ARTICLES

FROM LEGISLATION TO REGULATION: AN EMPIRICAL EXAMINATION OF AGENCY RESPONSIVENESS TO CONGRESSIONAL DELEGATIONS OF REGULATORY AUTHORITY

JASON WEBB YACKEE & SUSAN WEBB YACKEE*

ABSTRACT

When Congress authorizes government agencies to regulate, do they? One of the key questions in the administrative law and political science literatures has been the extent to which Congress controls the agencies to whom it delegates enormous lawmaking power. However, few studies empirically examine agency responsiveness to congressional delegations. Using an original dataset that links federal statutes to rules produced by multiple federal government agencies over a forty-year period, we provide a novel empirical analysis of agency regulatory responsiveness to congressional statutes. We find that agencies promulgate legally binding regulations in response to only 41% of statutory authorizations to regulate. We also find that Congress can increase the probability of agency action by designating a regulation as mandatory rather than as permissive and by

^{*} Jason Webb Yackee is an Associate Professor of Law, University of Wisconsin-Madison; jason.yackee@alumni.duke.edu. Susan Webb Yackee is a Vilas Distinguished Professor of Political Science and Public Affairs; Director, La Follette School of Public Affairs, University of Wisconsin-Madison; yackee@wisc.edu. We would like to thank Lisa Bressman, Nina Mendelsen, Cary Coglianese, David Lewis, Kevin Stack, Jim Rossi, Anne Joseph O'Connell, and Wendy Wagner for comments on earlier drafts, as well as panel participants at the Public Management Research Conference, Minneapolis, June 2015; the Midwest Political Science Association Conference, Chicago, April 2015; the Empirical Rulemaking Conference, Madison, February 2015; Vanderbilt University Political Science lecture series, Nashville, December 2014; the University of Pennsylvania Law School's/Penn Program on Regulation's "Agency-Setting Conference," Philadelphia, November 2014; and the Law and Society Association Annual Conference, Minneapolis, May 2014.

using procedural tools such as deadlines. Even with the use of such tools, we conclude that agencies are, at best, imperfectly responsive to congressional delegations. The study thus raises critical questions for our understanding of political accountability and democratic governance.

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INTRODUCTION

It is a truism of federal administrative law that bureaucratic agencies have no authority to regulate absent a statute, passed by Congress and signed by the President into law, which grants them the power to do so. The power of the executive branch to regulate is not "inherent" but is delegated.¹ It is also doctrinally and normatively clear that agencies are supposed to do what Congress, through a lawfully enacted statute, tells

^{1.} Thomas W. Merrill, Rethinking Article I, Section 1: From Nondelegation to Exclusive Delegation, 104 COLUM. L. REV. 2097, 2100 (2004).

them to do. Agencies are formally subservient to Congress, even if, in many cases, a delegating statute will, by accident or design, provide an agency with a significant "zone of ambiguity" in which it might exercise its discretion.² Indeed,

There is little doubt that agencies owe significant 'faithfulness' to Congress. Agencies are creatures of Congress. Congress breathes them into being and endows them with purpose and authority.... Agencies are keepers of the statutory flame. It is their job to keep Congress's words and intent alive, to transform the legislative will into reality, even after the public attention is drawn to other causes and the personnel in Congress has changed.³

As the famous *Chevron* decision's "step one" suggests, that duty of faithfulness is especially strong when Congress has clearly told the agency what to do: "If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress."

But do agencies actually do what Congress tells them to do? How reliably do they obey Congressional commands? Surprisingly, those questions have received virtually no empirical attention from scholars of the administrative process or of bureaucratic politics. The lack of empirical attention is surprising because law professors and political scientists have spent the last thirty years (and more) debating the problem of "control" of the bureaucracy.⁵ The result is a large literature discussing the various ways in which Congress might structure the rulemaking process to ensure that agencies do what Congress wants. But the actual extent of agency responsiveness to Congress has remained largely unexplored from an empirical perspective.

^{2.} See Matthew C. Stephenson & Adrian Vermeule, Chevron Has Only One Step, 95 VA. L. REV. 597, 601 (2009) (explaining the "zone of ambiguity").

^{3.} Robert R.M. Verchick, Toward Normative Rules for Agency Interpretation: Defining Jurisdiction Under the Clean Water Act, 55 Ala. L. Rev. 845, 850 (2004).

^{4.} Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc., 467 U.S. 837, 842-43 (1984).

^{5.} See J.R. DeShazo & Jody Freeman, The Congressional Competition to Control Delegated Power, 81 Tex. L. Rev. 1443, 1445 (2003) (noting "three decades of debate over whether agencies are sufficiently accountable to Congress"); see also Lisa Schultz Bressman, Beyond Accountability: Arbitrariness and Legitimacy in the Administrative State, 78 N.Y.U. L. Rev. 461, 461–64 (2003) (arguing that this "fixation" on accountability neglects a more important debate on how to prevent "arbitrary" agency action). While we use "control" loosely to also cover arguments about agency "accountability" to Congress, accountability is not necessarily synonymous with control. We can say that A is accountable to B, if B is in a position to impose costs on A for a decision that A has made. We can say that A is controlled by B, if A can only do what B wants. As an illustration, a Senator is "accountable" to the electorate in that the electorate can remove him from office (imposing a cost) if it disagrees with his vote on a particularly salient issue. But the electorate can't control the Senator's decision in the sense of determining it; the Senator is always free to make his decision and to suffer the costs.

