content analysis of thirty-six rules from the DOT and finding that while businesses often participate at a high rate, this is not consistent across rulemakings). High-salience rules appear to receive especially large numbers of comments from individual members of the public. \textit{See, e.g.}, Coglianese, \textit{supra} note 54, at 65 (“Rules of broad, foundational policy importance tend to attract large numbers of public comments.”).
\end{itemize}
have extremely limited participation by public interest groups and individuals, and there is little citizen participation in any of the rules.\footnote{Golden, supra note 58, at 253.} Professors Jason and Susan Webb Yackee analyze over thirty rules and around 1700 public comments from four U.S. federal agencies and find that business interests submitted over 57% of the comments in their data set.\footnote{Yackee & Yackee, supra note 13, at 131–33.} Professors Wendy Wagner, Katherine Barnes, and Lisa Peters examine ninety Hazardous Air Pollutant rules and find that comments from business interests comprise over 81% of the comments.\footnote{Wagner, Barnes, & Peters, supra note 13, at 128–29.} Professors Scott Furlong and Cornelius Kerwin conduct a survey of interest groups and find that businesses participate in over twice as many rulemakings as public interest groups.\footnote{Furlong & Kerwin, supra note 7, at 361.} By contrast, Justice Mariano-Florentino Cuéllar examines democratic participation in three different rulemakings issued by the Nuclear Regulatory Commission, the Federal Election Commission, and the Treasury Department, and finds that even when form letters are excluded, “comments from individual members of the lay public account for over 70% of comments” in two of the three regulations he examines.\footnote{Cuéllar, supra note 62, at 411, 429, 460 (2005).}

The notice-and-comment process is not, however, the only—or the most important—opportunity for the public to participate in the rulemaking process. One crucial but “seldom studied” phase of the rulemaking process is the agenda-setting phase: the phase at which regulators decide to initiate a rulemaking process on a particular subject.\footnote{Coglianese & Walters, supra note 63, at 97.} The APA provides that “[e]ach agency shall give an interested person the right to petition for the issuance, amendment, or repeal of a rule.”\footnote{Administrative Procedure Act, 5 U.S.C. § 553(e) (2012).} Agencies must respond to these petitions, and if they deny them, provide reasons for their decisions,\footnote{Id. § 555(b).} though judicial review of an agency’s denial of a rulemaking petition is typically “highly deferential.”\footnote{Nat’l Customs Brokers & Forwarders Ass’n of Am., Inc. v. United States, 883 F.2d 93, 96–97 (D.C. Cir. 1989); Livermore & Revesz, supra note 31, at 1382.} Participating at this early stage of the rulemaking process—either through submitting a petition for rulemaking or communicating...
through informal channels—is thought to be a more effective means of influencing a rule than participating in the public comment process, since the rule must be very close to fully developed by the time it is proposed.67

The empirical research that focuses on this stage of the rulemaking process concludes that business interests participate more than other types of interest groups. Professor Kimberly Krawiec takes advantage of special transparency requirements in the Dodd-Frank Act to analyze interest group participation in the early development of the Volcker Rule.68 From analyzing thousands of public comments submitted in advance of the issuance of the Volcker Rule NPRM and the logs of hundreds of meetings with agency officials, Krawiec concludes that the “battleground is dominated by regulated industry.”69 In a review of 276 rules, Professor William West and Connor Raso find that 60% of the rules in their sample were issued at the agencies’ discretion and business groups disproportionately participated in the agenda-setting process for these discretionary rules.70 Indeed, they find only five discretionary rules in which public interest groups were involved at the agenda-setting phase, suggesting that “participation in agenda setting may be significantly more one-sided” than participation in the public comment process.71

Some evidence suggests public interest groups may play a more active role in nondiscretionary rules, particularly those issued pursuant to a court order. Coglianese finds that environmental groups file most of the deadline suits brought against the EPA (lawsuits brought to compel an agency to issue a rule in response to a congressionally-imposed deadline).72 Professor Wendy Wagner, Professor Katherine Barnes, and Lisa Peters find that sixty-six (73%) of the Hazardous Air Pollutants rules in their sample were promulgated under court orders from deadline suits filed in the United States

67. KERWIN & FURLONG, supra note 5, at 200 (describing two studies which find that “business interests participate more actively and effectively during the important early stage of rule development”); E. Donald Elliott, Re-Inventing Rulemaking, 41 DUKE L. J. 1490, 1495 (1992) (“Because of the need to create a record, real public participation—the kind of back and forth dialogue in which minds (and rules) are really changed—primarily takes place in various fora well in advance of a notice of proposed rulemaking appearing in the Federal Register.”); Wagner, Barnes, & Peters, supra note 13, at 110 (“Ironically . . . the emphasis on developing a proposed rule that is ready for comment pushes a great deal of the policymaking and true regulatory work earlier in the process, during the rule development stage. Indeed, the courts have made it painfully clear that if a rule is to survive judicial review, it must be essentially in final form at the proposed rule stage.”).


69. See id. at 84.

70. West & Raso, supra note 13, at 495, 504.

71. Id. at 510. But see COMM. ON GOVERNMENTAL AFFAIRS, PUBLIC PARTICIPATION IN REGULATORY AGENCY PROCEEDINGS, S. Doc. No. 95-71, at 14–15 (1977) (finding that at two agencies, public interest groups filed as many or more petitions for rulemaking than businesses).

72. Coglianese, supra note 54, at 42.
Courts of Appeals, and they assume that these cases are predominantly brought by public interest groups. 73

Another important stage of the rulemaking process at which interest groups may participate is the OIRA review process. Under Executive Order 12,866, federal agencies are required to submit all “significant regulatory action[s]” to OIRA for review before they can become final. 74 Perhaps the most well-known part of this review process involves reviewing the costs and benefits of new rules. 75 Once the agency formally submits a rule to OIRA for review, interest groups and members of the public are given an opportunity to meet with OIRA to express their views on the rule. 76 OIRA’s policy in recent years has also been “to meet with any party interested in discussing issues on a rule under review.” 77

Once again, most evidence finds that businesses participate more intensely at this phase of the rulemaking process. 78 Croley examines all OIRA meetings from 1993 to 2000 and finds that 56% of the meetings included only businesses and trade associations, 28% included business interests and public interest organizations, 10% were attended only by public interest organizations, and 5% were attended only by governmental groups. 79 Professor Rena Steinzor, Michael Patoka, and James Goodwin examine interest group participation in 6194 OIRA reviews between 2001 and 2011, and find that 65% of the attendees at these meetings represented industry—around five times as many people who represented public interest groups. 80

Interest group participation in the rulemaking process does not end when a final rule is issued. For instance, different kinds of interest groups may resort to submitting administrative appeals or even filing for judicial review in the United States Courts of Appeals to vindicate their interests. 81 As

73. Wagner, Barnes, & Peters, supra note 13, at 137.
75. Livermore & Revesz, supra note 31, at 1370 (“At the heart of OIRA’s review of agency decision making is the cost-benefit standard, which requires, to the extent possible, that agencies identify and quantify the benefits and costs of proposed rulemakings.”).
76. 3 C.F.R. 638.
78. Bagley & Revesz, supra note 31, at 1306 (“Predictably, then—and despite OIRA’s location within the Executive Office of the President—the available evidence supports the view that the mix of participants active in the OIRA review process heavily favors industry.”).
Coglianese points out, *ex ante* there are some reasons to suggest that businesses might file more litigation over rules, but there are other countervailing reasons to suggest that public interest groups may file more litigation. On the one hand, business interests tend to have greater incentives and resources; on the other hand, litigation tends to be an “outside” strategy, pursued by groups who are excluded from the political process.82

Yet here too, the empirical evidence that exists suggests that business interests participate more intensely at this stage of the rulemaking process. In his own study, Coglianese reports that in 908 cases filed against the EPA from 1987 to 1991 most of the “lead plaintiffs” were corporations or trade associations.83 More recently, Wagner, Barnes, and Peters find that of the twenty rules in their study that were the subjects of petitions for reconsideration or suits for judicial review, business interests filed nine of these petitions, public interest groups filed four, and both groups jointly filed seven.84

Thus, with some exceptions, the empirical literature by and large supports the notion that businesses disproportionately participate throughout every stage of the rulemaking process, though public interest groups usually have some representation at most stages. This is further substantiated by a survey of interest groups conducted by Furlong and Kerwin, which finds that 85% of the trade associations and businesses report participating in the rulemaking process, compared to about 75% of public interest groups.85

2. Influence

Imbalances in interest group participation in administrative rulemaking do not necessarily translate into imbalances in influence, however, and the empirical evidence on interest group influence in the rulemaking process is more equivocal.86 Several early studies find participation in the public comment process generally did not have much influence over the content of rules.87 Professor Wesley Magat, Alan Krupnick, & Winston Harrington find

82. Coglianese, *supra* note 5455, at 69.
83. *Id.* at 100.
86. See CROLEY, *supra* note 34, at 127 (“But estimates of the frequency with which various parties participate in agency decisionmaking processes and the amount of resources those parties commit to their participation are meaningful only inasmuch as they provide reliable markers of parties’ abilities to affect the substance of agency decisions. Ultimately, it is efficacious participation, not mere participation, that affects regulatory outcomes. Measurements of participation quantify the efforts different types of interests make to influence agency decisionmakers, but whether those efforts spell proportionately more influence is a separate question.”).
87. For example, Professor E. Donald Elliott famously described the notice-and-comment process as Kabuki theater and claimed that it is “primarily a method for compiling a record for judicial review.” Elliott, *supra* note 67, at 1492.
that active participation by businesses during the notice-and-comment process generally did not translate into weaker regulations.\textsuperscript{88} Professors David C. Nixon, Robert M. Howard, and Jeff R. DeWitt examine a sample of twenty-one rules issued by the Securities and Exchange Commission, which they hypothesize “represents the classic profile for the agency capture thesis.”\textsuperscript{89} Focusing on references to comments in the preamble of the final rule, they find that there is “practically no evidence” that more institutionally advantaged commenters (such as industry groups or self-regulatory organizations) are more likely to have their policy concerns addressed in notice-and-comment process.\textsuperscript{90} More recently, Professor Susan Webb Yackee examines thirty-six rules from the DOT issued between 2002 and 2005 and finds that “businesses are not consistently influential.”\textsuperscript{91}

Other research finds that comments do result in cosmetic changes to the rule but that these changes are not very consequential. Golden finds that “in the majority of cases the agency made some of the changes that were requested by commenters, but it rarely altered the heart of the proposal.”\textsuperscript{92} Professor Stuart Shapiro examines twelve economically significant regulations issued between 2008 and 2010, and finds that agencies agreed with the commenters on 42% of the issues raised, but that agencies were more likely to change regulations when the requested changes were minor clarifications rather than substantive changes to policy.\textsuperscript{93} Professor William West examines the notice-and-comment process in a sample of forty-two rules and finds that twenty-eight of the rules involved significant conflict, and sixteen of those rules changed.\textsuperscript{94} However, he concludes that changes during the notice-and-comment process “are difficult, they are often confined to excision as a path of least resistance, and they seldom address the fundamental nature of the policy.”\textsuperscript{95} Furlong and Kerwin conduct a survey of interest groups and find that they do perceive written comments as being effective but that they “may

\textsuperscript{88} WESLEY MAGAT, ALAN KRUPNICK, & WINSTON HARRINGTON, RULES IN THE MAKING: A STATISTICAL ANALYSIS OF REGULATORY AGENCY BEHAVIOR 143–45 (1986).


\textsuperscript{90} Id. at 74.

\textsuperscript{91} Yackee, Reconsidering Agency Capture, supra note 13, at 320.

\textsuperscript{92} Golden, supra note 58, at 259.


\textsuperscript{95} Id. at 74.
Several other recent studies, however, have found that interest groups’ participation in the public comment process—and business participation in particular—does influence rules. Using content analysis to study over thirty rules and over 1700 public comments from four federal agencies, Yackee and Yackee find that business commenters, but not nonbusiness commenters, hold important influence over the content of final rules—as measured by whether the rule becomes more or less stringent overall from the proposed rule stage to the final rule stage.97 Susan Webb Yackee examines a selection of forty rules promulgated by four federal agencies and finds that the agencies often adapt the rule during the notice-and-comment period to better match the position of participating interest groups.98 Wagner, Barnes, and Peters find a rough correlation of one change in the NPRM for every two issues raised by commenters, and they find that the number of changes weakening the rule increased with the number of comments from industry.99

In the largest-scale study of its kind, Professors Andrei Kirilenko, Shawn Mankad, and George Michailidis employ a machine-learning algorithm to examine 60,000 comments, 104 proposed rules, and 67 final rules issued by the Commodity Futures Trading Commission between 2010 and 2013.100 Kirilenko, Mankad, and Michailidis find that only those from the regulated industry have an impact on the content of the final rule, but they find that greater consensus among public comments, along with comments from certain types of organizations, increases the chances of a rule being finalized.101

A few studies have found evidence of interest group influence in the regulatory process at other stages of the rulemaking process. Keith Naughton, Celeste Schmid, Susan Webb Yackee and Xueyong Zhan use content analysis to study how a sample of thirty-six DOT rules change from the ANPRM stage to the NPRM stage, and they find that these comments are associated with changes in the content of the rule and whether the rule is withdrawn.102 Professors David Nelson and Susan Webb Yackee examine a sample of rules from the DOT and find that lobbying coalitions influence the

96. Furlong & Kerwin, supra note 7, at 365.
97. Yackee & Yackee, supra note 13, at 133–35.
100. Kirilenko, Mankad & Michailidis supra note 13, at 3.
101. Id. at 4.
development of rules from the ANPRM stage to the NPRM stage. Susan Webb Yackee also finds that ex parte contacts do influence regulatory outputs and that they are a “potential factor in causing the withdrawal of regulations from consideration.” Professors Simon F. Haeder and Susan Webb Yackee study 1526 “economically significant” regulations that were reviewed by OIRA between 2005 and 2011 and find that lobbying by business interests is associated with regulatory change, but that the same is not true for public interest groups. Daniel E. Walters analyzes data on rulemaking petitions and finds that although business interests—when examined together—had a greater chance of having a petition granted than non-business interests, this advantage disappears when business interests are disaggregated. He finds that while the identity of the petitioner “does not seem to drive agency decision-making with regard to rulemaking petitions . . . agencies favor rulemaking petitions that request narrow, technical changes in a deregulatory direction.”

