No. 17-28
Spring 2017

MERCATUS GRADUATE POLICY ESSAY

READING BETWEEN THE LINES: REGULATORY DISCRETION IN THE FEDERAL RAILROAD ADMINISTRATION

by Stephen M. Jones

MERCATUS CENTER
George Mason University

Abstract
The president, congress, interest groups, and bureaucracy all influence the production of regulation, but the size and limits of each group's influence has not generally been measured. I add to this debate by quantifying channels of influence within one regulatory agency. By reviewing all 162 Federal Railroad Administration (FRA) rules issued between 1980 and 2015, I estimate the total amount of discretion in FRA rulemaking and the channel of influence "causing" each discretionary regulation. My results suggest that congress is an active participant but not a dominant player in discretionary rule making.

Author Bio
Stephen Jones is an alumnus of the Mercatus Center MA Fellowship at George Mason University. He is currently an economist with the US Coast Guard's regulatory shop. Stephen graduated *summa cum laude* from Florida Atlantic University with a BA in economics. He has worked at Tenke-Fengurume Mining in the Democratic Republic of the Congo as a community development special projects assistant and interned with the US Department of State. Jones was also a National Security Education Program–Boren Scholar to Tanzania and received a Council of American Ambassadors Fellowship. His research interests include the political economy of the administrative state, the theory of regulation, development economics, constitutional economics, and institutional economics. Stephen's current research examines the political economy of failed states, the causes of regulation, and the complexity and outcomes of the regulatory process.

Committee Members

Patrick McLaughlin, senior research fellow at the Mercatus Center at George Mason University
Jerry Ellig, senior research fellow at the Mercatus Center at George Mason University
Garett Jones, associate professor of economics and BB&T Professor for the Study of Capitalism at the Mercatus Center at George Mason University

Mercatus MA Fellows may select the Mercatus Graduate Policy Essay option in fulfillment of their requirement to conduct a significant research project. Mercatus Graduate Policy Essays offer a novel application of a well-defined economic theoretical framework to an underexplored topic in policy. Essays offer an in-depth literature review of the theoretical frame being employed, present original findings and/or analysis, and conclude with policy recommendations. The views expressed here are not necessarily the views of the Mercatus Center or Mercatus Center Academic and Student Programs.

Table of Contents

1. Introduction

From the time that McCubbins (1985) and McCubbins, Noll, and Weingast (1987, 1989) argued that Congress developed the Administrative Procedure Act to police agencies, many have asserted that Congress dominates agency rulemaking. Others, notably Kagan (2001) and Lewis (2008), suggest that the president, whose myriad political appointees oversee the vast bureaucracy, has primacy over bureaucratic decision making. Recent research by Susan Webb Yackee and her coauthors have shown that interest groups and members of the public can have a significant effect on rulemaking (Yackee 2005; Naughton, Schmid and Yackee 2009). Additionally, I argue, in line with earlier statements by Tullock ([1965] 2005), Downs (1967), Niskanen (1971), and Breton and Wintrobe (1982), that members of the bureaucracy have an independent incentive to produce rules and to have a significant effect on the course of agency policy. In sum, scholars have posited that Congress, the president, interest groups, and bureaucrats each influence the quantity of regulation produced.

These various channels of influence have not been directly compared with one another. Scholars have amassed evidence illustrating that their favored channel of influence exists, but the size and limits of each channel generally have not been measured. The lack of limits on the size of channels of influence likely causes scholars to overstate what their evidence shows. I add to this debate by quantifying each hypothesized channel of influence.

In general, Congress determines the amount of discretion agencies possess. If Congress writes a strict statute with little discretion, bureaucrats can only implement the predetermined text. If they were to implement a different text, there would be a discrepancy in the law, which the courts would compel the bureaucracy to correct. (For the purpose of this paper, I will assume the courts adjudicate such conflicts on the basis of Congress's actual preferences at the time of

enactment of the statute in question, in line with the interest group theory of the courts (Landes and Posner 1975). Congress determines the amount of discretion agencies possess. Thus, in mandatory rulemakings, Congress is the only relevant player.

Discretionary regulations therefore give us a better measure of which party influences the bureaucracy precisely because the bureaucracy is not mandated to issue them. However, once Congress permits an agency to exercise discretion, Congress, the president, interest groups, and bureaucrats may each desire to produce regulations for their own benefit. Each has mechanisms by which they influence rule production. Congress has the power of hearings and investigations, the president has numerous appointees and direct oversight, interest groups can submit public comments and lobby through Congress and the president, and bureaucrats are the ones who write the prospective regulations.

What, then, is the relative effect of each of these parties on the output of bureaucracies? Empirical questions require empirical answers. Until now, no one has comprehensively estimated the amount of discretion in an agency's rulemaking. By reviewing all 162 Federal Railroad Administration (FRA) rules issued between 1980 and 2015 and qualitatively labeling them as discretionary or mandatory, I estimate the total amount of discretion in FRA rulemaking. I further estimate the channels of influence from Congress, the president, and interest groups by looking for clear signs of influence discussed within each discretionary final rule. I demonstrate that between 1980 and 2015, discretionary rulemaking accounted for roughly 42.9 percent of all changes in FRA's regulatory text.

Furthermore, I estimate the separate motivational channels proximately causing this regulation by looking for clear signs that one party held sway over each discretionary regulation, such as executive orders, congressional actions, or interest group petitions. I estimate that 28.4

percent of FRA's discretionary regulation is requested by Congress, 10.9 percent traces to executive orders, 8.5–28.6 percent answers the petitions of railroad interest groups, and 25.3–45.5 percent was implemented without clear evidence of a channel of influence. I take the absence of a stated channel as an upper bound for bureaucratic influence.

My results indicate that no single party dominates discretionary rulemaking. I concur with Moe (1990a) that a political process between the various parties determines the ultimate outcome of regulation. In this way, statements such as Workman's (2015) that Congress is omnipresent in rulemaking may miss the mark. Nondiscretionary regulation, which is often all but written by Congress, is grouped with discretionary actions to conclude that bureaucrats are dominated by Congress. The bureaucracy faces congressional dominance in the domain on which they deal with Congress directly—statutes. Therefore, the act of looking at the set of all regulation and of concluding congressional dominance biases the estimate of relative dominance. I avoid this by investigating discretionary regulations that are not required by Congress. The president, interest groups, Congress, and bureaucrats themselves may each influence what is produced.

I begin by briefly explaining the federal regulatory process in section 2 of this paper, as it is essential to understanding both my methodology and discussions of how discretion may occur. I also describe FRA and introduce evidence that it is similar to other regulatory agencies. Section 3 discusses the various theories of influence on bureaucratic action. Section 4 re-introduces the public choice perspective on bureaucracy and argues that bureaucrats have an independent motive to produce regulation and then face weak marginal constraints against doing so. Section 5 presents my methodology for calculating discretion and the data I used. I then provide results connected to the various theories of bureaucratic action in section 6, and I close in section 7.

2. FRA and the Rulemaking Process

Regulation is not crafted by Congress—legislation is. Once legislation is enacted, executive-branch agencies are required to interpret and implement it. The interpretation manifests itself in administrative law, colloquially known as regulation.

FRA is one such regulatory agency. It is a component of the US Department of Transportation that was created by the Department of Transportation Act of 1966.[1] The Federal Railroad Safety Act of 1970 vested FRA with authority to prescribe regulations as necessary for all areas of railroad safety. Regulatory responsibility for railroads is not exclusive to FRA; it is one of two main railroad regulatory agencies.[2] In some areas, FRA shares its regulatory authority with the Occupational Safety and Health Administration or the Pipeline and Hazardous Materials Safety Administration. In others, FRA has overlapping jurisdiction with the Environmental Protection Agency, the Transportation Security Administration, or the Surface Transportation Board.

FRA is a small agency with about 900 employees (FRA 2017). Its regulatory text, however, is not small in comparison to other agencies. The text, 49 CFR 200–299, contains 652,967 words, or roughly 0.73 percent of all text in the *Code of Federal Regulations*. For comparison, the median agency's regulatory text contains only 83,572 words, and the mean agency's text contains 373,308. Overall, only 34 agencies had regulatory texts that were larger

[1] The first railroad safety regulations were issued by the Interstate Commerce Commission (ICC) and derived from the Safety Appliance Act in 1893. ICC's jurisdiction over railroad safety (specifically hours of service, equipment, and inspection standards) was transferred to FRA with the Federal Rail Safety Administration.

[2] The Surface Transportation Board is the other railroad regulator. The Surface Transportation Board has broad economic regulatory oversight of railroads, including over rates, services, construction, acquisition of rail lines, season ticketing of rail lines, carrier mergers, and interchange of traffic among carriers.

than FRA's,[3] placing it in the top 10th percentile of the 440 agencies listed by the Office of the Federal Register (Al-Ubaydli and McLaughlin 2014).

FRA commonly undertakes rulemaking in a fashion similar to negotiated rulemakings. Regulatory agencies may collaborate with interested parties to draft proposed rules, provided their negotiations are properly documented. The proposed rule subsequently goes through the notice and comment process wherein individuals and groups may respond to the proposed rules by submitting comments. FRA commonly drafts its rules through this negotiation process. In March of 1996, it established the Railroad Safety Advisory Committee (RSAC) to collaborate with stakeholders in forming new railroad standards and regulations.

The RSAC is a formally chartered and structured federal advisory committee that provides a forum for collaborative rulemaking and program development. It includes representatives from all of FRA's major stakeholders, including railroads, labor organizations, suppliers, manufactures, and other interested parties.[4] The RSAC's stated purpose is to "seek agreement of the facts and data underlying any real or perceived safety problems; identify cost effective solutions based on the agreed-upon facts; and identify regulatory options where necessary to implement those solutions. In determining whether regulations are necessary, the Committee shall take into account 1(a) of Executive Order 12866" (RSAC 2016a). FRA's policy is to use RSAC's recommendations as the basis for proposed and final agency actions where possible. It does this by assigning tasks to RSAC. For example, task number 08-07 developed the recommendations for the Conductor Certification rule issued in November of 2011 (see Exhibit 1). I provide a copy of this task as it was presented to RSAC below. RSAC may accept a task,

[3] Although the rest of my citations to the Regdata database are from Regdata 3.0 figures, I used Regdata 2.2 for these figures because a list of parts corresponding to agencies was not yet available in Regdata 3.0.
[4] RSAC has 36 members (RSAC 2016b).

reject it, or recommend it be restructured. Once the task is assigned, FRA sets a target date for its recommendations to be made final (RSAC 2016a). Whereas FRA is not bound to the recommendations developed through RSAC, FRA will often base Notices of Proposed Rulemakings (NPRMs) and final rules on RSAC's recommendations (FRA 2005, 11054). In the data I collected on all final rules issued by FRA, I noted when a task was assigned to RSAC regarding a rule and whether its final version was based on RSAC recommendations.