Our Article fills that important gap in the literature by providing one of the first attempts to examine systematically the extent to which agencies regulate in response to Congressional commands. Our study takes as a given the extensive literature on potential mechanisms of bureaucratic control (a literature which we review in the following Part). By that we mean that we accept as sufficiently well established that Congress, aided by the courts, enjoys various ways of potentially helping to push agencies toward doing what they are told. However, we enter our project agnostic about the relative effectiveness of those mechanisms.

Our study design is, as noted, empirical. The study can thus be situated in a new and growing body of empirical research on administrative law, exemplified both by our own prior work and by notable studies by Professors O'Connell, Wagner, Croley, and Coglianese among others.⁶ Our study is also historical in the sense that we provide a picture of Congress–Agency interactions dating back to the first days of the Administrative Procedure Act (APA).⁷ We describe our methods and data in more detail further below, but in brief, we assemble a large, original dataset of the universe of Congressional delegations of regulatory authority to a number of federal agencies, covering a period of over forty years. We also compile the universe of notice-and-comment regulations issued by those agencies in response to the delegating statutes. We use the combined dataset of delegating legislation and resulting regulations to track the responsiveness of agencies to Congressional delegations. We trace, in other words, the movement from legislation to regulation.

To preview our findings: we find that when Congress clearly commands regulation, agencies *are* in fact more likely to regulate. And when Congress gives agencies discretion to regulate, they are more likely to fail to do so. These results can be read as partially supporting a *Chevron* "step one" view of Congress—bureaucracy relations: clear statements of congressional interest in regulation more reliably prompt such regulation, while less clear statements of congressional interest in regulation are less likely to prompt it. Perhaps more surprisingly, the difference in responsiveness is not as large as one might expect. Moreover—and this is arguably the most important point of our study—we find that in a relatively large minority of cases,

^{6.} See, e.g., Anne Joseph O'Connell, Political Cycles of Rulemaking: An Empirical Portrait of the Modern Administrative State, 94 VA. L. REV. 889, 895–96 (2008); Wendy E. Wagner, Administrative Law, Filter Failure, and Information Capture, 59 DUKE L.J. 1321, 1321–22 (2010); Steven Croley, White House Review of Agency Rulemaking: An Empirical Investigation, 70 U. CHI. L. REV. 821 (2003); Cary Coglianese, Assessing Consensus: The Promise and Performance of Negotiated Rulemaking, 46 DUKE L.J., 1255, 1259–61 (1997); Connor N. Raso, Note, Strategic or Sincere? Analyzing Agency Use of Guidance Documents, 119 YALE L.J. 782, 787 (2010).

^{7. 5} U.S.C. § 500-596 (2012).

agencies fail to regulate even when clearly commanded by Congress to do so. We argue that this result suggests an important amount of "slippage" between congressional demand for regulation and agency supply of it. Many readers will view such slippage as normatively troubling. Bureaucratic governance is justified in large part by the notion that, at the end of the day, the people, through their elected representatives, get to tell the bureaucrats what to do. Our analysis suggests that they do not always listen.

The Article proceeds as follows: Part I provides the doctrinal and theoretical background of our study, reviewing the bureaucracy's constitutionally subservient position to Congress and summarizing the vast literature on the problem of ensuring that the bureaucracy actually is subservient; Part II presents our study design; Part III provides a graphical overview of our data; Part IV presents our statistical model and results; Part V discusses the larger implications of our study; and Part VI concludes.

I. BACKGROUND

In this Part, we describe the constitutional position of the bureaucracy in the federal government, focusing in particular on what Thomas Merrill calls the "exclusive delegation postulate." We then review the problem of congressional control over the bureaucracy, situating our Article in an important empirical gap in that literature.

A. The Exclusive Delegation Postulate

Article I, Section 1 of the U.S. Constitution provides that "All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives." By vesting "all legislative powers" in Congress, Article I implicitly withholds "legislative powers" from the other two branches of the Federal government. In other words, "legislative powers" are not just delegated to Congress, but *exclusively* delegated to it. In Merrill's terms, this "exclusive delegation" understanding of Article I, Section 1 incorporates two subprinciples—the "anti-inherency" principle and the "transferability" principle—that are now hornbook rules of administrative law. The first was prominently articulated in the famous *Steel Seizures* case and holds that the Executive Branch has no inherent authority to exercise "legislative

^{8.} Merrill, *supra* note 1, at 2100.

^{9.} U.S. CONST. art I, § 1.

^{10.} Id.

^{11.} *Id*.

^{12.} Merrill, supra note 1, at 2109.

power"; the second holds that Congress may nonetheless delegate such authority if it wishes.¹³

Both sub-principles of the exclusive delegation postulate are embodied in the APA, the framework statute governing most federal agency action. 14 Section 553 of the APA recognizes the possibility that agencies can make "rules" (defined in § 551(4) as "an agency statement of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy") through a process of notice-and-comment, but it also requires agencies to state in their proposed rules "reference to the legal authority under which the rule is proposed." That "legal authority" is the statute that transfers legislative (rulemaking) power to the agency in the first place. The recognition that agencies can write rules reflects Congress's ability to delegate to agencies the power to regulate, while the requirement to reference the legal authority to do so reflects the fact that agencies may not regulate absent such delegation.