3. Determinants of Influence

There are two primary hypotheses regarding the conditions under which interest groups are most likely to influence rules. First, perhaps the most well-established hypothesis is that influence is determined by the size of a group and the consensus among its participants. Nelson and Yackee theorize that coalition size and consensus determine influence because they send a signal to policymakers regarding the magnitude of strength or opposition for a particular policy proposal and because coalition leaders are strategic about
whom they recruit into their coalitions. Similarly, Kerwin and Furlong observe that “[p]ublic comments help agencies determine the degrees of acceptance and resistance in the affected communities to the rule under development.” They suggest that this information may help agency officials figure out what kinds of monitoring and enforcement systems they will need to implement, as well as gauge the likelihood of future litigation.

There are a number of empirical studies that support the hypothesis that more unified interest groups have more influence in the rulemaking process. Yackee and Yackee find “[w]hen business commenters are united in their desire to see less regulation in a final rule . . . they will receive less regulation over 90% of the time,” though they caution that their findings may not be applicable to high-salience rulemakings, in which other types of interest groups are more likely to participate.

The second theory is that more sophisticated participants are more likely to influence regulatory outcomes. Cuéllar suggests a few reasons why this may be the case: Agency staff have limited resources so will be more responsive to comments that they can easily understand how to address; agency staff may believe that the issues raised in more sophisticated comments are more likely to be scrutinized in judicial review; and more sophisticated commenters may know “how to make recommendations that fall within the staff’s purview, thus gaining a chance to persuade the staff about how to use its discretion.”

110. Id.
111. See, e.g., Golden, supra note 58, at 259 (finding that agencies are most likely to modify their NPRMs when there is consensus among commenters); Haeder & Yackee, supra note 13, at 1 (finding that both the number of interest groups and the consensus among them are positively associated with a change in the rule, though these results hold only for industry and not public interest groups); Amy McKay & Susan Webb Yackee, Interest Group Competition on Federal Agency Rules, 35 AM. POL. RES. 336 (2007) (finding that an interest group’s dominance in the public comment process translates to influence on the rule); Stuart Shapiro, Does the Amount of Participation Matter? Public Comments, Agency Responses and the Time to Finalize a Regulation, 41 POL. SCI. 33 (2008) (finding that agencies make changes to the their proposed rule when they receive a lot of comments on highly complex rules that are not politically salient but that high comment volume did not lead to changes from the proposed rule on high-salience or low-complexity rules); Yackee & Yackee, supra note 13, at 128 (finding that businesses are more influential when more businesses and fewer non-businesses participate). But see Nixon, et al., supra note 89, at 59 (finding little evidence that the number or proportion of commenters in favor of a specific request determines the likelihood that that request will be reflected in the final rule); Susan Webb Yackee, Assessing Inter-Institutional Attention to and Influence on Government Regulations, 36 BRITISH J. POL. SCI. 723, 740 (2006) (finding no evidence that increased consensus among interest groups as to whether the rule should become more or less stringent enhances influence).
112. Yackee & Yackee, supra note 13, at 135.
113. Id. at 137.
There is some—albeit more limited—evidence to support this hypothesis. Drawing on interviews with agency officials involved in drafting rules, Cuéllar develops a series of questions designed to measure the sophistication of public comment letters, and he finds some “initial evidence” to support this hypothesis. Other research finds that businesses and industry associations tend to submit much more sophisticated comments than individual members of the public. Steven Rashin analyzes 47,000 comments to the Securities and Exchange Commission, and finds that organizations that submit comments that include data and industry-specific language are more likely to result in modifications to proposed rules.

Both of these theories of influence have been invoked to support the hypothesis that businesses are more influential in the rulemaking process than other kinds of interest groups. Because of businesses’ superior resources and organizational capacity, they are better equipped than other kinds of interest groups and members of the public both to build large coalitions and to participate in more rulemakings. In addition, Yackee and Yackee suggest that business interests are more uniform than the interests of other types of interest

115. Id. at 476. Cuéllar’s sophistication scale relies on five questions: (1) “Did the commenter distinguish the regulation from the statutory requirements?”; (2) “Did the commenter . . . indicate an understanding of . . . the statutory requirement?”; (3) “Did the commenter propose an explicit change in the regulation provided in the notice of proposed rulemaking . . . ?”; (4) “Did the commenter provide at least one example or discrete logical argument for why the commenter’s concern should be addressed?”; and (5) “Did the commenter provide any legal, policy, or empirical background information to place the suggestions in context?” Id. at 431. But see Yackee & Yackee, supra note 13, at 136 (applying their own measure of comment quality, and finding no evidence that businesses submit higher-quality comments, despite having more influence in the notice-and-comment process).

116. Cary Coglianese, Citizen Participation in Rulemaking: Past, Present, and Future, 55 DUKE L. J. 943, 959 (2006) (“According to one recent study of about 500,000 comments submitted on an especially controversial EPA rule, less than 1[%] of these comments reportedly had anything original to say.” (citing David Schlosberg et al., “To Submit a Form or Not to Submit a Form, That Is the (Real) Question”: Deliberation and Mass Participation in U.S. Regulatory Rulemaking II (May 5, 2005) (unpublished manuscript) (on file with the Duke Law Journal)); Krawiec, supra note 68, at 77–78 (“[I]mportantly, the citizen letters provide... little evidence that commenters even understand, or care, what proprietary trading or fund investment is, much less the ways in which the Volcker Rule might govern such activities. The contrast with the meticulously drafted, argued, and researched—though far less numerous—letters from financial industry members and trade groups is stark.” (footnote omitted)).


118. Wagner, Barnes, & Peters, supra note 13, at 116 (“Finally, the notice-and-comment process itself may be ‘open’ to all, but in practice accessible to only a few, at least when rules are very complex and technical. . . . While expert, sophisticated public interest groups may be able to penetrate these costly rules, even they will lack resources to engage in all of them and may find they must dedicate resources to only a few.”).
groups so it is easier for them to achieve consensus. Similarly, several scholars have suggested that businesses may be more likely to have the capacity to provide richer and more sophisticated feedback on regulations that includes analysis on technical, legal, or policy matters.

4. Conclusions and Hypotheses

Although the empirical literature on interest group influence in the rule-making process is not uniform in its results, it supports a few conclusions: With some exceptions—perhaps particularly for high-salience rules and deadline suits—businesses tend to participate to a greater extent at most stages of the rulemaking process than public interest groups and individuals. The findings on influence are more equivocal, but the recent literature in particular supports the conclusion that business interests exert more influence than other interest groups during the regulatory process. The determinants of this influence are still not well-understood, but there is evidence that interest group influence is determined by the number of participants in a group and the consensus among them (at least in low-salience rulemakings), as well their relative sophistication.

Yet a careful review of this literature also raises several possible reasons why business interests may have less influence over the rulemaking process than this evidence alone suggests. Some of these reasons have to do with constraints on businesses influence, while others involve methodological issues that may give the impression that businesses have more influence than they really do.

119. Yackee & Yackee, supra note 13, at 130 (“Of course, not all business comments will be unified in their suggestions for change and the degree of consensus in their messages should affect the ability to persuade agencies. However, on average, we may expect more cohesion in matters of regulatory policy between business interests than other groups of potential participants.”).

120. Kerwin & Furlong, supra note 5, at 194 (“Data we have collected in our previous surveys suggest that businesses, and the trade associations that represent businesses and professions, are involved in rulemaking more often than are other groups, and they devote to it greater slices of their likely larger budgets and staffs. A strong case can be made that their superior resources and experience lead to a degree of influence in rulemaking that others cannot match. But the data from our surveys are not sufficient to establish such a case.”); Yackee & Yackee, supra note 13, at 131 (outlining several reasons why this might be the case).

121. See supra Section I.B.1.

122. See supra Section I.B.2.

123. See supra Section I.B.3.
Hypothesis 1: Businesses may take very different positions on regulatory issues, even when they are broadly in favor of less regulation.

Although the empirical literature finds that business interests dominate the rulemaking process, and that consensus among business interests is one of the main determinants of whether they have influence in the rulemaking process, some of this literature relies on a fairly coarse-grained definition of consensus. This literature either treats interest groups as being in consensus if they consistently are in favor of more or less stringent regulation overall or if they support or oppose a rule. Yet it is possible that business interests are unified in these general respects, and yet still sharply disagree on important aspects of the rule.

Business interests may take very different positions on regulatory issues, depending on their industry, size, region, and other factors. Such inter-industry and inter-business conflicts can have the effect of hampering business’s ability to obtain beneficial regulatory changes.

124. See, e.g., Nelson & Yackee, supra note 103, at 347 (measuring “Rule Consensus by first identifying the regulatory direction desired by each of the study’s respondents . . . [then comparing] the desired direction of all coalition participants across each sample rule” (emphasis omitted)).


126. Cary Coglianese et al., Seeking Truth for Power: Informational Strategy and Regulatory Policymaking, 89 MINN. L. REV. 277, 298–99 (2004) (“Older firms frequently have interests that differ from newer firms. Suppliers’ interests can differ from those of manufacturers. Firms selling to regional or niche markets may differ from firms selling to a broad, national market. Differences in firms’ cost structures, technologies, and comparative abilities will affect attitudes toward disclosing information to regulators. Firms also differ in the degree to which they are regulated. Some firms are affected by an entire series of regulations issued by a government agency, while other firms are affected by only a few of the agency’s rules. Firms that interact with a regulatory agency on an ongoing basis will have stronger interests in open and accurate disclosure of otherwise adverse information on any given issue than firms that rarely interact with the agency; the former have more need to maintain their credibility with the regulator.”).

127. Kerwin & Furlong, supra note 5, at 211 (“There are examples of programs that are seemingly dominated by what we would call business interests . . . But, at the same time, a degree of conflict between these two business interests effectively prevented either of them from dominating the process.”). For a recent high-profile example of this, see Patrick Radden Keefe, Carl Icahn’s Failed Raid on Washington, NEW YORKER (Aug. 28, 2017), https://www.newyorker.com/magazine/2017/08/28/carl-icahns-failed-raid-on-washington (describing how opposition from the ethanol industry helped to quash an attempt by Carl Icahn to convince the Trump Administration to change an EPA regulation that would have benefited him). But see Krawiec, supra note 68, at 82 (finding in her study of interest group participation in the development of the Volcker Rule that “financial industry interests appear . . . more unified in their interests than press reports and the legislative history would predict, reducing the probability that conflict among powerful interest groups will diminish the influence of any single position”).
than always being opposed to stronger regulations, business interests sometimes join public interest groups in seeking stronger regulatory requirements. These differing priorities provide more reason to be skeptical that imbalances in participation between businesses and other types of interest groups in the rulemaking process translate to equivalent differences in influence.

Business interests appear to be lobbying more at cross-purposes in recent years. In one study of business lobbying, Lee Drutman observes that inter- and intra-industry competition has become more common as more companies have begun hiring their own lobbyists and ceased relying as heavily on trade associations. He observes that today, “rarely does ‘business’ lobby as a single unified entity. More and more, corporate lobbying involves fights between industries and even between companies.”

Hypothesis 2: Businesses may often not receive their desired rule changes, even when the stringency of the rule shifts in the direction that they desire.

There are multiple ways to measure interest group influence in the rulemaking process, and it is not known whether these different measures yield consistent results. For example, much of Susan Webb Yackee and her coauthors’ work measures influence at the rule level, coding whether each comment is in favor of more or less stringent regulation and then noting whether the rule actually became more or less strict overall from the proposed to final rule stage. By comparison, Wagner, Barnes, and Peters examine the most significant requests for changes to the rule (as enumerated by the agency in

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128. See Frank R. Baugartner et al., Lobbying and Policy Change: Who Wins, Who Loses, and Why 12 (2009) (“Citizen groups, like others, typically participate in policy debates alongside other actors of many types who share the same goals. For every citizen group opposing an action by a given industrial group, for example, there may also be an ally coming from a competing industry with which the group can join forces.”); Livermore & Revesz, supra note 31, at 1355 (describing the “Bootleggers and Baptists” coalition, in which public interest groups team up with businesses to enact anti-competitive regulations); Shapiro, supra note 21, at 240 (“[N]ot all business related comments seek the same ends. Some corporations (or trade associations) may find it in their self-interest to support stronger regulation.”); West & Raso, supra note 13, at 508 (“Business interests do not always speak with a common voice. Characterizing rulemaking by the Fisheries Service of the National Oceanic and Atmospheric Administration as ‘the politics of greed,’ for example, an official from that agency’s Alaska region noted that the recreational fishing industry (charter boats), large commercial fishermen, and small commercial fishermen often had conflicting interests. Nor are the goals of business groups necessarily incompatible with those of less well-represented constituents. Requests from mortgage bankers for the Rural Housing Service (of the US Department of Agriculture) to simplify its loan-application rules may also benefit the low-income families that agency was created to serve.”).