Since the first rule was negotiated within RSAC, a total of 103 final rules have been issued by FRA. Of these, 35 rules, or 34 percent, were tasked to RSAC. Most agencies issue only a few rules through negotiated rulemaking (or a process similar to negotiated rulemaking), making FRA an outlier in this respect (Kerwin and Furlong 2011, 209).

Exhibit 1:

U.S. Department
of Transportation

Federal Railroad Administration

Railroad Safety Advisory Committee
Task Statement:
Conductor Certification

Task No.: 08-07

Date initially presented to the RSAC: December 10, 2008

Purpose:

To develop regulations for certification of railroad conductors, as required by the Rail Safety Improvement Act of 2008 (Act), and to consider any appropriate related amendments to existing regulations.

Description:

- Review safety data bearing on opportunities for reducing risk associated with the duties performed by freight and passenger conductors.
- Assist FRA in developing regulations responsive to the legislative mandate.
- Consider any revisions to 49 CFR Part 240 appropriate to conform and update the certification programs for locomotive engineers and conductors.

Issues requiring specific report:

- What requirements for training and experience are appropriate?
- What classifications of conductors should be recognized?
- To what extent do existing requirements and procedures for certification of locomotive engineers provide a model for conductor certification?
- To what extent should unsafe conduct occurring while a locomotive engineer affect certification status as a conductor, and visa versa?
- Starting with the locomotive engineer certification model, what opportunities are available for simplifying appeals from decertification decisions of the railroads?

Source:

49 U.S.C. § 20163, as enacted by section 402 of Division A, Public Law No. 110-432.

Refer to/establish following working group: Conductor Certification Working Group

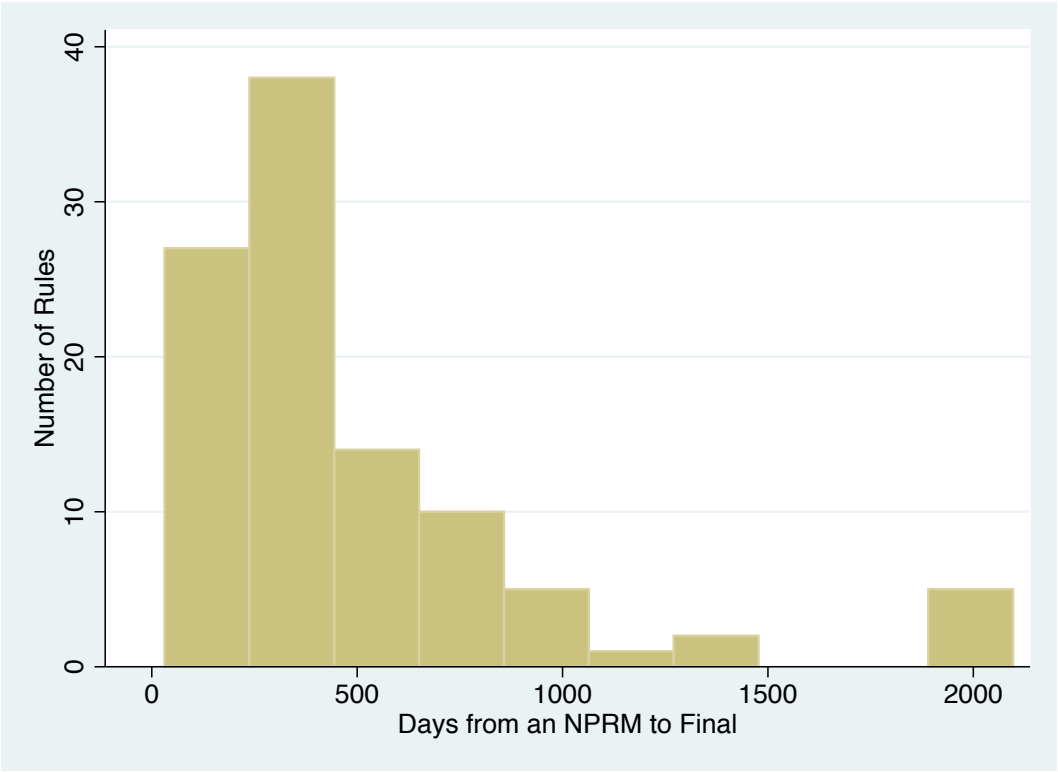
Target Dates:

- Report recommendations for proposed or interim final rule (as determined by FRA in consultation with the Office of the Secretary of Transportation and the Office of Management and Budget) by October 16, 2009.

Disposition: Accepted **Date:** December 10, 2008

In most other ways, FRA is similar to other regulatory agencies. For example, it issues rules as quickly as them. Its mean time from NPRM to final rule was 493.39 days, or 16.44 months, and its median time was 360.5 days, or 12.01 months. Figure 1 charts this distribution. These are within the confidence interval generated by Potter (2017a), who showed across 9,000 rules over 20 years that the mean time for bringing a rule from NPRM to final rule is a little over 1 year (14.7 months).

Figure 1: FRA Days from NPRM to Final Rule



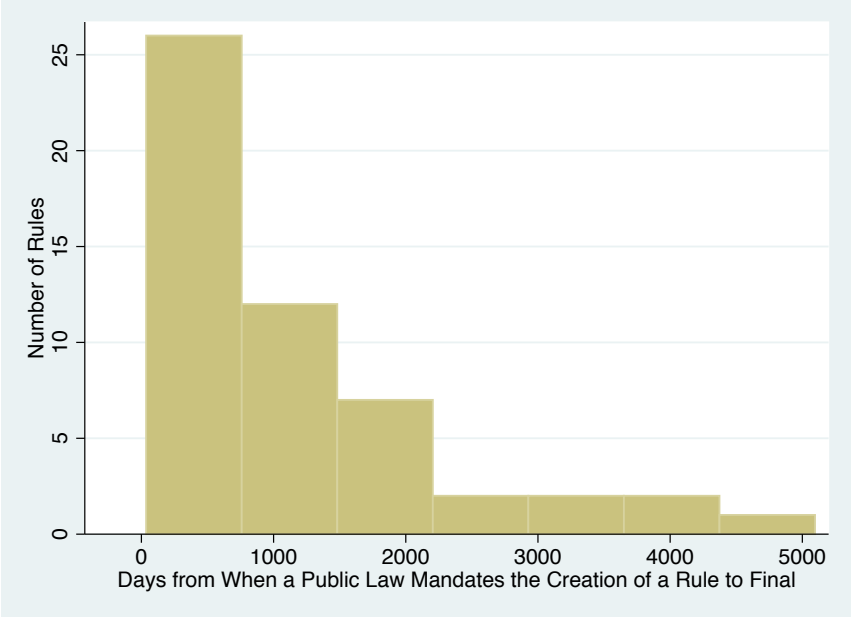
Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.
Note: NPRM = Notices of Proposed Rulemakings.

I also developed various measures to approximate the total length of a rulemaking project from inception to final rule. Under these measures as well, FRA's project duration is similar to those of other agencies. I traced the number of days from a citing statute's enactment to when a rule is final, the number of days from an Advanced Notice of Proposed Rulemaking (ANPRM)

to a final rule, and the number of days from when an RSAC takes a task to a final rule. Whereas each of these is an imperfect measure of the time it takes to complete a rulemaking project, together they paint a picture of the average time required. Rules emanating from statutes should not begin production until the statutes are issued, and the date a task enters RSAC and the issuance of an ANPRM are both very early stages in the rulemaking process. Note that these measures do not apply to all rules: only about half of all rules trace to statutes, only rules issued since 1996 may have involved RSAC, and ANPRMs are infrequent.

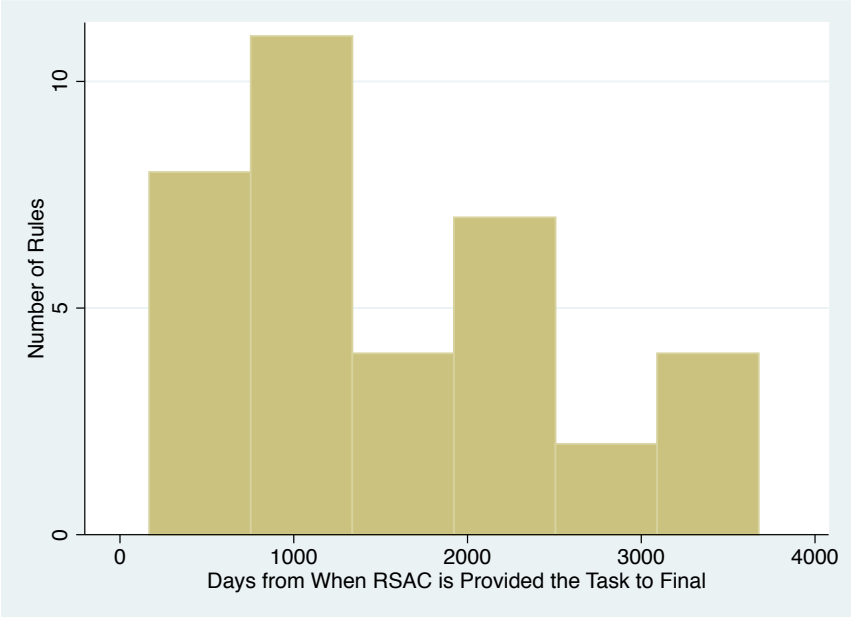
The median number of days from statute to final rule, from RSAC task acceptance to final rule, and from ANPRM to final rule is 761.5 days, 1,285.5 days, and 1,165 days, respectively. Their distributions are included in Figures 2–4. Kerwin and Furlong (2011, 108) found through a GAO study that few rules were issued more than six years or 2,190 days from the commencement of the rulemaking process. Some of FRA's rules show longer development time frames, but generally most of its rules do seem to become final within six years.

Figure 2: Days from Statute to Final Rule Issuance



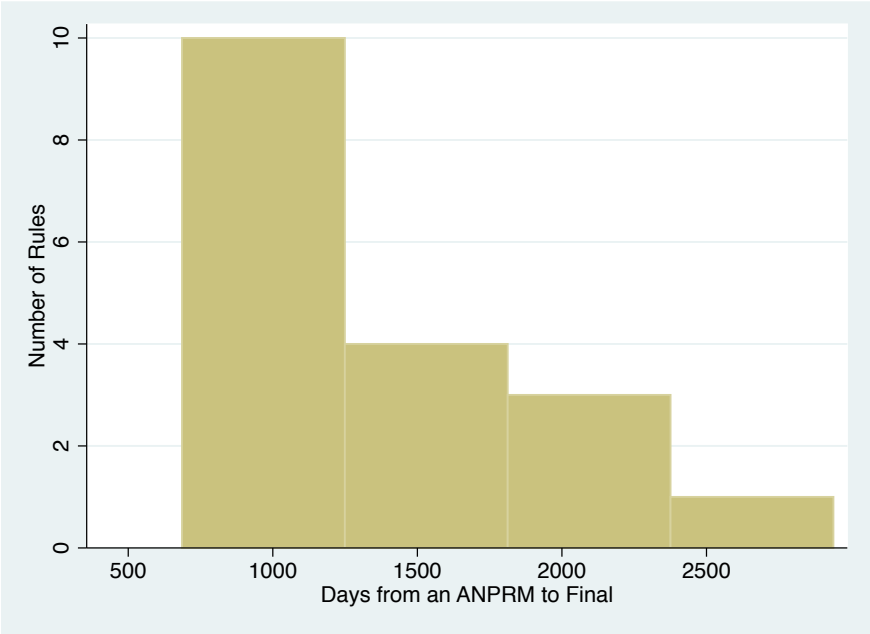
Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.