The transferability principle is sometimes said to violate a strict Lockean conception of separation of powers, under which "one of the . . . unbreachable boundaries confining legislative authority [is] that: 'The Legislative cannot transfer the Power of Making Laws to any other hands." Conventional legal wisdom accepts that Locke's views remain formally embedded in the constitutional doctrine of "nondelegation," which requires congressional delegations to be accompanied by an "intelligible principle" limiting agency discretion. However, in practice courts have not overturned an agency action or invalidated a statute on non-delegation grounds since the years of the Great Depression, and the doctrine is no longer viewed as a serious check on the ability of Congress to delegate regulatory authority to agencies. In fact, the courts have routinely upheld remarkably open-ended grants of authority to agencies to write legally binding, sanction-enforced rules that are, for all intents and purposes, the equivalent of legislation. Indeed, it would probably be

^{13.} Youngstown Sheet & Tube Co. v. Sawyer, 343 U.S. 579, 588 (1952).

^{14.} Administrative Procedure Act (APA), 5 U.S.C. §§ 500–596 (2012).

^{15.} Id. §§ 551, 553.

^{16.} Id. § 553(b)(2).

^{17.} Peter H. Aranson, Ernest Gellhorn & Glen O. Robinson, *A Theory of Legislative Delegation*, 68 Cornell L. Rev. 1, 4 (1982) (quoting J. Locke, Two Treatises of Government 380–81 (2d Treatise) (Cambridge Univ. Press, 1960)).

^{18.} J.W. Hampton, Jr. & Co. v. United States, 276 U.S. 394, 409 (1928) (setting out the intelligible-principle doctrine).

^{19.} See generally Eric A. Posner & Adrian Vermeule, Interring the Nondelegation Doctrine, 69 U. CHI. L. REV. 1721, 1722–23 (2002) (describing and critiquing the nondelegation doctrine).

^{20.} See e.g., Yakus v. United States, 321 U.S. 414 (1944) (holding the Emergency Price Control Act to not involve an unconstitutional delegation to the Price Administrator of the

naïve to think that modern government could work without allowing Congress to transfer legislative authority to executive branch agencies.²¹

B. The Control Problem

The ubiquity, if not inevitability, of bureaucratic lawmaking poses a number of normative and practical problems. One that has received perhaps the most attention by legal scholars and political scientists is the problem of control.²² Lawmaking by a relatively autonomous, unelected bureaucracy is viewed by many as antithetical to democratic norms of governance.²³ Control of the bureaucracy, by the people or by their elected representatives, may help to mitigate the dissonance between the government of the people that we think we should have, and the

legislative power of Congress to control prices).

- 21. Evan J. Criddle, When Delegation Begets Domination: Due Process of Administrative Lawmaking, 46 GA. L. REV. 117, 120 (2011) ("Rather, administrative lawmaking has become a central, defining feature of the modern administrative state in areas as diverse as financial regulation, environmental regulation, and occupational safety regulation. Although the Court has not formally abandoned the nondelegation doctrine, it has, in essence, bowed to the practical imperatives of modern congressional lawmaking, recognizing that Congress simply cannot do its job absent an ability to delegate power under broad general directives."); see also Edward L. Rubin, Law and Legislation in the Administrative State, 89 COLUM. L. REV. 369, 371–72 (1989) (arguing that it is the extensiveness and inescapability of bureaucratic lawmaking that makes the modern administrative state "modern").
- 22. Brigham Daniels, Agency As Principal, 48 GA. L. REV. 335, 338 (2014) ("At the heart of administrative law, we find a rich literature that focuses on the extent to which Congress and the Executive control or at least ought to control the federal bureaucracy."); see also id. at 347 ("Indeed, control over agencies is, and has been, a major theme of the literature focused on agencies for more than a century."); see also Jacob E. Gersen & Anne Joseph O'Connell, Deadlines in Administrative Law, 156 U. PA. L. REV. 923, 924 (2008) (noting that "A cottage industry in administrative law studies the various mechanisms by which Congress, the President, and the courts exerts control over administrative agencies," and providing numerous examples). The literature's focus (if not obsession) on the problem of control has occasionally been criticized. See, e.g., Bressman, supra note 5, at 462–64.
- 23. See DAVID SCHOENBROD, POWER WITHOUT RESPONSIBILITY: HOW CONGRESS ABUSES THE PEOPLE THROUGH DELEGATION 3 (1993) (explaining the delegation-harmsdemocracy argument); see also David Schoenbrod, Delegation and Democracy: A Reply to My Critics, 20 CARDOZO L. REV. 731, 732 (1999) (arguing that Congress has avoided its responsibility through delegation). A related argument is that delegation to unaccountable agencies undermines important constitutional values. See William N. Eskridge, Jr. & John Ferejohn, The Article I, Section 7 Game, 80 GEO. L.J. 523, 526–27 (1992) (arguing that legislative delegation to agencies undermines the Constitution's structural bias toward policy stability). Schoenbrod's position has been powerfully challenged by several prominent administrative law scholars, including, Vermeule, Mashaw, and Schuck, who suggest that delegation may actually promote democratic values. See Posner & Vermeule, supra note 19, at 1721–22; see also Peter H. Schuck, Delegation and Democracy: Comments on David Schoenbrod, 20 CARDOZO L. REV. 775, 776–77 (1999); JERRY L. MASHAW, GREED, CHAOS, AND GOVERNANCE: USING PUBLIC CHOICE TO IMPROVE PUBLIC LAW (1997).