130. Id. at 23.

131. See, e.g., Yackee & Yackee, supra note 13, at 131–32.
the preamble to the final rule), whether they asked for a stronger or weaker regulatory requirement, and whether the specific changes they sought were granted by the agency in the final rule how the agency responded to these requests. One alternative approach follows Cuéllar, who records the total number of suggestions raised in each comment that were adopted by changes in the rule, along with whether any suggestion in the comment was adopted.

Golden observes, empirically measuring influence is “one of political science’s thorniest problems.” Each of these methodologies has its own advantages and potential drawbacks. The first two measures make it more feasible to analyze a larger number of comments and rules; yet they could conceivably lead to overestimating influence, as there may be situations where the stringency of the rule or one part of the rule shifts in the direction that the commenter wanted but the agency rejects the specific changes that the commenter requested. By contrast, measuring influence by calculating the proportion of specific policy concerns raised in the comments that are adopted in the final rule, as Cuéllar does, would seem to obviate this problem. Yet tracing out which specific concerns were adopted is likely more time-intensive, which makes it more difficult to analyze a large sample of rules and comments, thus limiting the generalizability of the study. Furthermore, whereas the previous methodologies may be over-inclusive, this measure might understate interest group influence, as interest groups could still have an impact on the development of the rule without receiving the specific changes they requested.

132. Wagner, Barnes, & Peters, supra note 13, at 155.

133. Cuéllar treats a suggestion as being “adopted” when:
(a) the agency makes precisely the change requested by a comment, (b) the agency claims in the Federal Register statement accompanying the final rule that a particular change was made in response to concerns raised in comments like the one in question, or (c) the agency makes a change that renders moot the concerns raised in the comments in question.

Cuéllar, supra note 62, at 433–34.

134. Golden, supra note 58, at 259; see also Kerwin & Furlong, supra note 5, at 210 (“Determining whether interest groups that participate get what they want is an analytical task as difficult as it is important. Much must be known about the law that established the boundaries of the rulemaking, the true preferences of the groups affected, the accuracy of the communication of those preferences to the agency decision makers, and the benefits the rule bestows and the costs it imposes.”).

135. Crole, supra note 34, at 132–33 (“[S]ome studies concluding that interest groups influence rulemaking find influence in the form of curtailing the scope of a proposed rule rather than altering the rule’s content. To that extent, interest groups do not get what they want from agencies, but merely less of what they do not want.”).

136. See Kerwin & Furlong, supra note 5, at 212 (describing several examples from case studies illustrating “that business interests do gain important concessions in rulemaking even when they are not able to achieve all they wanted”). Granted, Cuéllar’s definition of “adopted suggestion” encompasses cases where the agency doesn’t fully adopt the commenter’s request, but only if the
Hypothesis 3: Focusing on changes made during the notice-and-comment period may overstate business influence.

Although most of the empirical literature focuses on changes made to rules during one or two stages of the rulemaking process, changes made during one stage may have been shaped by influence exerted at earlier stages or be negated by subsequent developments. For instance, Magat, Krupnick, and Harrington find that rules which start out more stringent are more likely to become less stringent at a later stage.\(^{137}\) Ideally, then, gauging interest group influence requires evaluating the changes made to a rule over its entire lifecycle, though this is difficult for reasons explored below.\(^{138}\)

In particular, although much of the literature focuses on the notice-and-comment period, there are reasons to think that business interests may be more successful at this stage of the rulemaking process than in the rest of the rulemaking process. Some scholars have suggested that agencies may be more likely to grant requests from commenters seeking a less stringent rule because the agencies view such changes “as less vulnerable to arguments that ‘material changes’ were made as compared with comments that demand adjustments or additions to the text.”\(^{139}\) If a court rules that the final rule is not the “logical outgrowth” of the proposed rule, then the court could force the agency to repeat notice-and-comment all over again or even reissue the rule entirely.\(^{140}\) For the same reason, the types of changes that agencies can make to rules at this late stage of the rulemaking process are relatively limited.

agency explicitly states in the final rule preamble that it altered the rule in response to the commenter’s suggestion. Cuéllar, supra note 62, at 433–34. Since agencies usually do not describe all of the changes that they made to a proposed rule, it seems likely that this will still understate interest group influence.

- \(^{137}\) MAGAT, KRUPNICK & HARRINGTON, supra note 88, at 74, 153–54 (“If a rule under consideration is made especially stringent during an early stage of the process, it is likely to become less stringent at a later stage.”).

- \(^{138}\) See infra note 151 and accompanying text; see also Furlong, supra note 7, at 341 (“Future research may want to look at the development of policies from ‘cradle to grave’ and examine interest group participation throughout. This may help in developing a better measure of influence that others may apply to future studies.”).

- \(^{139}\) Wagner, Barnes & Peters, supra note 13, at 132 & n.118 (“One possible implication of the need to provide adequate notice is a bias in favor of subtractive changes in proposed rules. Deletions in response to public comment thus are not subject to the criticism that they have caught stakeholders by surprise.” (quoting William F. West, Inside the Black Box: The Development of Proposed Rules and the Limits of Procedural Controls, 41 ADMIN. & SOC’Y 576, 581 (2009))); West, supra note 94, at 67 (“Changes are made frequently enough during the comment phase of rulemaking, but they tend to be small and painful, and they are often subtractive rather than innovative or additive.”).

Coglianese also suggests that focusing on the notice-and-comment period may exaggerate interest group influence because at least some of the changes made during this process in particular may reflect strategic behavior on the part of agencies, rather than substantive policy concessions.\textsuperscript{141} Former Centers for Medicare and Medicaid Services (“CMS”) Administrator Thomas Scully recently made a similar claim in an interview with \textit{Politico}, describing the notice-and-comment period as a sort of bargaining process: “You put out a proposed rule knowing that people are going to go a little crazy and then you come back, and they’ll be so excited and relieved that the final rule’s half as bad as the proposed rule was.”\textsuperscript{142} For all of these reasons, focusing solely on the notice-and-comment period will tend to overstate the influence of organizations seeking less stringent rules.

\textbf{Hypothesis 4: Businesses may be more successful in part because they make more limited and realistic requests.}

Finally, it is possible that business interests are more likely to receive their desired changes than other types of interest groups in part because they ask for more limited changes. This is in line with Wagner, Barnes, and Peters’ suggestion that agencies may be more likely to reject public interest groups’ comments because they “were more ambitious and demanded material changes to the rule.”\textsuperscript{143} Similarly, Cuéllar hypothesizes that more sophisticated commenters may know how to make suggestions that fall within the scope of the rulemaking.\textsuperscript{144} Yet most of the empirical literature has been unable to devise a consistent way to measure the substantive significance of specific changes in the rule.\textsuperscript{145}

\begin{footnotesize}
142. \textit{Running CMS: What it’s Like, and What Seema Verma May Do}, \textit{POLITICO’S PULSE CHECK}, at 19:28–19:35 (Feb. 15, 2017), https://www.stitcher.com/podcast/politicos-pulse-check/e/running-cms-what-its-like-and-what-seema-verma-may-do-49144932. \textit{But see} Wagner, Barnes & Peters, \textit{supra} note 13, at 148–49 (enumerating several reasons why it seems unlikely that agencies could perfectly anticipate industry pressure and negate it by issuing an extra-stringent proposed rule). It is possible that both of these assessments are correct: Agencies may counterbalance some interest group pressure through issuing an overly stringent proposed rule without negating it entirely. If that is the case, then focusing solely on changes made during this stage of the rulemaking process will still tend to overestimate influence.
143. Wagner, Barnes & Peters, \textit{supra} note 13, at 132. \textit{But see} Yackee & Yackee, \textit{supra} note 13, at 136–37 (finding no support for the hypothesis that “business commenters communicate a greater level of information and expertise than do other commenters”).
144. Cuéllar, \textit{supra} note 62, at 484–85.
145. \textit{See, e.g.,} Wagner, Barnes & Peters, \textit{supra} note 13, at 130 n.115 (acknowledging that they “were not able to determine reliably whether the changes were ‘big’ or ‘little’ . . . thus, there is still the distinct possibility that even if there is some indication of interest group impacts on the proposed rule as a result of comments, whether these impacts are substantively important is unclear”). They note that EPA identified the rule changes that they focus on as “significant;” but concede that “this
II. CASE STUDY: THE TANK CAR RULE

A. Methodology

1. Study Design

To investigate the four hypotheses, this Article examines a case study of interest group influence in the rulemaking process. The case study focuses on the “Tank Car Rule” (“HM-251”)—a suite of standards jointly promulgated by the Pipeline and Hazardous Materials Safety Administration (“PHMSA”) and the Federal Railroad Administration (“FRA”) in May 2015, in coordination with Canadian regulators.

Although focusing on a single rule obviously limits the generalizability of this study’s conclusions, using a case study approach has two primary advantages: First, it allows for a more fine-grained analysis of how interest groups participate in and influence the regulatory process that considers multiple dimensions of participation and influence, as well as the specific policy changes that they requested. Second, whereas most previous studies of influence in the rulemaking process have tended to focus on one or two stages of the rulemaking process (most commonly, the notice-and-comment period), focusing on only one rule makes it possible to examine interest group influence over the lifecycle of the rule.

The major empirical component of this study involves translating the materials in the regulatory docket into quantitative data that can then be analyzed. The DOT received over 3300 comments, several petitions to initiate a rulemaking, and a number of administrative and judicial appeals on the Tank Car Rule. Some of this participation was by organized interest groups.
For each public submission in the regulatory docket, I code various characteristics about the individual or organization and their submission, including the organization type (e.g., individual, business, industry association, state/local government), what form the participation takes (e.g., comment on the NPRM, comment on the ANPRM, petition for rulemaking), how sophisticated they were, and whether their submission appeared to be a form letter.\textsuperscript{150}

I measure whether the participants’ desired rule changes were reflected in the final rule using two different measures: First, I code whether the overall stringency of one or more of the major pieces of the rule shifted in the direction the participant wanted. Second, to the extent possible, I attempt to code how many discrete policy concerns each submission raised and whether the specific concerns it raised were reflected in the final rule. For the latter, I try to count a request as being addressed in the final rule only if it was clear that it was completely addressed in the final rule. To do this, I undertake a detailed examination of the final rule and compare it to what the participants in the rulemaking process requested. To supplement this analysis, I also conduct several informal interviews with government officials, industry representatives, and non-governmental staff who were closely involved with the development of this rule.

There were a number of different stages of the Tank Car Rule rulemaking process, and there were opportunities at each stage for individuals and interest groups to participate in this process. Figure 1 illustrates the major stages at which DOT issued a new version of the rule—or officially rejected requests to further amend the rule—as well as the ways that interest groups and individuals participated in at each stage of this process.

\textsuperscript{150} For more detail on these categories, see Methodological Appendix.
That being said, not every issue that eventually became part of the Tank Car Rule was under consideration at each stage, and not every group or individual who participated in the process did so at each stage. Furthermore, there is more public information about interest groups’ participation at some stages than at others. For example, whereas all petitions and public comments are made available at regulations.gov, there are no public records of the conversations that transpired at 12,866 meetings. Nor were these the only ways that interest groups participated in the Tank Car Rule process. For example, DOT regulators are not required to record and publish contacts that they had with outside groups that occurred before they issued the proposed rule.151

Thus, by necessity I focus on different stages of the rulemaking process and use different metrics to investigate the four hypotheses enumerated above.152 First, I examine consensus among interest groups throughout the rulemaking process, primarily, but not exclusively, at the ANPRM and NPRM stages. Second, to examine how different measures of influence may yield different results, I compare participants’ positions on the NPRM to the final rule. In keeping with much of the empirical literature on this subject, I

151. See Wagner, Barnes & Peters, supra note 13, at 112 (“The agency is required to log ex parte contacts in the public record only after publishing the proposed rule and generally not before.” (citing Home Box Office, Inc. v. FCC, 567 F.2d 9, 57 (D.C. Cir. 1977))).

152. See supra Section I.B.4; see also GARY KING ET AL., DESIGNING SOCIAL INQUIRY 48 (1994) (“Our data need not all be at the same level of analysis. Disaggregated data, or observations from a different time period, or even from a different part of the world, may provide additional observable implications of a theory.”).
focus on these two late stages because they yield the most documentary evidence of what changes participants were asking for, as well as how DOT responded to those requests. In addition, by these late stages in the rulemaking process, most of the major elements of the rule were on the table, as well as several potential changes to the rule that were ultimately not adopted. Third, in contrast to much of the previous literature and in spite of the associated measurement difficulties, I try to assess how much influence interest groups exert over the entire rulemaking process, from submitting petitions to review to filing litigation in court. Finally, to examine whether business groups ask for more limited changes to the rule than other types of interest groups and individual members of the public, I focus on the number and type of concerns that they raised in their comments on the proposed rule.

One important disclaimer is that this study does not pass judgment on any of the policy choices or preferences of the various government officials or interest groups that participated in this rulemaking process. The focus of this study is on examining—to the extent possible—how interest groups participated and to what extent they influenced the rulemaking process, not on whether this participation and influence ultimately led to positive or negative results.