Figure 3: Days from RSAC Task Acceptance to Final Rule Issuance



Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.

Figure 4: Days from ANPRM to Final Rule Issuance



Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.

Alternative rulemaking methods exist that may avoid public comments and oversight mechanisms by the Office of Management and Budget (OMB). In some instances, agencies may issue either Interim Final Rules (IFRs) or Direct Final Rules (DFRs); both limit the public's ability to comment (Brito and Dudley 2012, 38). IFRs are generally issued in an emergency situation when the bureau deems regulation necessary and in short order. Agencies are expected to consider public comments on IFRs, and they will issue final rules if comments are received. DFRs are used primarily when regulations are considered routine, and they do not allow for

public commenting.[5] However, if an adverse comment is received on a DFR, the rule will need to be reissued through an NPRM. About one-sixth of "major" rules among all agencies were published without a comment period (GAO 1998, 2). A "major" rule is one that is likely to result in a large annual effect on the economy or a large increase in costs or prices, or significant adverse effects on competition, employment, investment, productivity or innovation. A similar percentage of FRA's rules issued did not involve a comment period.

Discretionary results at FRA may be similar to those at other executive branch agencies to the extent that FRA functions similarly to them. As I show above, FRA is the 35th largest regulatory agency and in the top 10th percentile of rulemaking agencies in size. Its rulemaking pace is comparable to that of most other regulatory agencies, and the rate at which it issues rules without a notice and comment period is also similar to that of other agencies.

3. Modeling Administrative Agencies

Regulatory agencies exist in a world of multiple principals: Congress, the president, and ultimately the public. These administrative agencies can deviate from their principals' desires, yet each principal has tools to influence the decisions the agencies make (Moe 1990a). So who has the advantage in this political game? Different theories have answered Congress (McCubbins, Noll, and Weingast 1987 and 1989), the president (Lewis 2002, 2008), interest groups (Stigler 1971; Yackee 2006), and the bureaucrats themselves (Niskanen 1971). Yet the ways in which these theories complement or substitute for one another is not always clear.

I argue that because of the principal-agent problem Congress faces with respect to agencies, it sets the amount of discretion they are allowed through statutes. This amount is primarily based on the fragility of the enacting coalition. In this way, I echo the insights of

[5] DFRs may also be used to conclude negotiated rulemakings, although FRA does not take this approach.

McCubbins (1985), McCubbins, Noll, and Weingast (1987, 1989), Moe (1990a, 1990b, and 1997), and Horn (1995). However, once the initial statutes are set, bureaucrats enter a political game to publish what they can, subject to constraints imposed by their agency's various principals (Moe 1990a, 145). This section therefore enumerates the ways in which interest groups, the president, and Congress may drive subsets of discretionary regulation. The following section reintroduces the public choice theory of the bureaucracy to discuss individual bureaucrats' motives for rulemaking.

3.1 Congress's Dual Principal-Agent Problem: Why Congress Is but a First Mover

Congress faces a dual principal-agent problem with respect to federal agencies, with the result that they are given a nontrivial amount of discretion. The first principal-agent problem is that Congress faces an incomplete contract with its administrative agencies: it cannot be sure that the agencies act in the way it intends (McCubbins 1985; McCubbins and Schwartz 1984; McCubbins, Noll, and Weingast 1987, 1989). As a solution, Congress could write statutes in such a way as to prevent bureaucratic discretion (McCubbins 1985), in essence by writing a more complete contract.

Congress could also monitor administrative agencies directly. However, monitoring is costly. It involves audits, hearings, and other tools to discover what agencies have done (McCubbins and Schwartz 1984). Where formal monitoring is too costly, Congress can write procedural laws, such as the Administrative Procedure Act, that provide fire alarms when agencies are misbehaving (McCubbins and Schwartz 1984; McCubbins, Noll, and Weingast 1987, 1989). These fire alarms act as an indirect monitoring mechanism whereby interest groups police the bureaucracy on behalf of Congress. Administrative procedures may also make agencies easier to monitor, as they force them to reveal previously undisclosed information.

It is important to note that these two tactics, statutory restrictions and monitoring, affect the behavior of bureaucrats differently. Statutes are enforced by the courts, and, as such, should be thought of as a structural constraint on agency discretion. Structural constraints do not influence marginal decisions; they only affect totals. In other words, if bureaucrats wish to defect from congressional desires, stringent statutes will not affect this underlying wish. In contrast, fire alarms, hearings, audits, and other investigations into agency conduct will decrease the desire to act independently as long as they are costly on the lives of bureaucrats, and they likely are. At each option to act, these constraints increase the expected price of independence, either directly or indirectly, in comparison to a world without monitoring.

The second principle-agent problem Congress faces with respect to federal agencies is between current congressional coalitions and future coalitions, as emphasized by Moe (1990a, 1990b, 1997) and Horn (1995). Current coalitions cannot expect future coalitions to uphold the present agreements. Thus, focus is put on rules that limit future congressional and presidential influence on agencies; examples include the civil service standards (Moe 1997, 469).[6]

When Congress writes statutes, it keeps these two principal-agent problems in mind. Depending on the context in which statutes are written, particularly whether the current Congress expects its goals to be perverted through discretion by agencies or by future Congresses, it tailors its statutes to allow agencies more or less discretion. In line with this theory, I demonstrate that

[6] Whereas Moe (1990b) formally incorporates bureaucrats as independent actors influencing their own structural constraints in future periods, my emphasis is on the output of regulations and whether bureaucrats are able to stray from concordance with legislative intent. In effect, my analysis concerns the *marginal product* of a given bureaucrat, whereas Moe focuses on the *inframarginal effect* of bureaucrats on the structure of their own bureaus. Moe's own analysis, in fact, indicates that bureaucrats are generally left unconstrained by future Congresses, which implies that there is significant space for bureaucratic discretion *on the margin*. Moe notes as much: "At the margins, groups and politicians cannot stop bureaucrats from shirking and thus making structural changes that promote their own autonomy" (1990a, 145).

discretion composed roughly 42 percent of FRA's rulemakings over the past 35 years and that this percentage has remained roughly constant over time.[7]

3.2 Congress's Influence on Regulation

While McCubbins, Noll, and Weingast (1987, 1989), and Moe (1990a, 1990b, and 1997) identify Congress as a first mover with respect to the bureaucracy, Baumgartner and Jones (2015) and Workman (2015) discuss Congress's role and influence in the marginal actions of rulemaking. To Baumgartner and Jones, Congress's role is to solve national problems, but it does not have the knowledge it needs to solve these problems. Congress also does not have the information to separate the many real problems from the chaff. Therefore, Baumgartner and Jones hypothesize that Congress delegates this responsibility to agencies that can generate the necessary information. They also argue that the size and shape of the bureaucracy changes as the information needs of Congress change (2015, 138–63).

In the same vein, Workman argues that the bureaucracy and Congress dually influence each other's agendas (2015). He demonstrates that Congress, through its issue prioritization, manipulates the regulatory agenda of bureaucracies, causing issues to be bundled, shuffled, or separated (2015, 105–29). As he asserts, "The prioritization of problems by Congress makes congressional influence on the federal bureaucracy so pervasive that it is intrinsic to the system of dual dynamics and operates even in the absence of structured incentive systems" (107).

It is clear, however, that Workman regards Congress as generally dominant; he provides ample evidence that Congress manipulates its side of the dual channel connecting it and the bureaucracy, but he does not discuss whether bureaucrats manipulate their side of the channel.

[7] Short-run average changes in word count would be subject to strategic timing issues, as noted by Potter (2017b).

Unquestionably, Congress has powerful tools at its disposal. The GAO can conduct audits of agency behavior. Congress regularly holds hearings in which agency members are required to testify on their agency's actions, accomplishments, and adherence to congressional mandates, or lack thereof. Members of Congress may comment on individual rules or schedule background informational meetings. Through these interactions, Congress communicates its desires, and the agency will likely respond to accommodate them.

3.3 The President's Influence on Regulation

Lewis (2002, 2008) argues that the exercise of presidential power, especially through appointment, is crucial to steering agencies. The president, through political appointees, controls the commanding heights of the bureaucracy and exerts a substantial effect on agency policy. These appointees interpret laws into policy, monitor bureaus for the president, and allocate internal resources and personnel (Lewis 2008, 7). The president also routinely alters the number of employees or restructures bureaus to amplify the effect of political appointees on a bureau's policy. This agency churn potentially undercuts the durability assumption crucial to the analysis of McCubbins, Noll, and Weingast (1987, 1989), and Moe (1990a, 1990b, and 1997).[8]

The president is also increasingly involved in agencies' regulatory agendas. The president regularly issues directives to agency heads (Kagan 2001, 2249). These directives, be they public pronouncements, memoranda, or executive orders, direct agency heads to perform a specific regulatory action. Review of these regulatory actions has been centralized in the OMB's Office of Information and Regulatory Affairs (OIRA), which acts as a bottleneck in which a crucial subset of rules are directly managed by the president's office (Kagan 2001, 2285). After a rule is issued, the president may claim credit for it as part of the presidential policy platform (Kagan

[8] Lewis does, however, ignore the fact that the total amount of regulators and regulation rarely decline, which should indicate that agencies are not dying but are simply being renamed (2002).

2001, 2283). In these ways, the president has a substantial effect on rules from initiation to completion.

3.4 Interest Group Influence on Regulation

Stigler (1971), followed by Peltzman (1976, Becker (1983, [1983] 1988), and Wittman (1995), saw interest groups as competing in their demands for regulation. This competition, they theorized, would then produce efficient regulation (Wittman 1995). However, it is important to note that their analysis does not include institutions as they exist. Bureaucracy is explicitly not part of their model. Stigler (1971), Peltzman (1976, Becker (1983, [1983] 1988), and Wittman (1995) all hypothesize a relatively clear exchange nexus of votes or campaign funds for laws, but this nexus cannot exist within the bureaucracy. Strict ethics laws severely limit what bureaucrats may be given or promised. Whereas exchanges brokered in Congress may be passed on to regulatory agencies as mandatory regulation, there is little to no arena for exchange between bureaucrats and interest groups.[9] Wittman (1995) further argues that competition for scarce outlays will produce something like efficient results; however, regulation need not be a function of these outlays.