government of bureaucrats that we actually do have.²⁴ Elected politicians have a less philosophical reason to worry about control: they can be removed from office by constituents unhappy with the laws the bureaucrats make and enforce.²⁵ Theories of control recognize that politicians cannot escape the need to delegate lawmaking authority to bureaucrats, but they also focus on politicians' abilities to ensure that the law the bureaucrats end up making is the law the politicians would have made in their place. Control is thus viewed as normatively desirable and as practically necessary, and a large academic literature has emerged that maps out the various ways in which the political branches might exercise it.

Richard Stewart laid out the basic issues in a classic article from 1975. an era of ambitious jurisprudential development in administrative law that was aimed, in part, at addressing widespread unease at the growing scope of federal bureaucratic activity. As he put it in a quote opening his article, "There is now general agreement about the necessity for delegated legislation; the real problem is how this legislation can be reconciled with the process of democratic consultation, scrutiny and control."26 "delegated legislation," Stewart meant bureaucratic regulations, issued under authority delegated to agencies by Congress through legislation.²⁷ As he described it, the "traditional model" of such delegations, which he dated to the late nineteenth century, rested upon a number of justificatory principles: that agencies had no inherent authority to regulate private conduct absent legislative authorization; that "agency procedures must be designed to promote the accurate, impartial, and rational application of legislative directives to given cases or classes of cases"; and that agency decisions must be subject to effective judicial review, whose purpose is to ensure that the agency has acted in accordance with the legislative directive.²⁸ This "traditional model" thus conceived "of the agency as a mere transmission belt for implementing legislative directives in particular cases. It legitimates intrusions into private liberties by agency officials not subject to electoral control by ensuring that such intrusions are commanded by a legitimate source of authority—the legislature."29 The problem for the

^{24.} Indeed, this is one of Schuck's main points in response to Schoenbrod—that agencies are in fact tightly constrained by Congress and other external actors. Schuck, *supra* note 23, at 784.

^{25.} But see Edward Rubin, The Myth of Accountability and the Anti-Administrative Impulse, 103 MICH. L. REV. 2073, 2073 (2005) (suggesting that elections are rarely won or lost on the basis of what the bureaucracy did or did not do in a particular case or on a particular issue).

^{26.} Richard B. Stewart, *The Reformation of American Administrative Law*, 88 HARV. L. REV. 1667, 1669 (1975).

^{27.} Id. at 1669.

^{28.} Id. at 1672-76.

^{29.} Id. at 1675.

transmission belt model, Stewart said, is that Congress now frequently delegates through "vague, general, or ambiguous statutes" that create unacceptable levels of bureaucratic "discretion." If "statutes do not effectively dictate agency actions, individual autonomy is vulnerable to the imposition of sanctions at the unruled will of executive officials, major questions of social and economic policy are determined by officials who are not formally accountable to the electorate, and both the checking and validating functions of the traditional model are impaired." ³¹

Unease about the growth and scope of regulatory activity was (and is still today) reflected in claims, often in popular rather than scholarly discourse, that the bureaucracy has "run amok." Political scientists and administrative law scholars have challenged the "runaway bureaucracy" thesis by cataloging the various mechanisms through which Congress may constrain and influence the bureaucracy even in the face of the ambiguous and vague delegations that worried Stewart. One implication of that research is that Stewart's traditional "transmission belt" model may still be useful or descriptively accurate, even in the era of the modern administrative state. In other words, we should not worry too much about statutory delegations to "unaccountable" agencies because Congress actually enjoys the ability to ensure that agencies generally do what

^{30.} While it is common to complain, as Stewart does, that agencies have too much "discretion," Rubin argues that the term is conceptually unhelpful; he prefers to think about agencies in terms of "supervision" and "policymaking" is "supervised." Edward L. Rubin, *Discretion and Its Discontents*, 72 CHI.-KENT L. REV. 1299, 1336 (1997); Stewart, *supra* note 26.

^{31.} Stewart, supra note 26, at 1676.

^{32.} See Rubin, supra note 30, at 1328–29 (noting that such complaints typically come from the political right); see e.g., Arthur G. Sapper & M. Miller Baker, Why Federal Agencies Run Amok, FORBES (Apr. 14, 2014, 10:23 AM), http://www.forbes.com/sites/realspin/2014/04/14/why-federal-agencies-run-amok; Agencies Run Amok Shows Danger of Growing Bureaucracy, C. REPUBLICAN NAT'L COMM. (May 26, 2013), https://www.crnc.org/agencies-run-amok-shows-danger-of-growing-bureaucracy; see also JAMES Q. WILSON, BUREAUCRACY: WHAT GOVERNMENT AGENCIES DO AND WHY THEY DO IT 235 (1989) (describing the "runaway bureaucracy" thesis and its popularity with the public and politicians). The political left tends to complain the opposite, that the bureaucracy is unduly hobbled by the courts and politicians from sufficiently regulating in the public interest. See, e.g., Richard J. Pierce, Jr., Seven Ways to Deossify Agency Rulemaking, 47 ADMIN. L. REV. 59, 60–62 (1995) (describing the ossification thesis); see also Thomas O. McGarity, Some Thoughts on "Deossifying" the Rulemaking Process, 41 DUKE L.J. 1385, 1386–87 (1992) (describing the ossification thesis).