2. Case Selection

The Tank Car rule was selected for this case study for a few reasons: First, it provides a rich and complex portrait of interest group and individual participation in the rulemaking process, which enables me to examine differences and similarities among how interest groups and individuals engage in the rulemaking process. Over 400 different interest groups—including businesses, state and local governments, and non-profit organizations—along with thousands of individual members of the public, participated in the rulemaking process and expressed their views on the rule to federal regulators. At the same time, however, the participation in the rulemaking process was not so overwhelming as to make manual content analysis practically impossible.153

Second, this rule illustrates the many different ways that interest groups can engage at different stages of the rulemaking process and how focusing on different stages of this process can lead to different conclusions about the extent and effectiveness of this participation. Interest groups were involved at every stage of the development of the Tank Car Rule, from helping to

highlight the inadequacy of current regulations, formulating new standards that were eventually adopted in the Tank Car Rule, generating pressure to pass the rule, participating in the notice-and-comment process, appealing to PHMSA and FRA—referred to hereafter simply as the DOT—to change some of the requirements in the rule, challenging the rule in court, and lobbying Congress to amend the rule.154

Third, the Tank Car Rule was a high-salience rule that received a substantial amount of attention from Congress, the media, and a wide range of different interest groups.155 Most previous empirical studies of influence in the rulemaking process have tended to focus on relatively less salient rulemakings, and influence in these contexts may differ.156 Finally, since much of the early scholarly literature on regulatory capture focused on the regulation of railroads, this seemed like a natural place to look for evidence of interest group influence over the regulatory process.157

That being said, focusing on a single high-salience rule also has disadvantages, as the dynamics surrounding the Tank Car Rule are unlikely to be representative of the rulemaking process as a whole. Like other case studies of high-salience rules, this study—viewed in isolation—may give the impression that interest groups are more intensely engaged in the rulemaking process than they actually are.158 As Kerwin and Furlong point out, many rules published in the federal register “are quite minor, routine, and noncontroversial,” and are therefore “not likely to attract much notice from interest groups because their individual effects are small.”159 In particular, the amount of attention that the Tank Car Rule received from public interest groups and the general public is unrepresentative of most rulemakings.160

B. Rule Background

The Tank Car Rule was a discretionary rule, issued pursuant to DOT’s longstanding authority under Title 49, section 5103(b) of the United States Code, which authorizes the Secretary of Transportation to “prescribe regulations for the safe transportation, including security, of hazardous materials in

154. See infra fig.3.
155. See infra Section II.B.
156. See Yackee & Yackee, supra note 13, at 137.
158. KERWIN & FURLONG, supra note 5, at 190 (“If we were to rely solely on case studies, we would immediately conclude that participation by interest groups is a prominent part of all rulemaking.”).
159. Id. at 191.
160. See supra notes 53–62.
infrastate, interstate, and foreign commerce.” The pressure to develop the rule began to build as the production of crude oil in the United States started rising sharply in 2009 and 2010, after having declined for many years. The production of crude increased by around 70% from 2010 to 2015, in large part due to increased drilling in shale formations (most notably the Bakken shale formation). Ethanol production in the U.S. also ramped up considerably around this time.

Historically, most crude oil was transported via pipeline or vessel. However, since there now wasn’t sufficient pipeline capacity to transport all this new crude oil and ethanol, shippers turned to rail as a stopgap measure. According to analysis from the Association of American Railroads (“AAR”)—an industry trade group that focuses on the U.S. freight rail industry—the volume of crude oil transported by rail increased by 131% between 2010 and 2014. By 2015, DOT reported that crude oil and ethanol comprised around 68% of the flammable liquids transported by rail. The number of tank cars carrying ethanol grew 40% from 2008 to 2011. Shippers increasingly employed the DOT-111—a general-purpose tank car whose design dates back to the 1960s—to transport this surfeit of oil and ethanol. Yet, the DOT-111 car was historically used for transporting non-flammable

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165. Id. at 26,644.
hazardous materials and was “long known to be ill suited for transporting flammable material.”

Soon, there was an uptick in rail accidents involving crude oil and ethanol, and there were devastating consequences. The early accidents involved ethanol. In June 2009, a train carrying ethanol derailed near Cherry Valley, Illinois, killing one passenger and injuring several persons. The release of ethanol from the train and the resulting fire prompted a mandatory evacuation of 600 residences and resulted in around $7.9 million of damage. Accidents involving crude oil began to pile up, too, going from zero accidents in 2010 to five in 2013. From 1975 to 2012, railroads spilled 800,000 gallons of crude oil, and in 2013 alone, they spilled 1.15 million gallons. In its findings stemming from its investigation of the Cherry Valley derailment, the National Transportation Safety Board (“NTSB”)—an independent government body charged with investigating and reporting on civil transportation accidents—determined that the DOT-111 “can almost always be expected to breach in derailments that involve pileups or multiple car-to-car impacts.”

Members of Congress also sent letters to FRA and PHMSA, “urging prompt, responsive actions.” Around the same time as the NTSB was focusing on this issue, the AAR’s Tank Car Committee—a self-regulatory body with representation from the railroad industry, the shipping industry, and the car owner/manufacturing industry that studies the railroad industry and helps to set standards for railroads—created a task force in 2011 to study how to reduce the risk of these events. Ultimately, this Committee came up with


174. Id.

175. See 79 Fed. Reg. at 45,019.

176. Krauss & Mouawad, supra note 166.


178. Id.

179. 79 Fed. Reg. at 45,026.

a specification for a new standard, the CPC-1232, which increased the thickness of the tank car shell.\textsuperscript{181} The AAR, on behalf of the committee, petitioned PHMSA to adopt these standards.\textsuperscript{182}

DOT recognized that the new industry standards improved on the old DOT-111 design, but it argued that these improvements did not go far enough and suggested a number of additional safety features.\textsuperscript{183} As a result, the Tank Car Committee put together a task force with representation from FRA, AAR, and the ethanol and oil industries which considered a number of additional safety requirements, but the committee failed to arrive at a consensus.\textsuperscript{184} The DOT decided to move forward with a rulemaking process to put the new standards in place anyway, but the effort stalled amidst concerns that the regulation’s costs would outweigh its benefits.\textsuperscript{185}

Then, on July 6, 2013, a train of DOT-111 tank cars filled with crude oil from the Bakken Formation in North Dakota derailed and exploded in a small Quebec town called Lac-Mégantic, killing at least forty-two people and incinerating much of the town’s infrastructure.\textsuperscript{186} In the following weeks and months, members of Congress ratcheted up pressure on the White House and federal regulators to respond, while the NTSB issued several more recommendations to PHMSA and FRA.\textsuperscript{187} Deborah Hersman, the former chairwoman of the NTSB, ominously warned in 2014 that not updating the standards could result in a “higher body count.”\textsuperscript{188}

This pressure helped to jumpstart DOT’s heretofore-moribund regulatory initiative. Only a few months later, on September 6, 2013, the FRA and PHMSA issued an ANPRM seeking comment on several petitions for rulemaking, among them the petition that the AAR Tank Car Committee had

\textsuperscript{181} 79 Fed. Reg. at 45,030.
\textsuperscript{182} Id.
\textsuperscript{183} Id.; PIPELINE & HAZARDOUS MATERIALS SAFETY ADMIN., T87.6 TASK FORCE SUMMARY REPORT (2013).
\textsuperscript{184} Id.
\textsuperscript{185} Telephone Interview with Government Official (March 3, 2017) (conducted on condition of anonymity).
\textsuperscript{188} Mouawad, supra note 171.
submitted back in 2011.\textsuperscript{189} FRA and PHMSA then worked together to develop a more comprehensive set of rules geared at improving safety for the transportation of flammable liquids by rail and ushering it through the notice-and-comment process. The rulemaking process occupied another year and a half, and on May 8, 2015, DOT issued the final version of HM-251, the Tank Car Rule.\textsuperscript{190}

The final rule is wide-ranging and touches on a wide array of regulatory issues, including instituting new tank design standards, speed restrictions, braking technologies, and notification requirements. In the preamble to the final rule, DOT summarizes thirteen different main issues that it considered in developing the final rule\textsuperscript{191}:

1. **Harmonization**

The DOT developed the Tank Car Rule in consultation with Transport Canada (the Canadian government agency responsible for transportation regulations), and the Tank Car Rule attempts to harmonize the U.S. regulations with Canada’s regulations “[t]o the extent possible,” but it does not fully harmonize some provisions, such as the brake requirements and speed limits.\textsuperscript{192}

2. **Definition of High-Hazard Flammable Train**

The regulation defines certain trains carrying large volumes of flammable liquids as “high-hazard flammable trains” ("HHFTs") and applies certain parts of the regulation—the speed limits, braking restrictions, and routing requirements—only to trains that meet this definition.\textsuperscript{193} The final rule defines an HHFT as “a single train transporting [twenty] or more loaded tank cars containing Class 3 flammable liquid in a continuous block or a single train carrying [thirty-five] or more loaded tank cars of a Class 3 flammable liquid throughout the train consist.”\textsuperscript{194}


\textsuperscript{191} Id.

\textsuperscript{192} Id. at 26,662.

\textsuperscript{193} Id. at 26,663-26,664.

\textsuperscript{194} Id. at 26,664.
3. **Crude Oil Treatment**

The NPRM had explored the idea of requiring that crude oil be “pre-treated” so that it is less volatile before being transported, but the final rule does not require pre-treatment of crude oil.\footnote{Id. at 26,665.}

4. **Scope of Rulemaking**

The DOT received a number of requests to expand the proposals in the rule beyond flammable liquids to all hazardous materials, but the final rule applies only to flammable liquids.\footnote{Id. at 26,666.}

5. **New Tank Car Construction**

The NPRM proposed three possible sets of safety features (such as increased shell thickness, thermal protection systems, etc.) for new tank cars, ranging from most stringent to least stringent.\footnote{Id.} The final rule adopts the intermediate option.\footnote{Id.}

6. **Retrofit Standard**

The final rule requires that existing tank cars be retrofitted only to meet the least stringent of the three options proposed in the NPRM.\footnote{Id. at 26,675.}

7. **Performance Standard**

To encourage innovation in tank car design, the final rule provides that tank cars can be designed in different ways as long as they meet certain performance criteria.\footnote{Id. at 26,679.}

8. **Implementation Timeline**

The rule provides a “risk-based” timeline over which existing tank cars must be retrofitted, taking into account the material they are transporting and the type of tank car.\footnote{Id. at 26,675.}
9. **Speed Restrictions**

The final rule adopts a forty mile-per-hour speed limit in “High-Threat Urban Areas” (defined as “an area comprising one or more cities and surrounding areas including a [ten]-mile buffer zone”).

10. **Advanced Brake Signal Propagation Systems**

The final rule requires all HHFTs to have an end-of-train or distributed power braking system, and requires a subset of HHFTs meeting the definition of a “high-hazard flammable unit train” (defined as “a train comprised of [seventy] or more loaded tank cars containing Class 3 flammable liquids traveling speeds at greater than [thirty miles-per-hour]”) to be equipped with an electronically controlled pneumatic (“ECP”) braking system when transporting flammable liquids.

11. **Classification**

The rule requires shippers to adopt a sampling and testing program for unrefined-petroleum products.

12. **Routing**

The rule requires railroad companies to perform an analysis that considers at least twenty-seven specified safety and security factors when they are making routing decisions.

13. **Notification**

The rule requires railroads to identify a point of contact on routing issues and to provide that information to state and local officials in affected jurisdictions.

Even after the Tank Car Rule was finalized in May 2015, the rule continued to evolve, and interest groups continued to lobby for further changes to the rule. Within weeks of DOT’s issuing the final rule, several interest groups filed administrative appeals with DOT and submitted petitions for judicial review in the federal courts of appeals. DOT rejected all of the administrative appeals in November 2015. However, the following month, Congress passed the Fixing America’s Surface Transportation (“FAST”) Act, a wide-ranging transportation funding and authorization law that—among

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202. *Id.* at 26,646 n.10, 26,691–26,692.
203. *Id.* at 26,645, 26,692.
204. *Id.* at 26,652.
205. *Id.* at 26,651.
206. *Id.* at 26,652.
many other things—made several important amendments to the Tank Car Rule, which I discuss below. DOT issued a regulation codifying many of these changes in August 2016.209

C. Findings

1. Consensus Among Interest Groups

**Hypothesis 1**: Businesses may take very different positions on regulatory issues, even when they are broadly in favor of less regulation.

Table 1 shows that in their comments on the proposed rule, many otherwise diverse interest groups are nevertheless internally unified in their respective positions as to whether they desired the Tank Car Rule to become more or less stringent. The vast majority of comments were submitted by (in order of most comments to least comments): individual members of the public, individual businesses, state or local governments, public interest groups (groups concerned with issues of general welfare such as the environment or consumer protection), and industry associations. In line with the existing literature (which mostly focuses on comments at the NPRM stage), I find that businesses, industry associations, public interest groups, and members of the public all display internal cohesiveness, with businesses and industry associations predominantly seeking less stringent regulations and public interest groups and individuals seeking more stringent regulations.210 State and local governments were slightly more divided, but most of them (76.64%) sought a more stringent regulation.