Whereas a "market" for regulation may not exist, Susan Webb Yackee and her various coauthors demonstrate that interest groups can have a substantial effect on an agency's regulatory output through the public commenting process and other mechanisms of interaction with the bureaucracy. Upon viewing the public's comments, agencies will change the content of

[9] Regular contact between stakeholders and regulators may provide voice, but voice need not induce efficient results. Quasi-negotiated rulemaking, insofar as all stakeholders unanimously agree to a rule, would result in efficient results (see, for example, Buchanan and Tullock [1962] 2004 and Buchanan 1962). However, negotiated rulemaking does not cover all rules, and some relevant groups, such as consumer groups, may be excluded from the negotiation process because the costs of organization to such a group would be too great relative to their potential gains.

their rules (Yackee 2006; Kelleher and Yackee 2008). Yackee and Yackee (2006) and McKay and Yackee (2007) further find that the side with the most comments gets the most attention and that the final rule will favor that side. McKay and Yackee (2007) do not find evidence that the lobbying of rulemakers by one party begets lobbying by their competitors, as would be anticipated by an extension of Becker (1983) to argue that a market in regulations exists through public commenting. Naughton et al. (2009) show that early commenters affect the agency's rulemaking agenda. Other methods of influence, such as ex parte lobbying (Yackee 2011) and lobbying the OMB (Haeder and Yackee 2015), are also associated with changes in the outcome of rules. This new and burgeoning literature seems to note that the more contact interest groups have with regulators, the more the regulations will favor those groups.

4. Public Choice Bureaucrats and the Output of Regulation

In this section, I return to Tullock's ([1965] 2005), Downs's (1967), and Niskanen's (1971) analyses arguing that bureaucracies do not act as cohesive units because they are collectives of individuals who each face different incentives and hold different aspirations. While previous scholars focus on how Congress or the president controls the *bureaucracy*, I emphasize that the output of bureaucracies reduces to *bureaucrat* versus constraints. I take it as a given that each bureaucrat has his or her own desires. I highlight that bureaucrats, when pursuing discretionary rulemaking, face weak marginal constraints at best. In a world of light constraints, each bureaucrat's desires become the key maximand. Under two very simple models of bureaucrat behavior, there would be a tendency to oversupply regulation, thus leading to a bureaucratic influence in producing regulation.

4.1 Controlling Bureaucrats via Oversight and Competition

Absent constraints and oversight, if bureaucrats have an independent interest in regulation, the public may become overregulated. Whereas some scholars have claimed that bureaucrats are constrained, I argue that the constraints on producing discretionary regulation are actually quite light.

When McCubbins, Noll, and Weingast (1987, 1989); Moe (1990a, 1990b, and 1997); and Horn (1995) discuss the stringency of statutes constraining bureaucrats, they are discussing *inframarginal constraints*, as opposed to marginal constraints. An inframarginal constraint is a constraint on the total product. A marginal constraint, however, raises the cost of desiring a good at all quantities and directly affects the quantity desired, such as in the traditional example of an excise tax. Oversight—by either the president, Congress, or interest groups—may be a marginal constraint, in that it raises the price of any amount of discretion, but it is often a weak one because there is a hard limit on bureaucratic capacity for oversight.

Congressional oversight is costly because of Congress's basic information asymmetry with respect to the bureaucracy's output (Niskanen 1971). Whereas oversight mechanisms such as fire alarms, audits by the GAO, hearings, and other forms of investigation are designed to minimize the cost of oversight, the ability for effective oversight is always limited, precisely because the current Congress faces the perennial threat of changes from future congressional coalitions. Congress may have the tools to perceive unwanted discretion, but Congress's ability to punish this discretion will always be circumscribed.[10] Civil service standards and the independence of numerous agencies substantially raise the cost for Congress to intervene directly in the working of agencies. Whereas hearings may present as disutility to a bureaucrat, the

[10] Note also that Congress may want some discretionary actions from the bureaucracy, as discretion economizes on the information problems facing Congress.

disutility will be momentary, provided he or she can weather them, and will last only until Congress becomes interested in another topic.

A fire alarm is weak because an alarm is only effective if it can be heard. The public and Congress have limited attention spans. If an agency has several rules, some congressionally mandated, that all receive many comments, the public's limited attention may be used up on mandatory rulemakings. Comments on statutory rules may still be material to Congress in considering a reform or repeal of those statutes, but the bureaucracy's ability to change the content or outcome of such rules is minimal. Also, during a period of significant commenting, the marginal discretionary rule could be more contentious, as the noise necessary to be heard would then be higher than usual. At a certain level of ambient noise, no fire alarm can be heard; similarly, a great number of comments may go relatively unnoticed if attention is focused on other issues.

Agencies may also manipulate the public commenting process to suit their interests. Potter (2017b) shows that the length of this process is frequently altered on the basis of whether the agency thinks extra time would support its objectives.

Thus Congress's direct constraints on regulatory agencies (public commenting, hearings, and oversight) are likely only weak constraints on discretionary rulemaking, because bureaucrats may be sheltered from them in various ways.

Some scholars, such as Wittman (1995) and Breton and Wintrobe (1982), contend that errant bureaucrats can be reined in indirectly via competition between bureaucracies. For competition to be fruitful in constraining the behavior of bureaucrats, it must induce bureaucrats to produce what their potential customers would want. In other words, competition must take place over desired outcomes. Unfortunately, competition over the outcomes of rulemaking is

unlikely. Rules are non-rivalrous, meaning that additional rules can perennially be added without competing for space with future rules (Buchanan [1975] 2000).

Nonetheless, the inputs to the rulemaking process are rivalrous, so competition could occur between bureaucracies over these inputs. Congress could allocate resources on the basis of how beneficial a given bureaucracy's rulemaking was in a previous period. However, a few crucial features of the bureaucracy and rulemaking mitigate this possibility. First, politicians have incentives to deviate from the public interest as well; they may therefore supply inappropriate budgets to the bureaucracy. Second, keeping constant the number of bureaucrats would still tend to increase the number of rules, because an additional rule is non-rivalrous in its consumption. Third, and most important, if competition occurs, it is likely to occur over rivalrous inputs instead of the non-rivalrous outputs. This competition would, however, economize on the number of rules produced per regulator and on each regulator's relative speed of production.

4.2 The Set of Possible Motivations

Because constraints on bureaucrats are light, the individual beliefs and motivations of bureaucrats would become the key maximand. Public choice scholars have advanced many potential motives for bureaucrats. They may be focused on extracting rents, either directly from private citizens or from organized interest groups (McChesney 1987, 1991; Djankov et al. 2002). They may exploit information asymmetries between the agency and Congress for budgetary rents (Tullock [1965] 2005; Niskanen 1971). They may be after their own career advancement, either internal to the bureaucracy, as in Tullock and in Downs (1967), or externally, by engaging in an implicit (or explicit) revolving door between the bureaucracy and the private sector. Bureaucrats also may produce less regulation than desired because of shirking (Breton and Wintrobe 1982).

Finally, bureaucrats may be enthusiastic about their agency's mission and view success by the number of rules produced rather than by whether the outcomes of those rules are beneficial.

Empirical tests of Niskanen's (1971) model have not unearthed strong results (Young 1991). Explicit rent-seeking by bureaucrats, at least in the United States and other developed nations, is likely forestalled by the stringency of civil service rules. Higher amounts of shirking would decrease rule accretion rates, but there is no compelling reason to believe that shirking is more common today than in the past, and the growth in the regulatory code appears constant and related to the number of full-time government employees (McLaughlin, Pagels, and Sherouse 2016). If the growth in the regulatory code is associated with the number of regulators, and if external calls to write additional regulations are light (as may be the case with discretionary rulemaking), then it would be useful to investigate the independent incentives bureaucrats may have to pursue rulemaking.

One possible incentive is career advancement. Each individual bureaucrat begins at a low level on the General Schedule—or GS—pay scale and over time wants to get better pay and more comfortable or interesting positions. Presumably, at each level of the hierarchy, the competition for positions becomes fiercer as they grow fewer in number and more prestigious.

Formally stated, career advancement requires entering a hiring or promotion process. Advancement is dependent on signals of productivity. Individuals are hired or promoted only if they *appear* to be productive. The appearance of productivity is marked by items listed on a candidate's resume, and items that are harder to accomplish will signal greater productivity. Rulemaking is a strong signal of productivity because of the lengthy administrative processes that must be followed to deliver a final rule.

Each bureaucrat thus has a motive to regulate independent of Congress or the president, because it is a strong and costly signal of productivity that should result in career advancement. As long as rulemaking is used as such a signal, individual bureaucrats are likely to overinvest in rulemaking.

Given that the hypothetical rule in this instance is a signal with future value, its production by others would be worthwhile to a third-party actor who can claim partial credit. That third party would be willing to contribute up to the value that party expects to get from the rule. Therefore, in practice, rule creation would function like a private good with positive externalities: *the quantity demanded would be suboptimal to any individual bureaucrat*. Bureaucrats therefore have reason to create institutional structures that incentivize rulemaking for rulemaking's sake.[11]

Presumably, signals of productivity internal to the bureau would be signals of productivity outside the bureau as well. The existence of an implicit revolving door between private- and public-sector employment may change the rules an individual regulator would create. But because regulators would have an incentive to supply regulation that is favorable to special interests, such a revolving door would not decrease the individual bureaucrat's demand to write regulation. Therefore, bureaucrats face an independent incentive to supply rules, even without presupposing revolving doors. The rule supplied need not be beneficial, it need only be a signal of productivity or, in the case of the implicit revolving door, provide benefits to special interest groups.

[11] Consider how this upends the "dual channel" between the bureaucracy and Congress hypothesized by Workman (2015). Bureaucrats have an incentive to tell Congress to give them work for work's sake, i.e., to instruct Congress that more regulation is necessary when it is not.

An alternate motivation to write rules is that bureaucrats are individually driven by enthusiastic support for their agency's mission. In this case, each bureaucrat may feel called to enforce the agency's mission, be it providing for the safety of railroads or halting anticompetitive practices. These individuals may confuse potential mechanisms to furnish this goal, such as regulations, executive orders, and other corrective actions, with actual success or reductions in the "social bads" that the agency is meant to curb. Each rulemaking project becomes a way to restrict bad outcomes, regardless of its social cost. In this way, they may see rulemaking as an end for its own sake, which would manifest in an individual desire for ever more regulations. In either of these two ideal types of bureaucrats, which Downs (1967) calls climbers and zealots, overproduction of rules is expected.

5. Prior Literature Assessing the Amount of Discretion

To my knowledge, mine is the first comprehensive estimate of the amount of discretion exercised by a federal regulatory agency. In an important precursor to my study, Ellig (2016) calculated the amount of discretion exercised in economically significant rules reviewed by OIRA that were issued between 2008 and 2013. Ellig was focused primarily on explaining the quality of regulatory impact analyses, however, so his chosen sample may not be a representative sample of rulemaking in general. Ellig's time period is also more compressed than my own. In contrast, I focus directly on the amount of discretionary rulemaking that took place and on the differences between discretionary and nondiscretionary rulemaking. I also examine rules made by a single agency over a much longer period using Regdata. The Regdata dataset quantifies the number of restrictions in an administrative code according to industry affected and which agency administered the ruling. Using this dataset, I discern the amount of regulatory text changes that were discretionary versus mandatory.