^{33.} See, e.g., Barry R. Weingast & Mark J. Moran, The Myth of Runaway Bureaucracy: The Case of the FTC, 6 REG. 33 (1982); Barry R. Weingast & Mark J. Moran, Bureaucratic Discretion of Congressional Control? Regulatory Policymaking by the Federal Trade Commission, 91 J. POL. ECON. 765 (1983) [hereinafter Weingast & Moran, Bureaucratic Discretion of Congressional Control]; Schuck, supra note 23, at 784–87 (discussing six ways in which Congress controls the bureaucracy).

^{34.} Stewart, *supra* note 26, at 1672–76.

Congress would have done in their place. While the public may not be able to directly hold agencies accountable by voting bureaucrats out of office, it can sanction Congress for making unwise delegations.³⁵

The literature on congressional control of the bureaucracy is quite large, and we do not comprehensively review it here.³⁶ But we can briefly highlight some of the various mechanisms of control, potential or actual, that scholars have identified. For example, Schuck argues that Congress constrains bureaucratic discretion through six main mechanisms: "statutory controls; legislative history; oversight; the appropriations process; statutory review of agency rules; and confirmation of key personnel."37 Weingast and Mark Moran focus on the role that congressional oversight committees can play in punishing agencies for departures from congressional preferences.³⁸ They argue that the fact that such sanctions may be rarely applied (or difficult to observe) is largely irrelevant. As long as agencies know that they are likely to be punished if they misbehave, they will tend to conform their behavior to the committee's preferences. McCubbins, Noll, and Weingast have famously argued in a series of articles that "most administrative law... is written for the purpose of helping elected politicians [and especially Congress] retain control of policymaking" by agencies.³⁹ Congress can design the "structure and process" in which agencies are required to function so as to increase the probability of convergence between policy outputs and the preferences of

^{35.} Posner & Vermeule, *supra* note 19, rely heavily on this argument in critiquing calls to strengthen the non-delegation doctrine.

^{36.} In addition to the literature on Congressional control of the bureaucracy, there is another strand that emphasizes the ways and extent to which the President, as opposed to Congress, influences agency outputs. Justice Kagan, for example, has argued that President Clinton dramatically increased presidential control of the bureaucracy. See Elena Kagan, Presidential Administration, 114 HARV. L. REV. 2245, 2250 (2001). Other scholars in law and political science have analyzed and debated the normative value and practical effects of expanded White House review of administrative rulemaking through the Office of Management and Budget (OMB). See, e.g., Croley, supra note 6; Bressman, supra note 5, at 485-91 (reviewing the presidential control model). But even those who emphasize the possibilities of presidential control of the bureaucracy also recognize that Congress continues to play an important supervisory role as well. See, e.g., Kagan, supra note 36, at 2250 (noting that "of course, presidential control co-existed and competed with other forms of influence and control over administration, exerted by other actors within and outside the government"). For our analysis, we are indifferent as to whether the President or Congress should (normatively speaking) exercise more control than the other, or whether, descriptively speaking, one or the other does play a more significant oversight role.

^{37.} Schuck, supra note 23, at 784.

^{38.} Weingast & Moran, Bureaucratic Discretion of Congressional Control, supra note 33.

^{39.} Matthew D. McCubbins, Roger G. Noll & Barry R. Weingast, Administrative Procedures as Instruments of Political Control, 3 J. L., ECON. & ORG. 243, 246 (1987); see also, Matthew D. McCubbins, Roger G. Noll & Barry R. Weingast, Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies, 75 VA. L. REV. 431 (1989).

the enacting coalition of legislators. For example, McCubbins and his coauthors argue that the APA, by making the regulatory process transparent, makes it easier, by design, for Congress and third parties to monitor and influence agency action as it develops.⁴⁰ Beermann catalogs over a dozen distinct oversight tools, ranging from "the power of the purse" to "litigation by Congress" to "casework."⁴¹ He concludes that

Congress is intimately involved in the execution of the law, both formally through legislative and other controls on the executive branch and informally through oversight, investigations, direct contacts, and other political methods. The extensive network of formal and informal oversight gives Congress a great deal of influence over the execution of the law.⁴²