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208. See infra notes 274–276.
210. See, e.g., Yackee & Yackee, supra note 13, at 132 (finding that over 83% of business commenters in their study sought less stringent regulations).
### TABLE 1: COMMENTERS’ POSITIONS ON THE NPRM (N=3,231)

<table>
<thead>
<tr>
<th>Commenter Type</th>
<th>N</th>
<th>More Stringent (%)</th>
<th>Less Stringent (%)</th>
<th>No Change (%)</th>
<th>Unclear (%)</th>
<th>Part More Stringent, Part Less Stringent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>2713</td>
<td>89.31</td>
<td>0.66</td>
<td>0.18</td>
<td>9.77</td>
<td>0.07</td>
</tr>
<tr>
<td>Business</td>
<td>225</td>
<td>2.67</td>
<td>89.78</td>
<td>0.44</td>
<td>1.78</td>
<td>4.89</td>
</tr>
<tr>
<td>State/Local</td>
<td>137</td>
<td>76.64</td>
<td>17.52</td>
<td>0.73</td>
<td>1.46</td>
<td>3.65</td>
</tr>
<tr>
<td>Industry Association</td>
<td>63</td>
<td>3.17</td>
<td>80.95</td>
<td>0</td>
<td>3.17</td>
<td>12.70</td>
</tr>
<tr>
<td>Public Interest</td>
<td>58</td>
<td>81.03</td>
<td>3.45</td>
<td>5.17</td>
<td>8.62</td>
<td>1.72</td>
</tr>
<tr>
<td>Congress</td>
<td>12</td>
<td>66.67</td>
<td>16.67</td>
<td>8.33</td>
<td>0</td>
<td>8.33</td>
</tr>
<tr>
<td>Native American</td>
<td>7</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Labor</td>
<td>6</td>
<td>83.33</td>
<td>0</td>
<td>16.67</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Academic</td>
<td>3</td>
<td>33.33</td>
<td>0</td>
<td>0</td>
<td>66.67</td>
<td>0</td>
</tr>
<tr>
<td>Other Fed. Gov.</td>
<td>3</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

However, industry associations and businesses were both less unified with respect to their positions on the ANPRM, with substantial fractions of industry associations and businesses calling for the existing regulatory regime to become more stringent, at least in some respects. This suggests, in line with the account offered above, that a substantial fraction of the business community viewed the regulations governing the transportation of

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211. See infra tbl.2.
212. See supra notes 180–182 and accompanying text.
flammmable liquids by rail that were in place before the Tank Car Rule as inadequate, even though most of them ultimately viewed the standards in the Tank Car Rule NPRM as having gone too far. 213

Moreover, although businesses and industry groups may have been relatively united in their overall position on the stringency of the rule throughout the rulemaking process, they held quite different views on some important specific aspects of the rule. In particular, the interests of railroad companies and tank car manufacturers sharply diverged with those of the shippers of goods (such as oil and ethanol companies) and the owners of tank car equipment. Because railroad companies do not own the tank cars that they transport (these cars are usually owned by either the shippers or the tank car manufacturers) but do have liability in the event of a rail accident, they are generally in favor of more rigid tank car standards. 214 Railroads companies

213. See supra Section II.B.
214. Compare Joan Lowy, Influence Game: Shaping Railroad Safety Rules, WASH. EXAMINER (July 14, 2014), http://www.washingtonexaminer.com/influence-game-shaping-railroad-safety-rules/article/2148796 (“The [AAR], for example, is pushing for tougher safety standards for tank cars than the current, voluntary standards agreed to by industry in 2011. Railroads, though, typically don’t own or lease tank cars and so wouldn’t have to buy new cars or retrofit existing ones. The oil and ethanol industries that own the cars want to stick with the voluntary standards, also known as ‘1232’ tank cars.”), with Daniel Machalaba, Railroads Push to Harden Tank Cars—Some Chemical
thus had been lobbying DOT for stricter regulation of tank cars since well before the Tank Car Rule was issued.\(^{215}\)

Although shippers and railroads aligned on certain issues in the proposed rule (such as the brake requirement and speed restrictions), they diverged on others. For example, in its comments on the proposed rule, the AAR “urge[d] PHMSA to adopt an aggressive phase-out schedule for cars that cannot meet retrofit requirements.”\(^{216}\) Likewise, tank car manufacturers, such as Greenbrier Companies, “encourage[d] PHMSA to finalize a rule for new cars and retrofits of existing cars that permits the industry to make these changes as rapidly as possible.”\(^{217}\)

By contrast, shippers and owners of tank cars were in general more resistant to imposing retrofit requirements for existing tank cars. For example, the Railway Supply Institute (the industry association representing freight car owners) warned in its comments that “PHMSA’s [p]roposed [m]odification [t]imeline [c]annot be [a]chieved [b]ased on [r]epair [n]etwork [f]acility [c]onstraints and [d]oes [n]ot [a]ccount for [s]everal [u]nintended [c]onsequences.”\(^{218}\) Similarly, the American Petroleum Institute (the largest industry association representing oil and gas companies) complained that “PHMSA’s proposed phase-out is highly ambitious and only works when there are very optimistic assumptions.”\(^{219}\)

These differences continued to play out at later stages of the rulemaking process. For example, after DOT finalized the Tank Car Rule, AAR submitted an administrative appeal to DOT, among other things, arguing that the rule should be expanded to apply to all cars carrying Class 3 flammable liquids—regardless of their number or arrangement on the train—and that DOT

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\(^{215}\) Ass’n of Am. R.Rs., Comments Before the Pipeline and Hazardous Materials Safety Administration, Docket No. PHMSA-2012-0082 (HM-251): Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains 1 (Sept. 30, 2014) (“In 2011, AAR petitioned PHMSA to adopt new tank car standards for packing group I and II materials, including flammable liquids. In comments responding to the 2013 ANPRM, AAR endorsed new tank car standards for all class 3 flammable liquids, including those classified as packing group III. AAR strongly supports new tank car standards for all class 3 flammable liquids.”).

\(^{216}\) Id. at 41.


should mandate that all tank cars carrying flammable liquids be equipped with new safety requirements.220

These demands contrasted with those of the shippers. Although the American Petroleum Institute (representing oil companies) had supported thermal blankets and pressure relief devices in its comments on the NPRM, it did not mention either of these issues in its appeal;221 Growth Energy (representing ethanol companies) argued that the new tank car and retrofit standards should exclude ethanol;222 by contrast, the American Chemistry Council (representing American chemical manufacturers) argued that PHMSA should narrow the scope of the rule so that it applied only to crude oil and ethanol.223

These different views made for some strange bedfellows. For instance, on some of the issues in its administrative appeal, AAR was in alignment with a coalition of environmental groups and local governments who also sued DOT, and who were similarly pushing DOT to expand the scope of the rule and impose the same safety features.224 In addition, interviews with government officials involved in the rulemaking process also suggest that the AAR’s desire for more stringent regulations were actually in line with the views of at least some regulators, even though these officials ultimately did not feel they were able to include such provisions in the final rule.225

The AAR’s support for stricter standards likely resulted in the Tank Car Rule being more stringent than it otherwise would have been. For instance, Congress ended up amending Tank Car Rule to include some of the safety features for which AAR had advocated,226 and to expand the scope of the


221. Greco, supra note 219, at 28.


224. See, e.g., Earthjustice, Forest Ethics, Sierra Club, Nat’l Res. Def. Council, & Oil Change Int’l, Comments Before the Pipeline and Hazardous Materials Safety Administration, Docket No. PHMSA-2012-0082 (HM-251): Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains 21 (Sept. 30, 2014) (“We strongly oppose allowing unsafe tank cars, including any DOT-111s or CPC-1232 tank cars, to continue to be used to ship crude oil and ethanol in any configuration unless retrofitted, including in blocks of fewer than [twenty] cars.”)


retrofit requirements. Shortly thereafter, the coalition of environmental petitioners and local governments dropped their lawsuit.

2. Different Measures of Influence

**Hypothesis 2:** Businesses may often not receive their desired rule changes, even when the stringency of the rule shifts in the direction that they desire.

I use two strategies for measuring influence during the notice-and-comment process: First, I code whether each commenter asked for one or more of the thirteen “major” issues highlighted above to become more stringent, less stringent, or stay the same; then I code whether that part of the rule actually became more or less stringent, or stayed the same, from the proposed rule stage to the final rule stage. Cases where the desired rule change matched the actual change are coded as a “1,” whereas cases where the desired rule change did not match the actual change are coded as “0.” The commenter’s overall influence is measured as the mean of these values across each commenter type (labeled “Influence 1” in Figure 2 below).

Second, I code the proportion of policy concerns raised in each comment that were completely addressed in the final rule, either because the specific part of the rule that they objected to was removed from the rule or because the revision that they suggested was fully adopted. The commenter’s overall influence is measured as the proportion of policy concerns that were completely addressed across each commenter type (labeled “Influence 2” in Figure 2 below).

As in other empirical studies of influence which rely on content analysis, neither of these measures is causal; they both only report associations between desired rule changes and changes in the actual rule. Because my goal is to examine the differences among different measures of influence, rather than to quantify precisely which interest groups had the most influence in this rule, I report only bivariate correlations below for the five most-represented categories of commenters.

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227. *Id.* at § 7304 (Phase-Out of All Tank Cars Used to Transport Class 3 Flammable Liquids) (to be codified at 49 U.S.C. § 20155).


229. Inter-coder reliability scores for the variable that recorded the number of issues that were addressed in the final rule were somewhat weak. The percent agreement was nearly 72% when counting all observations, but only 49% when counting only non-form letters. For more detail on these categories, see the Methodological Appendix.

230. For more detail on these categories, see the Methodological Appendix.
Using the first measure of influence, the businesses appear to wield disproportionate influence during the notice-and-comment stage of the rulemaking process, compared to individuals, public interest organizations, and state and local governments. This is not entirely surprising: Business commenters overwhelmingly preferred a less stringent rule, and a plurality of major pieces of the rule became less stringent than more stringent from the proposed to the final rule stage. Of the thirteen major categories in the rule, five became less stringent or adopted the least stringent of the options presented in the proposed rule: The timeline over which the DOT-111 tank cars are to be phased out is less ambitious, the scope is narrower, the retrofit standard is the least stringent of the options proposed, the speed restriction is the least stringent of the options proposed, and the braking requirement applies to fewer trains. The remaining eight major issues in the rule either did not noticeably change or became more stringent in some respects and less so in others.

**FIGURE 2: INFLUENCE DURING THE NOTICE-AND-COMMENT PROCESS**

![Bar Chart]

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231. *Infra* fig.2. Figures 2 and 4 separate out businesses from industry associations to see if they have different levels of influence, whereas Figures 3 and 5 combine them to make the presentation more straightforward.

232. *See supra* tbl.1.


234. *Id.*
Using the second measure of influence, industry associations still appear to wield more influence than individuals and public interest groups, but the gap among the different types of interest groups narrows substantially. According to this measure, businesses actually exhibit less influence than public interest groups, while individuals exert virtually no influence during the notice-and-comment process according to both measures of influence.

As expected, the second measure of influence is also almost uniformly lower than the first measure, indicating that most of the time in which a major piece of the rule moved in the direction that the commenter requested, the commenter usually did not receive the specific change that he or she was asking for. For example, one widely circulated form letter submitted by businesses cautioned that “any brake-system requirements that may affect speed restrictions should be limited to proven technology” — a clear reference to the ECP brake requirement in the Tank Car Rule NPRM, which businesses repeatedly criticized as unproven technology. Although the brake requirement became less strict from the proposed rule to the final rule, businesses’ request was ultimately not granted, as the brake requirement was included in the final rule.

How to interpret the disparity between these two measures is unclear. On the one hand, this disparity could be viewed as evidence that even the most influential interest groups usually do not get exactly what they want in...
the notice-and-comment process. On the other hand, it could be viewed as evidence that interest groups treat the public comment process in bargaining terms and deliberately request ambitious changes that they know are unlikely to be granted, in the hope that more ambitious requests will be more likely to change the rule in the direction they desire. Either way, it presents a more limited picture of interest group influence in this rule: More often than not, even the most influential interest groups did not get precisely the changes that they asked for in the final rule.

3. Influence over the Course of the Rulemaking Process

_Hypothesis 3_: Focusing on changes made during the notice-and-comment period may overstate business influence.

Interest groups participated in the Tank Car Rule rulemaking process in several other ways besides submitting a comment on the NPRM: submitting petitions for rulemaking before the DOT had even begun developing a rule, commenting on the ANPR, participating in meetings with OIRA, and appealing the final rule either through the DOT’s administrative appeal process or in court.241

Evaluating the effects of this participation at these other stages is more difficult than doing so at the NPRM stage for two reasons: First, only a subset of issues ultimately incorporated into the Tank Car Rule were discussed at these stages. Second, for some of these stages, such as the OIRA review process or _ex parte_ meetings (i.e., “off the record” meetings) with outside groups, there is little documentation about what interest groups were requesting (indeed, DOT did not possess any documentation of _ex parte_ contacts in this rule, so I do not consider these contacts below).242 For these reasons, most of the empirical literature does not attempt to measure influence over all of these stages of the rulemaking process. Nevertheless, I attempt to evaluate influence at these other stages to the extent possible below by comparing interest groups’ requests at these stages to the contents of the final rule.