6. Methodology

To calculate how much discretion there was in FRA's regulations, I needed a comprehensive list of rules issued by FRA. To find all these rules, I created a manual estimate of the word count of each part of FRA's regulatory text, 49 CFR 200–299, that I could compare directly to Al-Ubadyli and McLaughlin's (2014) Regdata.

Whereas both my manual estimate and Regdata measure the same thing, the word count of each part of 49 CFR 200–299, both counts were necessary because there were errors in both datasets. My manual estimate included text that was not strictly part of the regulatory code, such as editorial notes and titles and dates at the top of a page. It also included timestamps and other imprints from the copied text that were imposed by my sources for the text, HeinOnline's Federal Register Library and the Office of the Federal Register's annual editions published on the eCFR website. Additionally, when copying a part of the regulatory code, the text did not copy perfectly. Words were arbitrarily separated or combined. Most crucially, the manual estimate also included text that should have been excluded, such as superseded text and editorial notes.

Regdata has some advantages over my manual word count. Its text excludes superseded text and editorial notes, it will not arbitrarily combine or separate words, and it does not include timestamps. However, Regdata 3.0 has had some discrepancies at the part level, where it would misclassify sections of text by reassigning them to a new part. These misclassifications would show up as a negative change in one part and a positive change in another part when no real change was occurring. For example, in 2009, Regdata recorded 2,569 words deleted from part 49 CFR 235 and 2,569 words added to part 49 CFR 236. My manual estimate recorded a change of 25 and 61 words, respectively. In 2011, a similar change in the opposite direction occurred

within Regdata with no corresponding movement in my manual estimate. I suspect that Regdata is misspecifying the end of part 235 and in some years sending sections of text from 235 to 236. This problem occurs somewhat frequently in Regdata.

Previous research using Regdata has aggregated data at the industry level. These studies would not run into the aforementioned issue, as neighboring parts likely regulate the same industry, and once the parts were aggregated, the end-part issues would cancel out. As I discuss below, Regdata was able to be salvaged with minor corrections for the purpose of this analysis, but my manual estimate was not. Thus, I generally rely on Regdata results for analysis.

I downloaded the PDF files of each of the parts of 49 CFR 200–299 between the years 1980 to 2015 from HeinOnline and the eCFR. Next, I manually calculated a word count for each part by copying the full text of the part and pasting it into a new Microsoft Word document. I could then generate a word count in Word.[12]

I used this manual word count estimate to identify new rules. For any part with a change in word count greater than 1,000 words (either positive or negative), I searched the PDF of the identified part for *Federal Register* citations. These citations are listed at the end of the sections they amend along with their publication date. (A typical CFR page with *Federal Register* citations is shown in Exhibit 2, with arrows pointing to corresponding final rule citations.) Each citation corresponds to a specific page in the *Federal Register* where a rule was published. The annual edition of Volume 49 is issued on October 1st of each year, so any final rules published between October 1st of the preceding year and September 30th of the year in question would affect the text of that volume.

[12] Copies of all PDFs and of the Word documents containing the copied text are available upon request.

After reviewing all parts of 49 CFR 200–299 with changes greater than 1,000 words, I matched all such changes in Regdata with identified rules issued. If any parts remained with un-accounted-for changes, I searched them for additional final rule citations, thereby ensuring that no substantial change in word count remained unexplained. The CFR text can only be affected by rules published in the *Federal Register*, so I could be sure this method would give me a comprehensive set of rules written over a sufficiently long time.

Exhibit 2: CFR Page within the Federal Registrar

§ 225.9 Telephonic reports of certain accidents/incidents.[1, 2]

(a) Each railroad must report immediately by toll free telephone, Area Code 800–424–0201, whenever it learns of the occurrence of an accident/incident arising from the operation of the railroad that results in the:

(1) Death of rail passenger or employee; or

(2) Death or injury of five or more persons.

(b) Each report must state the:

(1) Name of the railroad;

(2) Name, title, and telephone number of the individual making the report;

(3) Time, date, and location of accident/incident;

(4) Circumstances of the accident/incident; and

(5) Number of persons killed or injured.

[39 FR 43224, Dec. 11, 1974, as amended at 41 FR 15847, Apr. 15, 1976; 49 FR 48939, Dec. 17, 1984]

§ 225.11 Reporting of accidents/incidents.

Each railroad subject to this part must submit to FRA a monthly report of all railroad accidents/incidents described in § 225.19. The report must be made on the forms prescribed in § 225.21 and must be submitted within 30 days after expiration of the month during which the accidents/incidents occurred. Reports must be completed as required by the current FRA Guide for Preparing Accident/Incident Reports. A copy of this guide may be obtained from the Office of Safety, Federal Railroad Administration, 400 Seventh Street, SW, Washington, DC 20590.

[49 FR 48939, Dec. 17, 1984]

[1] The National Transportation Safety Board requires certain railroad accidents to be reported by telephone at the same toll free number (See Title 49, Code of Federal Regulations Part 840).

[2] FRA Locomotive Safety Standards require certain locomotive accidents to be reported by telephone at the same toll free number (See Title 49, Code of Federal Regulations, § 229.17.)

§ 225.12 Rail Equipment Accident/Incident Reports alleging employee human factor as cause; Employee Human Factor Attachment; notice to employee; employee supplement.

(a) *Rail Equipment Accident/Incident Report alleging employee human factor as cause; completion of Employee Human Factor Attachment.* If, in reporting a rail equipment accident/incident to FRA, a railroad cites an employee human factor as the primary cause or a contributing cause of the accident; then the railroad that cited such employee human factor must complete, in accordance with instructions on the form and in the current "FRA Guide for Preparing Accident/Incident Reports," an Employee Human Factor Attachment form on the accident.

(b) *Notice to identified implicated employees.* Except as provided in paragraphs (e) and (f) of this section, for each employee whose act, omission, or physical condition was alleged by the railroad as the employee human factor that was the primary cause or a contributing cause of a rail equipment accident/incident and whose name was listed in the Employee Human Factor Attachment for the accident and for each such railroad employee of whose identity the railroad has actual knowledge, the alleging railroad shall—

(1) Complete part I, "Notice to Railroad Employee Involved in Rail Equipment Accident/Incident Attributed to Employee Human Factor," of Form FRA F 6180.78 with information regarding the accident, in accordance with instructions on the form and in the current "FRA Guide for Preparing Accident/Incident Reports"; and

(2) Hand deliver or send by first class mail (postage prepaid) to that employee, within 45 days after the end of the month in which the rail equipment accident/incident occurred—

(i) A copy of Form FRA F 6180.78, "Notice to Railroad Employee Involved in Rail Equipment Accident/Incident Attributed to Employee Human Factor; Employee Statement Supplementing Railroad Accident Report," with part I completed as to the applicable employee and accident;

(ii) A copy of the railroad's Rail Equipment Accident/Incident Report and Employee Human Factor Attach-

From this process, I identified a total of 162 rules written between 1980 and 2015. I found a rule to explain every change in word count greater than 1,000 words that occurred within that interval, as well as many rules that affected parts in smaller increments. My rule set corresponds to a total absolute value word count change of 807,540 of 896,952 words (or roughly 90 percent) in Regdata and 808,450 of 872,158 words (or roughly 92.7 percent) in my manual word count.

Next, I reviewed the preamble of the 162 rules I had found. I recorded the type of rule; the date of publication; the part affected; any relevant NPRMs, IFRs, ANPRMS, or previous NPRMs, along with their corresponding dates of publication; public laws cited, along with their citation and date of issue; the date RSAC took up the task to review the rule; a binary marker for whether I rated the rule as discretionary or mandatory; my subjective certainty in my rating; and any notes to explain why I had rated the rule as discretionary or mandatory.

Rules were mandatory if a public law had required the agency to issue a rule, even if the law had not directly specified what form the regulation must take. Discretionary rules were rules that I could not designate as statutorily required. A discretionary rule would generally cite no statues or refer to FRA's general authority to issue safety-related rules. Occasionally, a rule would cite a vague statutory requirement. To determine whether the rule was mandatory or discretionary in those instances, I looked at the specific language of the statutory requirement. If a public law had instructed FRA to issue a rule after lawmakers had conducted a study on the best way to issue that rule, I counted that rule as mandatory. In contrast, if a public law had instructed FRA to consider making a rule but had left the option for FRA to decide against regulating, I rated the rule as discretionary. In Table A1 of the appendix, I list each rule, each part it affected, and why I labeled it as discretionary or mandatory.

There were a few instances in which I was uncertain whether a rule was discretionary or mandatory. In those instances, I contacted Brenda Moscoso, the former director of FRA's Office of Safety Analysis with more than 20 years of experience in FRA; Sarah Yurasko, an attorney in FRA's Safety Law Office; or Jeffrey Horn, a senior industry economist at FRA for more than 20 years. Collectively, they have substantial firsthand knowledge of FRA rulemaking, since they all worked in FRA's regulatory shop. They guided me in determining whether 6 of the 162 rules were discretionary or mandatory. I noted when their judgment was consulted in the Reason/Justification column in Table A1 of the appendix.

Once I had assembled my list of rules and determined whether they were discretionary, I began to verify and correct Regdata so that I could match word count changes to final rules, thereby producing a measure of the size of a given rule. To correct Regdata, I generated a list of all parts of 49 CFR 200–299 where Regdata's word count change and my manual word count change differed by more than 500 words. The changes should have roughly moved together, so that large discrepancies in the word count changes over a given year should have been caused by either Regdata, my manual estimate, or both. In total, I found 73 parts between 1981 and 2015 that had an absolute difference in word count change greater than 500 words. Additionally, I found four parts that were erroneous in both Regdata and my manual estimate.

Of those 73 parts, 24 were caused by an error in my manual word count, 39 were caused by errors in Regdata, and 10 contained errors that I could not clearly attribute to either Regdata or my manual estimate. The errors in my manual word count are ultimately irrelevant, as I rely primarily on Regdata for results and descriptive statistics. Of the 49 errors not caused by my manual word count, 7 were caused by superseded text that Regdata excludes, 26 were caused by a misspecification of the end of a part, 8 were caused by Regdata misreporting the year in which

a change occurred, and the remaining 8 did not have a clear cause. The first of these cases is a feature, not a bug. The second and fourth were irrelevant, as the part was recording a change when no change was occurring, so when I matched final rules to their corresponding part, all but one instance of a misspecification fell away. The third case, in which Regdata was misstating the year of a change, needed a correction, so I changed the year a rule was effective as recorded in my list of rules. This change would not have affected my results in any meaningful sense, because the year a rule was effective was only used for identification.