This literature supports the view that Congress is capable of influencing agency outputs to a greater extent than Stewart and other pessimists believed possible. To date, though, there have been few efforts to test empirically the extent to which the conventional wisdom plays out in practice. In other words, is it true that Congress effectively controls agencies, in the sense that agencies usually do what Congress wants? Those tests that do exist, while suggestive, are generally limited in scope. Weingast, for example, provide evidence that FTC policy responds to changes in the preferences of the agency's oversight committee, but their study focuses only on one agency over a handful of years in the 1970s.43 DeShazo and Freeman, focusing on congressional committees and the implementation of the Endangered Species Act, confirm Weingast and Moran's earlier finding that agency policy decisions respond to congressional oversight, but again, the analysis covers a single agency.⁴⁴ And while Wood and Waterman present an empirical study of political control over seven different agencies, their study is by now somewhat dated, and focuses exclusively on the effects of changes in agency leadership, initiated by the President.⁴⁵ Political scientists Epstein and O'Halloran, Huber and Shipan, and Farhang and Yaver have performed perhaps the most sophisticated empirical tests of the control thesis, but their focus is upon how the degree of discretion written into delegating statutes varies in

^{40.} In an extension of McCubbins et al., Bressman argues that the courts have interpreted administrative law in ways that enhance congressional control. See Lisa Schultz Bressman, Procedures as Politics in Administrative Law, 107 COLUM. L. REV. 1749 (2007).

^{41.} See Jack M. Beermann, Congressional Administration, 43 SAN DIEGO L. REV. 61 (2006) [herinafter, Beerman, Congressional Administration]; see also Jack M. Beermann, The Turn Toward Congress in Administrative Law, 89 B.U. L. REV. 727 (2009).

^{42.} Beermann, Congressional Administration, supra note 41, at 158.

^{43.} Moran & Weingast, Bureaucratic Discretion of Congressional Control, supra note 33.

^{44.} DeShazo & Freeman, supra note 5.

^{45.} B. Dan Wood & Richard W. Waterman, *The Dynamics of Political Control of the Bureaucracy*, 85 AMER. POL. Sci. Rev. 801 (1991).

response to changes in the alignment of congressional and presidential interests.⁴⁶ While they thus examine and explain statute-writing behavior, they completely ignore the question of how agencies respond—or fail to respond—to those statutes.⁴⁷ As such, their studies have nothing to say about the extent to which congressional attempts to control bureaucratic outputs are actually effective.⁴⁸ In a valuable recent study, West and Raso essentially do the opposite; they focus on what the bureaucracy supplies in terms of regulatory policy within a given year, but they do not connect this supply to what Congress demands of agencies.⁴⁹

In sum, existing empirical tests of the control thesis are limited, dated, or do not adequately explore the link between congressional delegation and

- 46. Epstein and O'Halloran code statutes for the presence of a number of procedural control devices of the type emphasized by the "structure and process" school. See David Epstein & Sharyn O'Halloran, Administrative Procedures, Information, and Agency Discretion, 38 AMER. J. POL. SCI. 697 (1994); see also David Epstein & Sharyn O'Halloran, Divided Government and the Design of Administrative Procedures: A Formal Model and Empirical Test, 58 J. POL. 373 (1996) [hereinafter Epstein & O'Halloran, Divided Government and the Design of Administrative Procedures]; DAVID EPSTEIN & SHARYN O'HALLORAN, DELEGATING POWERS: A Transaction Cost Politics Approach to Policy Making under Separate Powers (1999) [hereinafter Epstein & O'Halloran, Delegating Powers]; John D. Huber & CHARLES R. SHIPAN, DELIBERATE DISCRETION? THE INSTITUTIONAL FOUNDATIONS OF BUREAUCRATIC AUTONOMY (2002) (counting the number of words in delegating statutes to create a measure of the amount of discretion granted to agencies and arguing that wordier statutes are more constraining); Sean Farhang & Miranda Yaver, Divided Government and the Fragmentation of American Law, 60 AMER. J. POL. SCI. 401 (2016) (measuring how delegating statutes provide regulatory authority to government units and suggesting that congressional statutes provide a greater number of administrative agencies with regulatory authority during periods of divided political control).
- 47. The lack of an agency focus is especially striking in Epstein and O'Halloran's work, as they explicitly set up their studies as examinations of the "modern administrative state [understood as] the delegation of broad decision-making authority to a professional civil service," EPSTEIN & O'HALLORAN, DELEGATING POWERS, supra note 46, at 5, and by emphasizing that "In the modern administrative state, much important policy is made not by direct legislation, but by administrative agencies," Epstein & O'Halloran, Divided Government and the Design of Administrative Procedures, supra note 46, at 374. In fact, they completely ignore how that "professional civil service," using the traditional regulatory tools that define the modern administrative state, actually interacts with and responds to those congressional delegations.
- 48. As Huber and Shipan admit, they "cannot say anything about the absolute quality of control over bureaucrats or about what, in fact, bureaucrats do after legislation is adopted." Huber & Shipan, *supra* note 46, at 224. However, some new work is beginning to address this omission. *See, e.g.*, Alex Acs, *Which Statute to Implement? Strategic Timing by Regulatory Agencies*, J. Pub. Admin. Res. & Theory (forthcoming). Acs studies the decision of regulatory agencies to implement congressional statutes, suggesting that the ideological preferences of actors may matter with regard to statute implementation choices.
- 49. William F. West & Connor Raso, Who Shapes the Rulemaking Agenda? Implications for Bureaucratic Responsiveness and Bureaucratic Control, 23 J. Pub. Admin. Res. & Theory 495 (2013).