241. _Infra_ fig.3.
The earliest documentation of interest groups’ positions on the Tank Car Rule comes from the petitions they submitted urging PHMSA to issue a rule. The Tank Car Rule ANPRM makes reference to twelve petitions for rulemaking: seven from different industry associations (four of which did not address the regulations governing the transportation of flammable liquids by rail, the subject of the Tank Car Rule), four from the NTSB, and one from a coalition of local governments. Of note, all of the petitions that were directly relevant to the Tank Car Rule (including those from industry associations) called for safety standards that were stronger than the status quo. Again, this suggests that these industry groups viewed the regulatory regime that pre-dated the Tank Car Rule as inadequate, even though the standards that were ultimately adopted in the rule went beyond what some of them would have liked.

Comparing their petitions to the final version of the Tank Car Rule reveals that the final rule is more stringent in several respects than what the industry associations asked for:

- First, although several industry associations, including the AAR and the American Petroleum Institute, submitted petitions in 2011 calling for...
new safety standards for DOT-111 tank cars carrying crude oil and ethanol, the standards that ended up being adopted for new tank cars in the final rule are more stringent than those these groups initially endorsed.246

- Second, the industries focused exclusively on raising standards for newly constructed tank cars, but they either “recommend[ed] no modification or retrofit for existing [tank] cars,” or argued that any retrofit requirements be addressed in a separate rulemaking.247 By contrast, the NTSB argued that new safety standards must also be applied to the existing DOT-111 tank car fleet.248 (This recommendation was endorsed by the coalition of local governments.)249 DOT ultimately required that some existing tank cars be retrofitted in accordance with the standards presented in the AAR Tank Car Committee’s petition, the least stringent retrofit standard considered in the proposed rule.250

- Third, the scope of the final rule was ultimately greater than the industry petitions: Whereas several trade associations recommended that the new standards be limited only to (or at least prioritize) tank cars carrying ethanol and crude oil,251 the final rule applied to tank cars carrying other kinds of flammable liquids as well.252

- Finally, the rule included a number of other requirements that industry groups did not call for in their petitions, including speed restrictions, requirements to adopt new brake technology, routing requirements, and new rules to ensure the proper classification of products being

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249. Petition of Vill. of Barrington, Ill. & The Reg’l Answer to Canadian Nation to Pipeline & Hazardous Materials Safety Admin., Petition for Rulemaking: Tank Car Standards for the Existing Fleet of DOT Class 111 Tank Cars Used for Packing Group I and II Materials; and Real-Time Electronic Freight Consist Distribution 1–2 (Apr. 3, 2012) (“As the National Transportation Safety Board (‘NTSB’) has observed, AAR’s proposed rule doesn’t go far enough as it fails to encompass the existing fleet of DOT-111 tank cars used to transport Groups I and II materials.”).

250. 80 Fed. Reg. at 26,647.


252. See 80 Fed. Reg. at 26,689 (“By defining a HHFT as a train with a continuous block of 20 or more tank cars or a total of 35 or more tank cars containing a Class 3 flammable liquid, we address the specific risks of increasing crude oil and ethanol production while also anticipating the potential for future risks presented by the increased production or transport of other Class 3 flammable liquids.”).
shipped by rail.253 That being said, some of the requirements that ultimately ended up being adopted in the final rule were less strict than those that DOT considered in the proposed rule.

The standards that were ultimately adopted gave the NTSB and the coalition of local governments, both of which supported additional safety measures, much—though not all—of what they asked for in their petitions. The final rule promulgated by DOT addressed two of the four NTSB recommendations considered in the ANPRM (three of which were endorsed by the coalition of local governments),254 and Congress later amended the rule to adopt NTSB’s third recommendation (requiring railroads to provide emergency responders with real-time information about the identity and location of hazardous materials on trains).255

The next stage of the rulemaking process for which there are materials in the regulatory docket is the ANPRM comment period. Figure 4 shows that, in contrast to the findings of most of the empirical literature, when one looks at this stage of the comment process, state and local governments were the most likely to have their policy concerns in these comments addressed in the final rule, with businesses and industry associations, as well as public interest organizations and individuals, much less likely to do so.256

253. See Petition of Ass’n of Am. R.Rs., supra note 247.
256. Because the first measure of influence relies on coding whether each commenter asked for one or more of the thirteen “major” issues highlighted in the final rule to become more stringent (see supra text accompanying note 229), less stringent, or stay the same, and because these issues were not defined at this early stage of the rulemaking process, I can only use the second measure of influence.
The overwhelming success of state and local governments is somewhat misleading, however, since it is due in large part to the fact that the majority of their comments were form letters, which raised a single request that ended up being reflected in the final rule (that DOT issue new regulations to retrofit existing DOT-111 tank cars used to transport certain classes of flammable liquids). When these form letters are removed, state and local governments are still the most successful type of interest group but see less than half of their suggestions granted in the final rule. The success rate of public interest organizations also falls somewhat with the removal of form letters, from roughly 29% to roughly 22%.

In addition to commenting on the proposed rule, interest groups also participated in the OIRA review process—both before the proposed rule was issued, as well as between when the proposed rule was issued and the final rule was promulgated. Of the thirty-four meetings that OIRA held with outside organizations about the Tank Car Rule, eighteen were called by businesses, thirteen by industry associations, two by public interest groups, and one by a labor group. Although there are no transcripts of what transpired in these meetings, the OIRA review process appears to have resulted in few substantive changes to the rule, aside from some adjustments to the implementation timeline. Most of the documented changes between the draft final

257. Supra fig. 4.
258. Meetings are categorized according to who is listed as having requested the meeting on https://www.reginfo.gov/public/do/eoHistoricReport. Some meetings had participants from multiple kinds of interest groups.
After DOT issued the final rule, six interest groups (four industry associations—the Dangerous Goods Advisory Council, the American Chemistry Council, the AAR, and the American Fuel and Petrochemical Manufacturers—one coalition of environmental groups and local governments, and one coalition of Native American Tribes) submitted appeals through DOT’s administrative appeal process on a variety of different issues. DOT rejected all but one of these appeals, which was withdrawn. That being said, the coalition of environmental and government groups’ appeal did prompt DOT to announce that the notification requirement in the Tank Car Rule did not supersede the previous notification requirements.

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259. See Substantive Differences between Final Rule Submitted to OIRA on February 5, 2015 and Published in the Federal Register on May 8, 2015 (June 15, 2015) (summarizing the changes in the final rule that were made during OIRA review).

260. The Dangerous Goods Advisory Council describes itself as “an international, non-profit educational organization that promotes safe and efficient transportation of hazardous materials in domestic and international commerce” whose membership “includes hazmat shippers, carriers, trade associations, and providers of related goods and services such as packaging, test labs, labels, warehousing facilities, freight forwarding, software, and consultants and trainers.” Dangerous Goods Advisory Council, http://www.dgac.org/ (last visited Dec. 22, 2017).


262. See supra note 168 and accompanying text.


contained in its May 2014 Emergency Order—which it had appeared to do.

Seven petitions for review of the final rule were also filed in four courts of appeals shortly after the Tank Car Rule was finalized, after which they were consolidated in the Court of Appeals for the District of Columbia Circuit. As of the time of writing, these petitions have all been closed.

Only a few months after DOT finalized the rule, however, Congress passed the FAST Act, which made several important amendments to the Tank Car Rule. The FAST Act granted most of the major changes that the AAR had requested in its appeals: It required DOT to prohibit the use of DOT-111 tank cars from carrying flammable liquids, regardless of whether they are transported in HHFTs; to add extra safety requirements for tank cars, including thermal blankets and pressure relief devices; and to lengthen and adjust the retrofit implementation timeline. Some of these requirements made the Tank Car Rule stricter and were in line with what environmental groups had requested (and perhaps what DOT itself wanted), while others served to make the rule less stringent.

Notably, the FAST Act also required the Government Accountability Office (“GAO”) and the National Academy of Sciences to conduct two separate studies of ECP brakes. (An earlier version of the bill reportedly provided for these tests to be conducted by a committee composed of the railroads, before the House Transportation Committee required that the tests be


272. Id.

273. See supra notes 222–227.

conducted by independent experts.\textsuperscript{275} The National Academy concluded that it was “unable to make a conclusive statement about the emergency performance of ECP brakes relative to other braking systems,”\textsuperscript{276} while the GAO issued a report recommending, among other things, “that DOT acknowledge uncertainty in its revised economic analysis of ECP brakes.”\textsuperscript{277} Then, in December 2017, the Trump Administration announced that it would initiate a rulemaking to rescind the ECP brake requirement, and in September 2018, it finalized this rescission.\textsuperscript{278}

At least some of the ways that DOT weakened the rule during the notice-and-comment process look less important within the context of the whole rulemaking process. For example, although the requirement to adopt ECP brakes became somewhat less stringent from the proposed rule to the final rule, the fact that FRA and PHMSA included this provision at all seems more indicative of DOT’s resilience to interest group influence, given how fiercely the business community (and in particular, the railroad industry) opposed requiring ECP brakes.\textsuperscript{279} Indeed, some reporting indicates that the final rule was tougher than expected.\textsuperscript{280} That is not to say that the changes made to the rule at the NPRM stage were not important. For example, the implementation timeline for retrofitting existing tank cars was substantially prolonged from the proposed rule to the final rule stage.\textsuperscript{281} Yet even this change seems like a less significant concession when viewed in the context of the entire rule, as industry groups initially resisted imposing any retrofit requirements for existing tank cars.\textsuperscript{282}

\textsuperscript{275} Halsey, supra note 274 (“One version of the bill would have entrusted the testing to a committee made up primarily of the railroads, but others involved in the talks insisted that the work be done by contractors free of conflicts of interest. ‘The original study was going to be tainted by the industry, and the House [transportation] committee fixed up the bill to make it more fair,’ Risch recalled.” (alteration in original)).


\textsuperscript{277} U.S. GOV’T ACCOUNTABILITY OFF., GAO-17-122, TRAIN BRAKING DOT’S RULEMAKING ON ELECTRONICALLY CONTROLLED PNEUMATIC BRAKES COULD BENEFIT FROM ADDITIONAL DATA AND TRANSPARENCY 48–49 (2016).


\textsuperscript{279} See Schaper, supra note 239 (describing the railroad industry’s opposition to the ECP brake requirement).


\textsuperscript{282} See supra note 249 and accompanying text.
Evaluating interest group influence over the course of the whole rule presents a more nuanced picture than looking solely at the notice-and-comment period. It is true that businesses and industry associations appear to have had a greater share of the policy concerns in their comments on the NPRM addressed in the final rule than other kinds of interest groups; yet, there is no such disparity when one compares their comments on the ANPRM to the final rule. In addition, the final rule is still more stringent than what these groups initially requested in their petitions for rulemaking in several respects. Finally, although the Tank Car Rule noticeably granted AAR a number of important requests, many of these changes were made by Congress, rather than the DOT. Furthermore, several of these changes (such as requiring thermal blankets and pressure relief valves, and broadening the scope of the rule) served to increase the stringency of the tank car standards, and interviews with DOT officials suggest that at least some officials would have liked to include these changes in the final rule, but knew they were too costly to get past OIRA review. Thus, even where business influence appears to be at its strongest, the outcome may not always be to weaken regulations.

4. Significance of Requests

**Hypothesis 4**: Businesses may be more successful in part because they make more limited and realistic requests.

This study finds three pieces of evidence that suggest that businesses and industry associations were more conservative and strategic as to the number and types of concerns that they raised about the Tank Car Rule NPRM. First, Table 1 shows that businesses, and to a lesser extent, industry associations, on average raised fewer policy concerns with the proposed rule than individuals and other types of interest groups.
TABLE 3: NUMBER OF REQUESTED CHANGES TO TANK CAR RULE NPRM

<table>
<thead>
<tr>
<th>Commenter Type</th>
<th>Average Number of Policy Concerns Raised</th>
<th>Average Number of “Main” Issues Addressed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>2.25</td>
<td>1.98</td>
</tr>
<tr>
<td>Individual</td>
<td>4.03</td>
<td>1.96</td>
</tr>
<tr>
<td>Industry Association</td>
<td>3.53</td>
<td>2.41</td>
</tr>
<tr>
<td>Public Interest</td>
<td>5.77</td>
<td>4.24</td>
</tr>
<tr>
<td>State/Local</td>
<td>4.03</td>
<td>2.97</td>
</tr>
</tbody>
</table>

Second, Table 3 shows that businesses—and again, to a lesser extent, industry associations—were more focused on the “main issues” (i.e., the thirteen issued discussed in the preamble to the final rule) that DOT had signaled were within the ambit of the rulemaking process.283 Table 3 shows how many of the main issues in the Tank Car Rule NPRM were addressed by each main category of commenters on average. The disparity between the total number of policy changes raised and the number of main issues addressed is smallest for businesses and largest for individuals.

Third, business interests were more narrowly focused on certain parts of the rule than other types of interest groups and individual members of the public. Figure 5 shows the proportion of each interest group’s comments that discuss the five most commonly cited issues, of the thirteen major issues in the rulemaking described above.284 An overwhelming majority of businesses and industry associations commented on the proposed speed restrictions, and no other issue received close to that same amount of attention from businesses or trade associations.285 By contrast, state and local governments, as well as public interest organizations, tended to be about as likely to mention any of the five most commonly cited issues in the proposed rule.286

283. All of these issues, except for three—harmonization, scope of the rulemaking, and crude oil treatment—were explicitly raised at the NPRM stage as well. The results in Table 3 remain virtually unchanged if you exclude those issues from the analysis.

284. These issues are the ones listed in the “Summary and Discussion of Public Comments” section of the preamble of the final rule. See 80 Fed. Reg. at 26,661–26,714.