Four parts had a change that required me to correct the word counts; however, in three of these instances, the problem was present in both the manual data and in Regdata. The "Signal Train Control Miscellaneous Amendments" rule issued on January 26, 1984, affected part 236. In Regdata, this part recorded a word count change of -1,317, while my manual estimate recorded a word count change of 1,041. However, Regdata had misspecified the end of part 235 and 236 and was arbitrarily moving about 2,400 words between these two parts, since part 236 in 1985 recorded an addition of 2,429 words and my manual estimate recorded no changes. To calculate the actual change in Regdata, I added the 2,429 words back to part 236 in 1984 to get the 1,112 words that were likely added. I changed the Regdata value for 1984 to 1,112, reflecting the actual change in word count.

In the 1995 49 CFR 219, the 1997 49 CFR 225, and the 2010 49 CFR 234, the word count in Regdata and my manual estimate differed by fewer than 500 words, but both were incorrect. In the 1995 and 1997 text, superseded text was included in the CFR, making a change look much larger than it actually was. To calculate the size of these two rules, I copied the regulatory changes recorded at the end of each rule that affected these parts and added them together. I then placed that value in the word count change for that year. In late 2008, a DFR

amended the 2009 text of 49 CFR 234 but received an adverse comment, forcing FRA to reissue an NPRM. FRA completed that NPRM and issued a final rule within a year. Thus, the 2010 text of 49 CFR 234 included the new final rule along with the subtractions from the old DFR. I calculated the net change by subtracting the 2010 change from the 2009 change and placing that value in the Regdata word count change.

Most rules uniquely matched to a given part in a given year. However, 56 rules matched to a part that at least 1 other rule matched to, so I had more than 1 rule explaining a given change in a given year. To ensure that I was not double-counting changes in text, I developed a measure of each rule's share of effectiveness over a word count change recorded in a given part in a given year. For this effort, I gathered the changed regulatory text at the end of a final rule and copied it into a Word document. An example of the text copied from a final rule is shown in Exhibit 3. The blue boxes represent the copied text. I would copy from after the first set of headings, and I generally would not edit the text copied after. As far as possible, when a rule mentioned that a section was removed, I copied that text from the previous year's CFR and subtracted it from the additions to the text. After this, I summed the word counts of each rule to generate an estimate of the total change in word count. I then divided each rule's word count by this total to generate a share of effectiveness. Finally, I multiplied Regdata's word count by the share of effectiveness to generate a unique Regdata-associated word count for each rule.

For example, in 2006, FRA issued two rules that affected the 2007 edition of part 49 CFR 229: "Passenger Equipment Safety Standards; Miscellaneous Amendments" on October 19, 2006, and "Occupational Noise Exposure for Railroad Operating Employees" on October 27, 2006. For the first rule, my copied text equaled 652 words; for the second rule, my copied text equaled 1,826 words. Together, these totaled 2,478 words. The first rule's share of effectiveness

was 652/2,478 or .263. It was then multiplied by the total Regdata-recorded word count of 1,611 to generate an effective word count for that rule of 423.9 words.

I repeated this process for all rules that did not uniquely identify word count changes. After I generated an effective word count for every part affected by a rule, I aggregated the word counts by rule so that I would have a total word count change caused by each final rule.

In sum, I developed a clear and consistent methodology both for finding all rules issued by FRA since 1980 and for determining whether they were discretionary or mandatory. I then verified and corrected Regdata, permitting each rule to be cleanly matched to corresponding changes in the CFR so that I could identify the per-rule word count effect on the CFR. The data developed and the code used to clean that data are enumerated in the appendix.

Exhibit 3: Text from a Final Rule

final rule will not result in the expenditure, in the aggregate, of $140,800,000 or more in any one year, and thus preparation of such a statement is not required.

G. Energy Impact

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any "significant energy action." *See* 66 FR 28,355 (May 22, 2001). Under the Executive Order a "significant energy action" is defined as any action by an agency that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) That is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. FRA has evaluated this response to petitions for reconsideration of the final rule in accordance with Executive Order 13211, and has determined that this regulatory action is not a "significant energy action" within the meaning of the Executive Order.

H. Administrative Procedure Act

Under the Administrative Procedure Act, an independent Notice of Proposed Rulemaking (NPRM) is not required when an agency, for good cause, finds "that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest." 5 U.S.C. 553(b)(3)(B). FRA believes that it is making only technical changes, clarifications, and minor amendments in response to petitions for reconsideration of FRA's final rule. For this reason, and because FRA believes that it has provided sufficient opportunities for notice and comment through the NPRM, the final rule, and the petitions for reconsideration which were all contained in the public docket, publishing an independent NPRM is unnecessary.

I. Privacy Act Statement

Anyone is able to search the electronic form of all comments received into any of DOT's dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT's complete Privacy Act Statement published in the **Federal Register** on April 11, 2000 (Volume 65, Number 70, Pages 19477–78), or you may visit *http://DocketsInfo.dot.gov.*

List of Subjects in 49 CFR Part 213

Penalties, Railroad safety, Reporting and recordkeeping requirements.

The Final Rule

In consideration of the foregoing, FRA amends part 213 of chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

PART 213—[AMENDED]

■ 1. The authority citation for Part 213 continues to read as follows:

Authority: 49 U.S.C. 20102–20114 and 20142; Sec. 403, Div. A, Public Law 110–432, 122 Stat. 4885; 28 U.S.C. 2461, note; and 49 CFR 1.49.

■ 2. Section 213.234 is amended by revising the first sentence of paragraph (a), and revising paragraphs (d), (e), and (g), to read as follows:

§ 213.234 Automated inspection of track constructed with concrete crossties.

(a) *General.* Except for track described in paragraph (c) of this section, the provisions in this section are applicable on and after July 1, 2012. * * *

* * * * *

(d) *Performance standard for automated inspection measurement system.* The automated inspection measurement system must be capable of indicating and processing rail seat deterioration requirements that specify the following:

(1) An accuracy, to within ⅛ of an inch;

(2) A distance-based sampling interval, which shall not exceed five feet; and

(3) Calibration procedures and parameters assigned to the system, which assure that indicated and recorded values accurately represent rail seat deterioration.

(e) *Exception reports to be produced by system; duty to field-verify exceptions.* The automated inspection measurement system shall produce an exception report containing a systematic listing of all exceptions to § 213.109(d)(4), identified so that an appropriate person(s) designated as fully qualified under § 213.7 can field-verify each exception.

(1) Exception reports must be provided to or be made available to all persons designated as fully qualified under § 213.7 and whose territories are subject to the requirements of § 213.234.

(2) Each exception must be located and field-verified no later than 48 hours after the automated inspection.

(3) All field-verified exceptions are subject to all the requirements of this part.

(4) Exception reports must note areas identified between ⅜ of an inch and ½ of an inch as an "alert."

* * * * *

(g) *Procedures for integrity of data.* The track owner shall institute the necessary procedures for maintaining the integrity of the data collected by the measurement system. At a minimum, the track owner shall do the following:

(1) Maintain and make available to FRA documented calibration procedures of the measurement system that, at a minimum, specify an instrument verification procedure that ensures correlation between measurements made on the ground and those recorded by the instrumentation; and

(2) Maintain each instrument used for determining compliance with this section such that it accurately provides an indication of the depth of rail seat deterioration in accordance with paragraph (d)(1) of this section.

* * * * *

Issued in Washington, DC, on September 6, 2011.

Joseph C. Szabo,

Administrator.

[FR Doc. 2011–23133 Filed 9–8–11; 8:45 am]

BILLING CODE 4910–06–P

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Part 571

[Docket No. NHTSA–2011–0139]

RIN 2127–AJ44

Federal Motor Vehicle Safety Standards, Child Restraint Systems

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: This final rule, the first of two under the designation RIN 2127–AJ44, amends a provision in Federal Motor Vehicle Safety Standard No. 213, "Child restraint systems," that permits NHTSA to allow manufacturers of child restraint systems (CRSs) manufactured before August 1, 2010, to choose to have NHTSA test the CRSs with either the Hybrid II 6-year old child (H2–6C) dummy or the Hybrid III 6-year-old child (HIII–6C) dummy. This final rule amends the provision to permit manufacturers of currently-manufactured CRSs the choice of