agency action. This gap in the literature is not necessarily surprising. As we describe in the next Part, testing the control thesis poses some difficulties. Before we describe our empirical strategy and our plan for addressing those difficulties, we admit that we enter our project perhaps more suspicious than others about the potential efficacy of the various control mechanisms typically discussed in the literature. Our suspicion is informed by the apparently widespread (if impressionistic and somewhat contradictory) complaints in the administrative law literature and in popular commentary that the federal bureaucracy is broken. As we already noted above, many observers claim that the bureaucracy has "run amok," in the sense that it often does things that it is not otherwise authorized to do; others argue that the bureaucracy routinely refuses or otherwise fails to do what Congress has told it to do.50 Both complaints suggest a bureaucracy that enjoys significant discretion to act or not, the main difference being alternative assumptions as to what the bureaucracy tends to do with its autonomy: it may over-regulate (the run-amok thesis) or it may under-regulate (theories focusing on "ossification" and regulatory delay).51

More directly in response to the literature discussed above, the "structure and process" argument has been cogently criticized for exaggerating the theoretical potential of common administrative procedures, like notice-and-comment, to actually ensure a tight match between congressional preferences and agency outcomes.⁵² And in an important series of articles,

^{50.} Sapper & Baker, supra note 32.

^{51.} On regulatory "ossification" see generally Pierce, supra note 32; McGarity, supra note 32; Mark Seidenfeld, Demystifying Deossification: Rethinking Recent Proposals to Modify Judicial Review of Notice and Comment Rulemaking, 75 Tex. L. Rev. 483, 489, 514 (1997). On regulatory delay, see Michael D. Sant'Ambrogio, Agency Delays: How a Principal-Agent Approach Can Inform Judicial and Executive Branch Review of Agency Foot-Dragging, 79 GEO. WASH. L. REV. 1381, 1383 (2011) ("Complaints about inaction and delay by government officers are almost as old as the Republic itself, but such complaints burgeoned with the dramatic expansion of the administrative state in the twentieth century."). The notion that rulemaking is "ossified" has been challenged. See Cary Coglianese, Empirical Analysis and Administrative Law, 2002 U. ILL. L. REV. 1111, 1127-31 (2002) (suggesting that available evidence does not support the ossification thesis, but calling for further research); Jason Webb Yackee & Susan Webb Yackee, Administrative Procedures and Bureaucratic Performance: Is Federal Rule-making "Ossified"?, 20 J. Pub. Admin. Res. & Theory 261 (2010) (providing an empirical test of the ossification thesis that finds little evidence of ossification using data from 1983 to 2006) [hereinafter Yackee & Yackee, Administrative Procedures and Bureaucratic Performance]; Jason Webb Yackee & Susan Webb Yackee, Testing the Ossification Thesis: An Empirical Examination of Federal Regulatory Volume and Speed, 1950-1990, 80 GEO. WASH. L. REV. 1414 (2012) [hereinafter Yackee & Yackee, Testing the Ossification Thesis].

^{52.} See, e.g., Steven P. Croley, Public Interested Regulation, 28 FLA. ST. U. L. REV. 7 (2000); Steven J. Balla, Administrative Procedures and Political Control of the Bureaucracy, 92 AMER. POL. SCI. REV. 663 (1998); David C. Nixon, Robert M. Howard & Jeff R. DeWitt, With Friends

Spence argues that despite the various potential methods of congressional control, agencies are often unable to foresee legislative preferences prior to regulatory decisions; Congress may actually have no discernable policy preferences on particular issues; congressional decisions on structure and process are relatively rare and too crude and general to influence specific regulatory decisions; and Congress's ability or willingness to punish agency malfeasance is imperfect and uncertain.⁵³ Spence argues that agencies have significantly more autonomy to pursue policies of their choosing than is generally thought.⁵⁴ His empirical study of the Federal Energy Regulatory Commission (FERC) provides some support for his contention: he finds that control mechanisms perform inconsistently and imperfectly.⁵⁵ More recently, political scientists Clinton, Lewis, and Selin presented results from a survey of agency personnel from across the federal government, in which respondents provided their subjective assessment of the extent to which Congress influenced specific agencies.⁵⁶ The results suggest wide variation in the level of perceived congressional influence. Some agencies seem relatively tightly controlled; some not so much.⁵⁷

To conclude this Part: the extensive literature in administrative law and political science on political control of the bureaucracy exhibits both a bipolar and an incomplete character. It is bipolar in the sense that pessimists like Stewart worry that a democratically accountable Congress has granted too much policymaking discretion to democratically unaccountable agencies, while optimists suggest that Congress's decisions to delegate are essentially unproblematic, as Congress enjoys numerous supervisory tools that ensure a tight (or tight-enough) fit between congressional preferences and agency actions. The literature is incomplete

Like These: Rule-Making Comment Submissions to the Securities and Exchange Commission, 12 J. Pub. Admin. Res. & Theory 59 (2002).

^{53.} See David B. Spence, Agency Policy Making and Political Control: Modeling Away the Delegation Problem, 7 J. Pub. Admin. Res. & Theory 199 (1997) [herinafter Spence, Agency Policy Making and Political Control]; David B. Spence, Agency Discretion and the Dynamics of Procedural Reform, 59 Pub. Admin. Rev. 425 (1999) [hereinafter Spence, Agency Discretion and the Dynamics of Procedural Reform]; David B. Spence, Managing Delegation Ex Ante: Using Law To Steer Administrative Agencies, 28 J. Legal Stud. 413 (1999) [hereinafter Spence, Managing Delegation Ex Ante].