285. See infra fig.5.

286. See infra fig.5.
Somewhat surprisingly, individual commenters at first appear quite unified in their focus on the proposed rule, despite the fact that they were the least likely to have their requests granted by DOT during the notice-and-comment period.\textsuperscript{287} Over 71\% of individuals’ comments on the proposed rule focused in part on the timeline for implementing the tank car standards, and they were not nearly as likely to focus on other aspects of the rule.\textsuperscript{288} However, this is largely due to the presence of a large number of form letters. Excluding form letters, individual comments are much less focused on the timeline issue, and are more evenly divided across a larger number of issues.

Taken together, this evidence suggests that businesses were more conservative and strategic in terms of the issues they raised, while individuals—and to a lesser extent, public interest organizations and state and local governments—adopted more of a scattershot approach, raising more concerns that were outside the scope of the rule and addressing more issues.

One possible explanation for these disparities is that individuals simply were not aware of what issues DOT was potentially open to changing and which ones it was not. However, while this may be true for individual members of the public, it seems less plausible with regard to public interest organizations, many of which are quite sophisticated. Another possibility is that business interests are more focused on issues in the rulemaking that the agency is open to revising because they were more successful at getting those

\textsuperscript{287} See supra fig.5.
\textsuperscript{288} See supra fig.5.
issues on the table at earlier stages in the rulemaking process. In other words, by setting the agenda early, businesses may have been able to determine which issues were under consideration in the notice-and-comment phase. Yet the fact that public interest organizations and the NTSB also participated at the earliest stages of the rulemaking process again suggests that businesses did not have total freedom in setting the agenda. One last possibility is that individuals and public interest groups may be focused on signaling their political support for stronger regulations to the agency’s political leadership, instead of trying to provide nuanced analysis to the agency staff that might lead to technical tweaks during the notice-and-comment process. Thus, they may be raising requests that they know have a low probability of success, but which would dramatically change the scope of the rule if they are successful.

III. IMPLICATIONS

At the most general level, the story of interest group participation and influence in the Tank Car Rule seems to fit quite well with the broader empirical literature: Businesses and trade associations together were better represented than public interest groups and individuals at almost every stage of the rulemaking process (though public interest groups were represented at most stages). Comments submitted by businesses and trade associations were also more likely to be associated with changes during the notice-and-comment period than those submitted by other interest groups. This fits with the recent empirical literature on interest group influence in the rulemaking process which finds that business interests still participate more—and exert more influence—than public interest groups and individual members of the public.

Yet at the same time, this study reveals a few findings that call into question the magnitude of business influence in the rule and suggest that we cannot infer from the existing evidence that businesses have captured the federal rulemaking process. These findings bolster the regulatory system

289. See West & Raso, supra note 13, at 497 (“Placing an issue on an agency’s rulemaking agenda is important. At a minimum, it . . . establishes the issues that will dominate subsequent debate. It may also reflect a tentative determination in favor of a particular course of action. As rules progress in their development, moreover, they accumulate organizational, political, and legal momentum that can inhibit major revisions in how problems are defined and addressed.” (citation omitted)).

290. See Cuéllar supra note 62, at 479, 484–85.

291. Id. at 485 (“While the agency staff nearly always dismisses those missives, enough of them can signal to the agency’s political leadership that the political costs of proceeding with a certain kind of regulation is greater than anticipated, and perhaps prohibitive. But if the letters are not enough to pull that off, then they appear to be largely ignored by the agency staff.”).

292. See supra Section I.B.
against two concerns associated with the regulatory capture view of the rule-making process: that the regulatory system fails to serve the public interest, and that it lacks democratic legitimacy.

A. How Much Influence Do Businesses Have in the Rulemaking Process?

This study reveals four findings that call into question the magnitude of business influence in this rule: First, while business interests largely presented a unified front at the proposed rule stage on the overall stringency of the rule, they differed on some important aspects of the rule—such as the stringency of new tank standards, the retrofit timeline, and the scope of the rule.293 In at least some of these cases, some industry groups, such as the AAR, even took up some of the same positions as environmental organizations, and this support appears to have resulted in a stronger rule.294 In addition, industry associations and businesses were less unified with respect to their positions on the ANPRM, with a substantial number of industry associations and businesses calling for the existing regulatory regime to become more stringent, at least in some respects.295

Second, although the major requirements in the rule were more likely to shift in the direction desired by industry associations and businesses than that desired by public interest groups and individuals, this gap narrows when one looks at the proportion of specific policy concerns that were fully addressed in the final rule.296 Moreover, more often than not, the concerns businesses and other interest groups expressed in their comments were not fully addressed in the final rule.297

Third, at least some of the concessions that business interests won during the notice-and-comment period appear less important within the context of the rule as a whole. Notably, although the final rule was less stringent than the proposed rule, it was still more restrictive than businesses had initially desired in several respects.298 In addition, when we focus on the ANPRM stage of the rulemaking process, state and local governments were the most likely to have their policy concerns in these comments addressed in the final rule, with businesses and industry associations less likely to be successful.299

Finally, business interests’ comments raised more limited concerns than individual members of the public and public interest groups. Businesses—

293. See supra Section II.C.1.
294. See supra Section II.C.1.
295. See supra tbl.2.
296. See supra Section II.C.2.
297. See supra fig.2.
298. See supra Section II.C.3.
299. See supra fig.4.
and to a lesser extent, industry associations—raised fewer policy concerns on
the proposed rule, commented on a more specific set of issues, and were more
likely to focus on issues that DOT had signaled fell within the scope of the
rulemaking. By contrast, public interest groups and individuals tended to ask
for more changes overall, focused on more issues, and raised more concerns
that fell outside the scope of the proposed rule.300

All this is not to say that businesses did not play a major role in the
development of the Tank Car Rule. Businesses were heavily involved
throughout every stage of the rulemaking process, and many of the specific
policy changes they desired were incorporated—at least to some extent—in
the final version of the rule.301 The railroad industry in particular ultimately
saw a number of its requests fully reflected in the rule, as amended by the
FAST Act.302 Yet even here, it is unclear whether the railroad industry’s
success is an indication solely of its influence, or whether it also reflects the
fact that DOT regulators believed that several of the changes sought by the
railroad industry would improve safety and strengthen the rule. This latter
interpretation accords with Professor Marissa Golden’s relatively benign
view of business influence, that “when there is conflict rather than consensus
among the commenters . . . the agency tends to hear most clearly the voices
that support the agency’s position.”303

B. The Implications of Business Influence

1. The Utility of Regulations

This Article suggests that although the recent theoretical and empirical
literatures demonstrate that businesses wield disproportionate influence in
the rulemaking process, the existing evidence does not substantiate the clas-
sic “capture” account of regulation, in which “government regulation reflects
the influence of special interests, and is created and operated for their ad-
vantage.”304 To some extent, this should be heartening: It suggests, in line
with Professor Steven Croley’s account, that our regulatory system is still
capable of serving the public interest and addressing major social problems,
despite the existing level of business influence.305

That is not to deny that the current imbalances in interest group partici-
pation and influence are problematic. To the contrary, it seems quite plausi-
ble that the current level of business influence reduces the net benefits of

300. See supra Section II.C.4.
301. See supra figs.2–4.
302. See supra note 273 and accompanying text.
304. Levine & Forrence, supra note 8, at 169.
305. See supra note 39 and accompanying text.
regulation relative to a counterfactual scenario with less business influence. For instance, disproportionate participation and influence may cause regulators to weaken needed regulations or fail to issue regulations that would have promoted improved public welfare if they had been enacted. Professors Daniel Carpenter and David Moss hypothesize that the level of business influence is likely sufficient to reduce the net benefits of regulation in many cases, but not so great that the public would be better served by having no regulation.

Yet other scholars argue that in at least some contexts, disproportionate business influence may yield better regulatory outcomes. For instance, Professor Dorit Rubinstein Reiss shows that in some contexts, a close relationship between agency regulators and business can yield important benefits—including better information, improved compliance, and avoidance of unintended consequences. Laurence Tai argues that designing regulatory processes to encourage business influence can incentivize business interests to provide valuable information to regulators.

Thus, at the very least, although one may still reasonably conclude—based on the existing evidence—that business interests have too much influence relative to other types of interest groups and individuals, we do not know nearly enough to conclude, in Senator Elizabeth Warren’s words, that “our rulemaking process is broken from start to finish.”

2. The Legitimacy of Regulations

The conclusions presented in this Article also help to defuse a possible threat to the democratic legitimacy of agency rules. Regulations’ legitimacy stems not only from their authorizing legislation, but also from the public’s meaningful participation in the rulemaking process. Rulemaking procedures are designed to preserve this legitimacy by increasing public access and

307. See, e.g., Thaw, supra note 16; Wansley, supra note 16.
309. Tai, supra note 16.
311. See, e.g., Bull, supra note 18, at 627 (“[I]f cultivated properly, public participation can both enhance the quality of agency decisionmaking and imbue citizens with a sense of investedness in the workings of the administrative state.”); Wagner, Barnes & Peters, supra note 13, at 100 (“Open government and equal access to decisionmaking processes are cornerstones that ensure an accountable and democratically legitimate Fourth Branch.”).
making regulators more responsive to the public. These procedures include requirements that agencies maintain open records, be inclusive, and respond to all significant comments. Over the years, however, this legitimacy has been undercut by allegations of regulatory capture and the weight of the evidence showing that business interests dominate the regulatory process and influence the development of regulations.

To the extent that business interests completely dominate the rulemaking process or control regulatory outcomes, the legitimacy of agency rules would seem to be in peril. Croley suggests that the extent to which business influence undermines this source of legitimacy depends on the relative imbalance in participation among different types of interest groups, as well as on the magnitude of business influence—i.e., the extent to which business interests are able to achieve their desired regulatory outcomes. In a similar vein, Reeve Bull suggests that public participation must be “effective” to confer legitimacy on agency rules. Carpenter and Moss go further, arguing that “[t]he widespread belief that special interests capture regulation, and that neither the government nor the public can prevent this, understandably weakens public trust in government” more generally.

313. Kerwin & Furlong, supra note 5, at 176–89; William F. West, Formal Procedures, Informal Processes, Accountability, and Responsiveness in Bureaucratic Policy Making: An Institutional Policy Analysis, 64 PUB. ADMIN. REV. 66, 74 (2004) (“Conservative allegations that agencies were driven by their own zealotry and liberal allegations that agencies were captured by special (read: business) interests reinforced the ‘crisis of legitimacy’ posed by bureaucracy’s increased reliance on delegated legislative power. Participation on the record was designed to counter both types of parochialism by ensuring transparency in the rulemaking process and by forcing agencies to respond to comments offered by the full range of stakeholders affected by their decisions.”) (citations omitted)).


315. Sidney Shapiro, Elizabeth Fisher & Wendy Wagner, The Enlightenment of Administrative Law: Looking Inside the Agency for Legitimacy, 47 WAKE FOREST L. REV. 463, 476–80 (2012) (outlining several empirical studies showing that business interests dominate the rulemaking process and concluding that these findings undercut the ideals of interest group pluralism in the administrative process); Wagner, Barnes & Peters, supra note 13, at 102 (“[A] number of scholars, particularly in the political sciences, question whether administrative processes actually provide this type of balanced access to and influence over the rulemaking process for all affected groups.”).


317. Id. (“To the extent that participation by regulated parties results in rules predicated on skewed or incomplete information strategically provided by those parties, participation exacerbates rather than ameliorates concerns about political legitimacy.”).

318. Bull identifies several elements constituting effective participation: “(1) it should be widespread, including as many citizens as practicable; (2) it should be informed; (3) it should be educational for the participating citizens; (4) it should produce information that is useful to the agency seeking public input; and (5) it should be conducted efficiently.” Bull, supra note 18, at 627.

319. Carpenter & Moss, supra note 4, at 2.
Yet the empirical literature does not show that businesses completely dominate the rulemaking process or control regulatory outcomes. Although the literature finds that businesses disproportionately participate throughout the rulemaking process, it also finds that state and local governments, individuals, and public interest groups are often represented. Furthermore, as this Article shows, the literature also says little about the magnitude of business influence and does not come close to demonstrating that business interests are routinely able to achieve their desired regulatory outcomes. Thus, administrative procedures should still serve as a source of democratic legitimacy for regulations.

3. Regulatory Reform

Finally, to the extent that policymakers are considering reforming administrative procedures in order to further democratize the rulemaking process, this Article provides reason to favor incremental reforms, rather than more radical ones. This Article suggests that there is still much that we do not know about the magnitude of interest group influence in the rulemaking process and how this influence is affecting the functioning of our regulatory system. Given this lack of information, it seems wise to proceed with caution, rather than completely restructuring our administrative process.

Scholars in recent years have articulated a number of incremental reforms aimed at leveling the playing field, while preserving the main elements of our current rulemaking process. For instance, some scholars have proposed reforms aimed at overcoming individuals’ informational deficits and rendering their participation more effective, such as appointing “regulatory public defenders” to represent the general public or forming “citizen advisory committees” composed of “small, deliberative bodies of citizens” to advise agencies on policy issues. Professor Wendy Wagner discusses several proposals for encouraging more participation from individuals and public interest groups, including offering monetary prizes and publicity to individuals or organizations that submit “public-benefiting” comments on a complex

320. See supra Section I.B; see also CROLEY, supra note 34, at 291–92 (“[W]hile one can still distinguish among regulatory decisions according to the amount of public attention they generate or the number of outside participants they involve, few agency decisions with significant stakes escape public attention or participation completely.”).