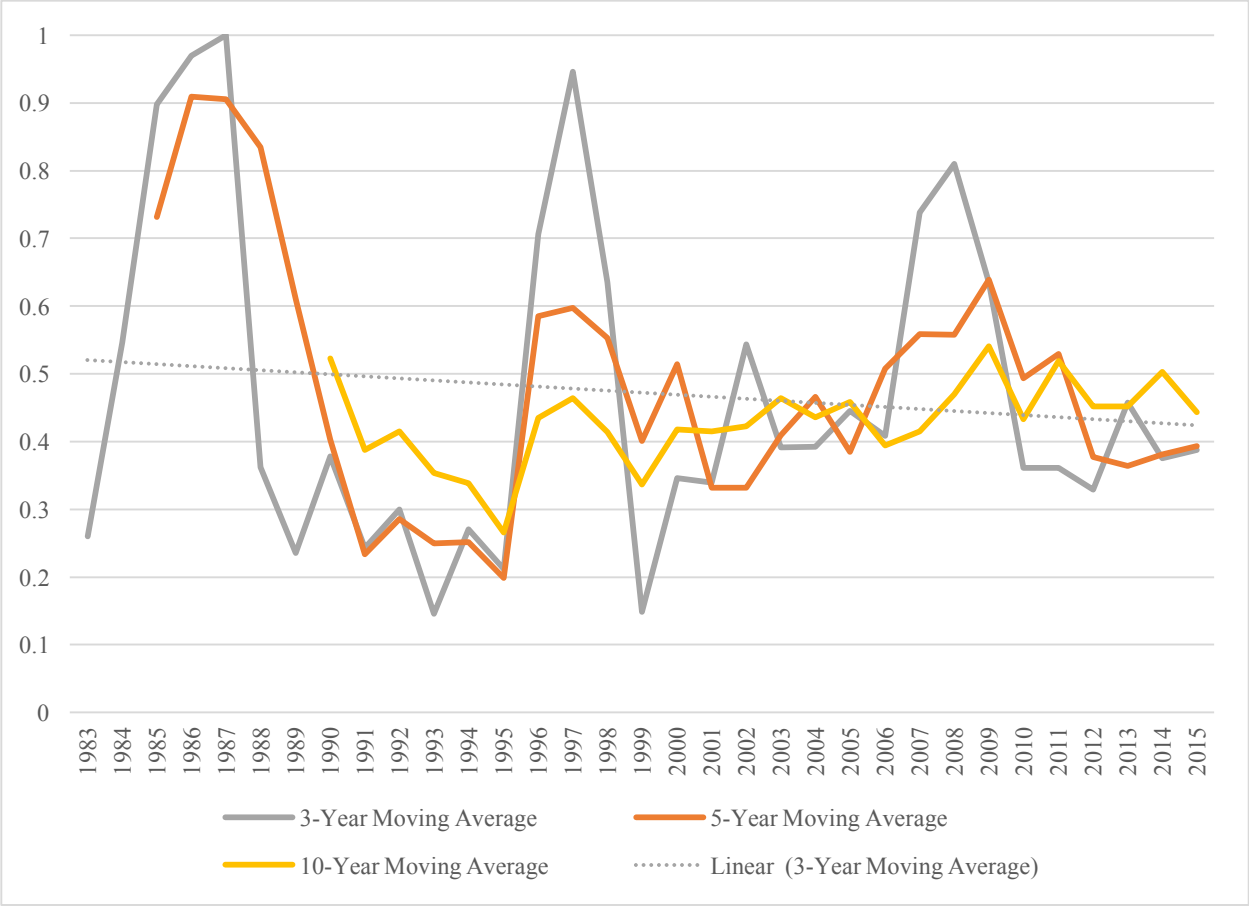
7. Results

Between 1980 and 2015, approximately 42.9 percent of all measured word count changes in FRA's regulatory text were discretionary. For the same period, 88 of 163 rules, or 54 percent of all final rules issued, were discretionary. Earlier in this paper, I argued that Congress sets an initial amount of permitted discretion through constitutive statutes. This argument would imply that the share of discretion as a percentage of total rulemaking should be roughly constant over a long time frame, provided that new statutes shrinking or broadening the power of an agency are not issued. (Short time frames are subject to political gaming on the part of the bureaucracy, as empirically demonstrated by Potter [2017a].) Indeed, this is consistent with what I find. My 3-, 5-, and 10-year moving averages of the share of all rules that were discretionary were remarkably stable, at around 40 percent of the absolute change in word count.[13] The trend line in the 3-year average discretion percentage is roughly flat.[14] Recall from earlier in this paper that my measures of the duration of rulemaking projects indicate that they often take between 4 and 10 years to complete; thus, 5- and 10-year moving averages capture the average length of a project.

[13] When I refer to shares of discretion, I use the total of the absolute value of word count changes. This preserves negative changes, or deletions from the regulatory text, as valid inquiry data and ensures a less biased result.

[14] The reason the share of discretionary regulation varies so greatly in short time frames is that the choice of when to issue a final rule is strategic.

Figure 5: Share of Discretionary Changes in Word Count by Year



Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.

Practically speaking, discretionary rulemaking should be able to be classified by motivation. Some rules will be motivated by demands from the president and Congress, others by demands from interest groups, and still others by the bureaucracy itself. To separate discretionary rules into these four groups, I required clear signals that a rule was of one type versus another. I searched each rule for keywords that would signal whether the president, Congress, or interest groups had motivated it. For signs of congressional motivation, I searched for (a) any discussion of interactions with Congress, such as presenting the regulation to Congress; (b) whether the rule itself was a response to GAO audits; and (c) laws that required

FRA to study whether to issue a rule. Presidentially motivated rules were labeled as such when the rule mentioned an executive order (from the president) or an emergency order (from the FRA administrator). Any time a petition for rulemaking was sent to FRA by the main railroad trade associations or unions, I labeled the resulting rule as motivated by interest groups.

I also delineated rules that were Responses to Petitions for Reconsideration (RPRs) or administrative rules. RPRs are always motivated by interest groups, in that they are generated by comments on final rules. Nonetheless, those rules appear to be of a different character than what we mean by "discretionary rulemaking," because agencies are merely modifying final rules. Additionally, the only RPRs I labeled as discretionary were RPRs modifying discretionary rules, even though all RPRs are technically discretionary. I do not include RPRs in my measure of interest group influence.

Administrative rules modify both administrative proceedings unconnected to congressional requirements (notably, direct final rulemaking proceedings and emergency relief dockets) and early rules modifying inflation impact adjustments that were labeled as discretionary because no statutes were cited. Administrative rules are listed as a separate category and are not included as influenced by any party.

If a rule that was negotiated in RSAC had started as a petition for rulemaking, it would be rated as influenced by interest groups. Alternately, if a rule was encouraged by a GAO audit and had gone through the RSAC process, I labeled it as influenced by Congress. If a rule did not fit in one of the boxes in Exhibit 3 but had passed through RSAC, I labeled it as RSAC. RSAC-negotiated rules were separated because it is not clear what channel influences them. On one hand, interest groups have a substantial effect on the outcome of those rules, because unions and railroads make up two-thirds of RSAC. On the other hand, it is not clear whether those rules

were motivated by the bureaucracy, by the administrator, or by the industry, because FRA sets the agenda by deciding whether to give a task to RSAC. FRA has also withdrawn tasks when RSAC outcomes were inconclusive or not what FRA had wanted.

The remaining rules without any identified signals provide an upper-bound estimate for bureaucratically motivated rulemaking. Within this bound I am including rules that were motivated by the president's FRA administrator, Congress, or interest groups. FRA may be strategically hiding the party that desired these rules, or FRA itself may be the chief party who thinks these rules should exist. I have no finer method to ensure these nondesignated rules were motivated by individual bureaucrats, however, so I include them in this upper bound.

Given that it is difficult to know whether RSAC rules were motivated by the bureaucracy or by interest groups, I generated estimates under three alternate assumptions. RSAC rules would either be all bureaucratically motivated, all interest group motivated, or split between the two. For the first two cases, I added the value of all RSAC rules to my estimate of bureaucratically motivated rules and to my estimate of interest-group-motivated rules. These generated high estimates of bureaucratically motivated and interest-group-motivated rules, respectively. In the third case, I added half the value of the RSAC rules to the interest group base estimate and half to the bureaucracy base estimate to generate a mid-estimate.

In Table 1, I provide these various estimates of the amount of regulation motivated by each group. Notice that my high estimate of bureaucratically motivated regulations accounts for 45.5 percent of all discretionary regulations and 19.5 percent of all regulations. My low estimate indicates that bureaucrats motivate 25.3 percent of discretionary rules, or 10.9 percent of all rules. Based on this data, Congress is certainly an active participant in discretionary rulemaking, but it is far from dominant.

Table 1: Motivations in Discretionary Rulemaking

Group	Number of rules	Share of rules, %	Word count changes	Share of discretionary changes, %	Share of total changes, %
Congress	14	15.9	81,967	28.4	12.2
President	8	9.1	31,472	10.9	4.7
High-estimate interest groups	21	23.9	82,607	28.6	12.3
Mid-estimate interest groups	14.5	16.5	53,534	18.6	8.0
Low-estimate interest groups	8	9.1	24,461	8.5	3.6
High-estimate, no stated channel (bureaucracy)	39	44.3	131,149	45.5	19.5
Mid-estimate, no stated channel (bureaucracy)	32.5	36.9	102,076	35.4	15.2
Low-estimate, no stated channel (bureaucracy)	26	29.5	73,003	25.3	10.9
RSAC	13	14.8	58,146	20.2	8.6
RPR	8	9.1	15,297	5.3	2.3
Administrative	11	12.5	4,108	1.4	0.6
Total	88		288,454		

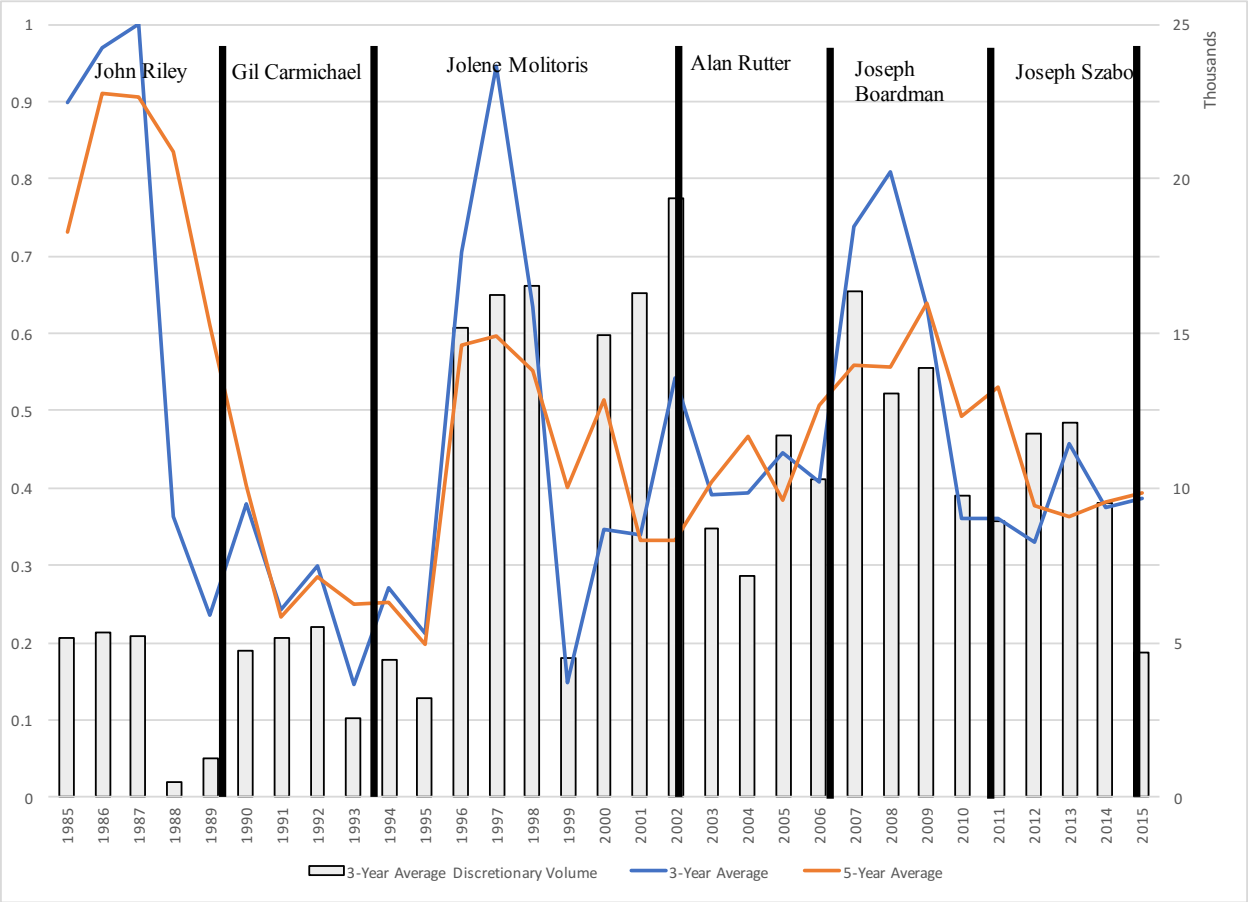
Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.
Note: RPR = Responses to Petitions for Reconsideration; RSAC = Railroad Safety Advisory Committee.