321. Wagner et al., supra note 13, at 152 (“There is a great deal that we do not know about the administrative process that we need to know to assess how well it works in advancing the goals set for it.”).

322. See Ronald M. Levin, The REINS Act: Unbridled Impediment to Regulation, 83 GEO. WASH. L. REV. 1446, 1454 (2015) (“The current rulemaking system incorporates a variety of controls over potential misuses of the rulemaking process . . . . Congress should be circumspect about entertaining proposals for drastic changes in this system.”).

323. Cuéllar, supra note 62, at 491.

324. Bull, supra note 18, at 640–47.
rule. Other scholars have proposed reforms that would further insulate agencies against business influence, including limiting agencies' meetings with outside groups and paying agency officials higher salaries to reduce the incentives to move to the private sector.

Other proposed reforms would more radically reshape our regulatory system. For instance, the REINS Act would require that Congress affirmatively approve new major agency regulations before they could take effect. There is historical precedent for concerns about regulatory capture leading to radical reforms to our regulatory system. In the 1960s, for instance, scholarship on regulatory capture led to “a curious two-pronged reform movement: pointing, on the one hand, toward deregulation and, on the other, toward a new wave of large-scale social and environmental regulation.” Although the contemporary scholarly literature shows that our current rulemaking procedures fall short of ensuring proportionate access and influence, its findings do not as yet justify comparable reforms today.

Moreover, even if the level of business influence were sufficient to justify more radical reforms, reforms such as the REINS Act that dramatically increase Congressional involvement in the rulemaking process would likely only have the opposite effect. Croley enumerates several ways in which administrative procedures serve to render agencies more autonomous than Members of Congress and less susceptible to control by interest groups. Similarly, contrary to proponents of the REINS Act, Coglianese and Scheffler examine the legislative procedures that Congress used in 2017 to advance two of its most important legislative initiatives, and they conclude that agency procedures are more transparent and inclusive than the procedures used by Congress. Professor Cass Sunstein argues that Congress’s “need to focus on reelection, especially when accompanied by the sheer press

325. Wagner, supra note 14, at 1406–19.
326. Tai, supra note 16, at 13–17 (outlining a number of proposals aimed at mitigating industry participation and influence).
327. Regulations from the Executive in Need of Scrutiny Act, H.R. 26, 115th Cong. § 3 (2017).
329. See supra notes 36–37 and accompanying text. But see Yackee, supra note 111 (finding that increased congressional attention reduces interest group influence during the notice-and-comment process).
330. See, e.g., Adler, supra note 12, at 32.
331. Cary Coglianese & Gabriel Scheffler, What Congress’s Repeal Efforts Can Teach Us About Regulatory Reform, ADMIN. L. REV. ACCORD 43, 52 (2017) (observing that the comments on these rules came “from a diverse collection of individual members of the public as well as from businesses, public interest groups, and state and local officials . . . [while] the process Congress used in repealing these rules appears to have been driven largely by just one segment of society: industry.”).
of time, increases the risk of influence by—and, on occasion, even near-exclusive attention to—information provided by private groups with clear commitments to one or another course of action.”

This case study supports the conclusion that agencies are less susceptible than Congress to interest group influence. Whereas DOT resisted intense opposition from industry groups and retained the ECP brake requirement in the final rule, Congress shortly thereafter amended the rule to make the imposition of this requirement contingent on additional testing and research (which in turn led to the Trump Administration’s rescinding the requirement) and granted the railroad industry several other changes that it had requested.

IV. CONCLUSION

Contrary to widespread perceptions and allegations of agency capture, this study shows that the existing evidence falls well short of demonstrating that businesses or other interest groups exert anything approaching systematic control over the regulatory process. Furthermore, through exploring interest group participation and influence in the context of the Tank Car Rule, this study suggests that even when businesses are better represented in the rulemaking process and receive more of their desired changes than other types of interest groups, their influence may be much more circumscribed than these factors alone would suggest. It also shows that, at least in some instances, there may be important constraints on businesses that do not necessarily show up when examining imbalances in interest group participation or high-level rule changes to rules during the notice-and-comment process. This in turn suggests that businesses may have less influence, and regulators may have more independence, than has been represented.

Recognizing the limits of business influence in the rulemaking process has important implications for the utility of our regulatory system, for its legitimacy, and for how this system should be reformed. As discussed above, there are legitimate reasons to be concerned about the level of business influence in the rulemaking process, even if the business interests do not control this process. Yet by painting an exaggerated portrait of this influence, the

333. Harder & Tita, supra note 280 (For example, Acting Director Sarah Feinberg reacted impassively to railroad companies’ protests, noting that “the railroads have been quite vocal they find ECP brakes to be both expensive and logistically challenging. But FRA is a safety agency. We’re not an agency with a goal of making things convenient or inexpensive for industry. Our entire goal and mission is safety.”). This is not to say that maintaining the ECP brake requirement was necessarily the right policy. The Government Accountability Office (“GAO”) recently published a report finding fault with DOT’s estimates of the benefits of the requirement. U.S. GOV’T ACCOUNTABILITY OFF., supra note 277.
capture account risks further undermining public trust in government and leading to unnecessary or unwise regulatory reforms, some of which could even augment business influence in the regulatory process. The unwarranted perception that businesses control the rulemaking process has helped to undermine public trust in regulatory agencies and has been used to justify radical reforms to the regulatory process, such as the REINS Act.\textsuperscript{334} Developing a better understanding of the extent and limits of business influence in the rulemaking process may help to rebut some of the cynicism about regulation, where warranted. Where such cynicism is justified, it may help policymakers focus on reforms that will ensure participation by a more representative cross-section of interest groups and individual members of the public and lead to a regulatory process that better serves the public interest.

\textsuperscript{334} See supra note 12 and accompanying text.
METHODOLOGICAL APPENDIX

Data Source

The main source of data for this study is the public submissions to the DOT on the Tank Car Rule, along with the rule itself and the FAST Act amendments to the rule. Over 400 different interest groups (including businesses, state and local governments, and non-profit organizations), along with an even larger number of individual members of the public, participated in the regulatory process for the Tank Car Rule. Together, they submitted over 3300 public submissions to the DOT concerning the rule, including petitions for rulemaking, comments on different versions of the rule, and appeals of the final rule. I downloaded all of the documents labeled “Public Submissions” from the docket folder on regulations.gov.

Coding and Analysis

Drawing on the work of other empirical researchers who have examined the role of interest groups in the rulemaking process, I developed a set of coding questions designed to document important characteristics of these groups, the positions they took on the rule, how they participated in the rule-making process, and whether the rule ultimately reflected their desired outcomes. I personally coded all of the public submissions on the rule. I cleaned and analyzed the data in Stata 13.1 but exported it to Excel to create all of the figures. Stata code is available upon request.

To validate my results after I had finished coding all of the submissions, I trained a law student in the coding methodology and he independently recoded a random sample of eighty-nine (approximately 2.5%) of the public submissions on the rule. Thirty of these submissions were scored as non-form letters (again approximately 2.5% of all the non-form letter submissions). I then separately computed inter-coder reliability scores first for all the observations and then for only the non-form letters. For the categorical variables (such as the type of organization participating in the rule), I computed the percent agreement. I also computed Fleiss’s Kappa and Krippendorff’s Alpha for variables which had sufficient observations. For the continuous variables (such as the number of words in each comment), I computed bivariate correlations. Following Professors Wendy Wagner, Katherine Barnes, and Lisa Peters, I generally only report data that have above 75% reliability and note in footnotes when reliability falls below this level.335

335. Wagner, Barnes & Peters, supra note 13, at 156.
I also supplemented my analysis by conducting informal interviews (on the condition of maintaining anonymity) with agency staff and private stakeholders who were involved in the rulemaking process. They provided extremely helpful background on the development of the rule, and they helped me to understand some of the more technical aspects of the rule and how it evolved throughout the rulemaking process.

Notes on Coding Categories

I categorized the participants in the rulemaking using categories similar to those used by Wagner, Barnes, and Peters,336 Professors Jason and Susan Webb Yackee,337 and Professor Cary Coglianese338: Business, Industry association, Non-Profit/Public interest group, State/Local government, Member of Congress, Other federal government, Native American tribe, Individual, and Other. I marked any and all categories that applied to each organization. For some organizations, multiple categories applied (for example, a non-profit organization that represents local governments). To determine how to categorize an organization, I looked first at how the organization describes itself in its submission. If the submission does not make clear what type of organization it is, then I performed a simple Google search for the organization.

To code the form of the participation in the rulemaking, I referred to the description of the submission on regulations.gov and the text of the submission itself, and I compared the date it was uploaded to regulations.gov to the timeline of the rule. I then examined whether the participation was asking for the rule to become more or less stringent overall. If the submission pre-dated the NPRM (for example, if it was a petition for rulemaking or a comment on ANPRM), then I coded whether the participant was generally advocating for the existing regulatory regime to become more or less stringent.

I coded influence in two main ways: First, I examined whether the participant was asking for one of the major issues in the rulemaking—as outlined by DOT—to become more or less stringent, and whether that part of the rule subsequently became more or less stringent (labeled as “Influence 1” in Figure 2). If the submission pre-dated the NPRM (for example, if it is a petition for rulemaking or a comment on ANPRM), then I coded whether the participant was advocating for the existing regulatory regime to become more or less stringent. To discern how the rule changed, I primarily relied on DOT’s discussion in the ANPRM, the NPRM, the final rule, and the amendments to the final rule in the FAST Act. To corroborate my understanding of how the

337. See Yackee & Yackee, supra note 13.
338. See Coglianese, supra note 54.
rule evolved, I conducted informal interviews with government officials and private parties involved in the rulemaking process and referred to media accounts of the rule.

This method is very similar to the content analysis methodology that Professor Susan Webb Yackee developed and has used in numerous papers. However, because the rule is quite long and complex and each comment involves multiple requests for change, I analyze influence at the “major issue” level, rather than at the rule-level, following Wagner, Barnes, and Peters. Yet unlike Wagner, Barnes, and Peters because my study is limited to a single rule, I analyze the actual comment letters, rather than relying on the requests summarized in the preamble to the final rule. To determine whether each section of the rule became more or less stringent, I drew on the summary of these changes in the preamble to the final rule, and particularly Table 2 in the final rule, which summarizes the changes to most of the major parts of the rule from the proposed rule stage to the final rule stage.

Second, I attempted to estimate the proportion of policy concerns raised in the submission that were fully addressed in the final rule (labeled as “Influence 2” in Figure 2). This method is similar to one used by Justice Mariano-Florentino Cuéllar, who recorded the total number of suggestions raised in each comment that were addressed by changes in the rule, along with whether any suggestion in the comment was addressed. Like Cuéllar, I counted a policy concern as being “adopted” if “the agency makes precisely the change requested by a comment” or if “the agency makes a change that renders moot the concerns raised in the comments in question.” However, whereas Cuéllar also counted cases where the agency explicitly states in the final rule preamble that “a particular change was made in response to concerns raised in comments like the one in question,” I counted such changes only where the agency fully adopted the commenter’s request or rendered it moot.

When tallying up the number of policy concerns, I did not count comments that addressed issues entirely outside the scope of the rulemaking (e.g., stopping fracking, taxing carbon emissions). I also counted policy concerns only, not concerns with PHMSA’s analysis of the rule. I did not code documents that commenters did not write (for example, if a commenter uploaded a New York Times article about the Tank Car Rule). If someone endorsed a proposal written by another person or organization, then I coded that endorsement only if the commenter describes the concerns addressed in that proposal.

339. See supra note 180 and accompanying text.
340. See Wagner et al, supra note 13.
342. Id.
343. Id.
(for example, I did not code a comment that just says, “I support Mr. Smith’s concerns with the rule”). If someone endorsed another proposal, I counted that as successful only if that entire proposal was adopted.

Comments discussing how stringent the standards should be for new and existing tank cars often addressed a number of distinct technical sub-issues. Usually, these sub-issues were lumped together, but sometimes commenters raised them separately. For consistency and for simplicity’s sake, I treated policy suggestions about tank car design standards as a single concern. I also did not track whether comments were later addressed in a separate rulemaking process. For example, a number of commenters requested that PHMSA require that shippers come up with comprehensive oil spill response plans, a concern which PHMSA stated it was addressing in a separate rulemaking.

To measure the sophistication of participants, I used a series of questions developed by Cuéllar: (1) “Did the commenter distinguish the regulation from the statutory requirements?”; (2) “Did the commenter . . . indicat[e] an understanding of the statutory requirement?”; (3) “Did the commenter propose an explicit change in the regulation provided in the notice of proposed rule-making . . . ?”; (4) “Did the commenter provide at least one example or discrete logical argument for why the commenter’s concern should be addressed?”; and (5) “Did the commenter provide any legal, policy, or empirical background information to place the suggestions in context?”

344 Very few comments received scores of 4 or 5 because very few commenters discussed the underlying statute, perhaps because the Tank Car Rule was a discretionary measure.

Also, following Cuéllar, I attempted to identify as many form letters as possible by noting if a submission closely resembled another submission. Although this method was necessarily imperfect and I undoubtedly missed a number of form letters, I still identified over 1000 form letters (over 30% of the submissions in the docket). I coded each form letter in the order in which they appeared in the docket.

344. Id. at 431.