My approach for separating channels of discretion is not perfect at separating presidentially motivated discretion from the remainder or the presumed upper limit of bureaucratically motivated rulemaking. Actions by the FRA administrator, a political appointee, would not frequently show up in executive orders. More likely, discretion exercised by a given administrator would appear as a greater-than-average amount of rulemaking under them. In effect, different administrators should result in different volumes of discretionary rulemaking. There does indeed appear to be some difference in the average amount of discretion exercised

during the terms of each FRA administrator, as indicated in Figure 6. The black bars represent the beginning and end of each administrator's term and the light gray bars measure the three-year average volume of discretionary rulemaking.

This indicates that the administrator does have an effect; however, the way this effect materializes is unclear. For example, assume the administrator decides to be permissive of additional regulation in general. Individual bureaucrats would then be more free to propose new regulations. However, these proposals would derive from the beliefs and observations of the bureaucrats, not those of the administrator, even if these rules were only proposed because the administrator's permissive stance lowered the cost of bureaucrats exercising their discretion. Another possibility is that the administrator came into FRA with a specific regulatory program in mind. If so, the regulations under that program should properly be attributed to the administrator. Since both bureaucrat-initiated and administrator-initiated rulemaking would be going on simultaneously, it is beyond my ability to separate these two distinct motivations.

Figure 6: Discretionary Rulemaking by Administrator



Source: Al-Ubaydli, Omar, and McLaughlin, Patrick A. 2015. "RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012." Regulation & Governance 11 (1): 109–23.

8. Conclusion

As I have argued theoretically and suggested empirically, bureaucrats have space for independent action and do influence the outcome of rulemaking. Neither Congress nor the president is dominant in this process; they are merely two participants in a four-player game that includes Congress, the president and appointees, bureaucrats, and interest groups. I estimate that Congress permitted discretion in about 42 percent of all rulemaking and that bureaucrats are responsible for producing up to 45.5 percent of this discretion. Even my low estimate implies

that bureaucrats produce up to 25.3 percent of discretionary text changes, or 10.9 percent of total changes in regulatory text. Discretion is frequent in rulemaking, and it is often employed not on Congress's behalf, but on behalf of other principals or of the bureaucrats themselves.

Works Cited

Al-Ubaydli, Omar, and Patrick McLaughlin. 2014. "RegData: A Numerical Database on Industry-Specific Regulations for All US Industries and Federal Regulations, 1997–2012." Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA.

Baumgartner, Frank R., and Bryan D. Jones. 2015. *The Politics of Information: Problem Definition and the Course of Public Policy in America.* Chicago: Chicago University Press.

Becker, Gary S. 1983. "A Theory of Competition among Pressure Groups for Political Influence." *Quarterly Journal of Economics* 98 (3): 371–400.

——— [1983] 1988. "Public Policies, Pressure Groups, and Dead Weight Costs." In *Chicago Studies of Political Economy*, edited by George J. Stigler. Chicago: The University of Chicago Press, 85–105.

Breton, Albert, and Ronald Wintrobe. 1982. "The Logic of Bureaucratic Conduct: An Economic Analysis of Competition, Exchange, and Efficiency in Private and Public Organizations." New York: Cambridge University Press.

Brito, Jerry, and Susan Dudley. 2012. *Regulation: A Primer.* Arlington, VA, and Washington, DC: Mercatus Center at George Mason University and the Regulatory Studies Center at George Washington University.

Buchanan, James M. 1962. "The Relevance of Pareto Optimality." *Journal of Conflict Resolution* 6 (4): 341–354.

——— [1975] 2000. *The Limits of Liberty: Between Anarchy and Leviathan*. In *The Collected Works of James M. Buchanan, Volume 7.* Indianapolis, IN: Liberty Fund.

Buchanan, James M., and Gordon Tullock. [1962] 2004. *The Calculus of Consent: Logical Foundations of Constitutional Democracy.* In *The Selected Works of Gordon Tullock, Volume 2.* Indianapolis, IN: Liberty Fund.

Djankov, Simeon, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer. 2002. "The Regulation of Entry." *The Quarterly Journal of Economics* 117 (1): 1–37.

Downs, Anthony. 1967. *Inside Bureaucracy.* Boston: Little, Brown and Company.

Ellig, Jerry. 2016. "Evaluating the Quality and Use of Regulatory Impact Analysis: The Mercatus Center's Regulatory Report Card, 2008–2013." Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA.

FRA (US Department of Transportation Federal Railroad Administration). 2005. "Standards for the Development and Use of Processor-Based Signal and Train Control Systems." *Federal Register* 70 (43): 11052–1108.

——— 2017. "Overview." Retrieved March 2017. https://www.fra.dot.gov/Page/P0351.

GAO (US Government Accountability Office). 1998. "Agencies Often Published Final Actions Without Proposed Rules." GAO/GGD-98-126, August. Retrieved December 2015. http://www.gao.gov/products/GGD-98-126.

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

Horn, Murray. 1995. *The Political Economy of Public Administration*. New York: Cambridge University Press.

Kagan, Elena. 2001. "Presidential Administration." *Harvard Law Review* 114 (8): 2245–385.

Kelleher, Christine A., and Susan Webb Yackee. 2008. "A Political Consequence of Contracting: Organized Interests and State Agency Decision Making." *The Journal of Public Administration Research and Theory* 19 (3): 579-602.

Kerwin, Cornelius M., and Scott R. Furlong. 1992. "Time and Rulemaking: An Empirical Test of Theory." *Journal of Public Administration Research and Theory* 2 (2): 113–38.

——— 2011. *Rulemaking: How Government Agencies Write Law and Make Policy,* 4th ed. Washington, DC: CQ Press.

Landes, William M., and Richard A. Posner. 1975. "The Independent Judiciary in an Interest-Group Perspective." *The Journal of Law and Economics* 18 (3): 875–901.

Lewis, David E. 2002. "The Politics of Agency Termination: Confronting the Myth of Agency Immortality." *The Journal of Politics* 64 (1): 89–107.

——— 2008. *The Politics of Presidential Appointments: Political Control and Bureaucratic Performance*. Princeton, NJ: Princeton University Press.

McChesney, Fred S. 1987. "Rent Extraction and Rent Creation in the Economic Theory of Regulation." *Journal of Legal Studies* 16 (1): 101–118.

——— 1991. "Rent Extraction and Interest-Group Organization in a Coasean Model of Regulation." *Journal of Legal Studies* 20 (1): 73–90.

McCubbins, Matthew D. 1985. "The Legislative Design of Regulatory Structure." *American Journal of Political Science* 29 (4): 721–48.

McCubbins, Matthew D., and Thomas Schwartz. 1984. "Congressional Oversight Overlooked: Police Patrols versus Fire Alarms." *American Journal of Political Science* 28 (1): 16–179.

McCubbins, Matthew D., Roger D. Noll, and Barry R. Weingast. 1987. "Administrative Procedures as Instruments of Political Control." *Journal of Law, Economics, and Organization* 3 (2): 243–77.

——— 1989. "Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies." *Virginia Law Review* 75 (2): 431–82.

McKay, Amy, and Susan Webb Yackee. 2007. "Interest Group Competition on Federal Agency Rules." *American Politics Research* 35 (3): 336–57.

McLaughlin, Patrick, Jim Pagels, and Oliver Sherouse. 2016. "The High Correlation between Agency Employment and Agency Regulations." Mercatus Chart, Mercatus Center at George Mason University, Arlington, VA, July. Retrieved January 2017. https://www.mercatus.org/publication/high-correlation-between-agency-employment-and-agency-regulations.

Moe, Terry. 1990a. "Political Institutions: The Neglected Side of the Story." *Journal of Law, Economics, and Organization* 6, special issue (1990): 213–53.

——— 1990b. "The Politics of Structural Choice: Toward a Theory of Public Bureaucracy." In *Organization Theory: From Chester Barnard to the Present*, edited by Oliver E. Williamson. New York: Oxford University Press.

——— 1997. "The Positive Theory of Public Bureaucracy." In *Perspectives on Public Choice: A Handbook*, edited by Dennis C. Mueller. New York: Cambridge University Press.

Naughton, Keith, Celeste Schmid, Susan Webb Yackee, and Xueyong Zhan. 2009. "Understanding Commenter Influence during Agency Rule Development." *Journal of Policy Analysis and Management* 28 (2): 258–77.

Niskanen, William A., Jr. 1971. *Bureaucracy and Representative Government*. New York: Aldine-Atherton, Inc.

Peltzman, Sam. 1976. "Towards a More General Theory of Regulation." *Journal of Law and Economics* 19 (2): 211–40.

Potter, Rachel Augustine. 2017a. "Slow-Rolling, Fast-Tracking, and the Pace of Bureaucratic Decisions in Rulemaking." *Journal of Politics* 79 (3):841–55. http://www.journals.uchicago.edu/doi/abs/10.1086/690614.

——— 2017b. "Disabling the Alarm? The Politics of Participation in Rulemaking." *Typescript*. Retrieved January 2017. http://www.lafollette.wisc.edu/images/publications/rule-Potter.pdf.

RSAC (Federal Railroad Administration Railroad Safety Advisory Committee). 2016a. "About RSAC." *Federal Railroad Administration Railroad Safety Advisory Committee (RSAC)*. Retrieved December 2016. https://rsac.fra.dot.gov/about.php.

——— 2016b. "RSAC Membership." *Federal Railroad Administration Railroad Safety Advisory Committee (RSAC)*. Retrieved December 2016. https://rsac.fra.dot.gov/organizations/.

Stigler, George J. 1971. "The Theory of Economic Regulation." *Bell Journal of Management Science* 2 (1): 3–21.

Tullock, Gordon. [1965] 2005. *The Politics of Bureaucracy.* In *The Selected Works of Gordon Tullock: Vol. 6. Bureaucracy*, edited by Charles Rowley. Indianapolis, IN: Liberty Fund.

Wittman, Donald. 1995. *The Myth of Democratic Failure: Why Political Institutions Are Efficient.* Chicago: Chicago University Press.

Workman, Samuel. 2015. *The Dynamics of Bureaucracy in the U.S. Government: How Congress and Federal Agencies Process Information and Solve Problems.* New York: Cambridge University Press.

Yackee, Susan Webb. 2005. "Sweet-Talking the Fourth Branch: The Influence of Interest Group Comments on Federal Agency Rulemaking." *Journal of Public Administration Research and Theory* 16 (1): 103–24.

——— 2006. "Assessing Intern-Institutional Attention to and Influence on Government Regulations." *British Journal of Political Science* 36 (4): 723–44.

——— 2011. "The Politics of *Ex Parte* Lobbying: Pre-Proposal Agenda Building and Blocking during Agency Rulemaking." *Journal of Public Administration Research and Theory* 22 (2): 373–93.

Yackee, Jason Webb, and Susan Webb Yackee. 2006. "A Bias Towards Business? Assessing Interest Group Influence on the U.S. Bureaucracy." *The Journal of Politics* 68 (1): 128–39.

Young, Robert A. 1991. Budget Size and Bureaucratic Careers. In *The Budget-Maximizing Bureaucrat: Appraisals and Evidence*, edited by Andre Blais and Stephane Dion. Pittsburgh, PA: University of Pittsburgh Press.