^{54.} See Spence, Agency Policy Making and Political Control, supra note 53.

^{55.} Spence, Agency Discretion and the Dynamics of Procedural Reform, supra note 53; Spence, Managing Delegation Ex Ante, supra note 53.

^{56.} Joshua D. Clinton, David E. Lewis & Jennifer L. Selin, Influencing the Bureaucracy: The Irony of Congressional Oversight, 58 AMER. J. POL. Sci. 387 (2014).

^{57.} *Id.* While the results of the Clinton et al. study are of high quality and interest, it should be noted that the study is static (it covers only one year), and it relies entirely on subjective assessments of control. Our own study, as we describe further below, covers fewer agencies, but more years. We also attempt to measure the degree of control objectively by focusing on the promulgation of regulations.

in the sense that few scholars have empirically examined the evidence comparing what Congress wants the bureaucracy to do and what the bureaucracy actually produces. Our study aims to fill that gap by implementing a novel empirical examination of the relationship between legislation—the demand by Congress for regulation—and the supply of regulation that agencies provide. In the next Part, we describe our study design in detail.

II. STUDY DESIGN

In this Part, we describe our basic empirical strategy (II.A) and provide an overview of our data collection methods (II.B). We close this Part (II.C) by explaining how our novel dataset allows us to provide a new empirical perspective on the agency-control debate.

A. The Basic Empirical Strategy

Our aim is to test the control thesis—that is, the thesis that agencies reliably act in ways that accord with congressional demands. That thesis is best illustrated by the influential work by McCubbins, Noll, and Weingast, and is reflected in Beerman's work as well. We take this "optimistic" view of the control problem as representing administrative law conventional wisdom, even if, as described above, some scholars and commentators hold a more pessimistic view.

In the abstract, any such test faces at least two empirical challenges: identifying congressional demands; and identifying relevant agency outputs (or the lack thereof). The former poses more serious problems than the latter, for two main reasons.

First, we face the problem of determining what exactly Congress wants an agency to do or not to do. While courts interpreting congressional statutes routinely attempt to gauge legislative "intent" by examining the language, purpose, and perhaps the legislative history of the delegating legislation, scholars recognize that Congress, as a collective body, does not reliably have any such thing as a single, discernable "intent." As Shepsle has memorably put it, legislative intent is an "oxymoron" built upon "myth" and "fallacy." And even if it is theoretically possible in limited cases for a collective body like Congress to have a specific intent when passing a statute, in many cases, either by accident or design, a statute will be ambiguous. In those probably frequent instances, the job of the

^{58.} Kenneth A. Shepsle, Congress Is a "They," Not an "It": Legislative Intent as Oxymoron, 12 INT'L REV. L. & ECON. 239, 239 (1992).

^{59.} Statutes can be ambiguous, and they can be vague. We use the term "ambiguous" loosely to refer to either characteristic. As Solum explains, a statute is ambiguous if its

agency is to resolve the ambiguity within an ill-defined zone of discretion.

Second, agencies often face a problem of serving two, or more, masters, with potentially different ideas of what the agency should do.⁶⁰ An agency serves the enacting Congress, which has embodied its intent—such as it might be said to have had one—in the delegating statute. And, practically and perhaps even normatively speaking, it serves the Congress of the day, which is separated by the passage of time from the enacting Congress, and which may have a very different composition of members and a very different idea of desirable agency output.⁶¹ Ascribing intent to the Congress of the day is especially daunting, though, when that Congress has not passed a statute expressing its intent.

We overcome the second problem by following the lead of most courts and commentators: we work under the assumption that, for purposes of testing the control thesis, what matters is whether agencies obey commands by the enacting Congress as contained in delegating statutes. We discuss the implications of that assumption for the normative conclusions that might be drawn from our findings in Part V of this Article.

The first problem remains, however, and we address it by focusing on the identification of unambiguous congressional commands. We identify unambiguous congressional commands by identifying statutes that order agencies to promulgate regulations. The non-inherency doctrine holds that agencies may not regulate absent congressional authorization to do so, and those authorizations can be written as either mandatory or permissive. A mandatory delegation is one in which Congress both authorizes regulation

language is susceptible to more than one meaning (e.g. "cool"); a statute is vague if contains categories that are difficult to apply to borderline cases (e.g. "tall"). Solum views both as examples of "underdetermination." See Larry Solum, Legal Theory Lexicon 051: Vagueness and Ambiguity (June 28, 2015), http://lsolum.typepad.com/legal_theory_lexicon/2006/08/legal_theory_le.html.

- 60. DeShazo & Freeman, supra note 5, at 1496–97, refer to this as the "multiple principals" problem. They argue that agencies may feel compelled to address the interests not just of the past and present Congresses, but also of oversight committees of the present Congress, which may have different policy preferences than Congress as a whole. Agencies also must worry about pleasing the President, who can exert influence directly or through the OMB. See also Thomas H. Hammond & Jack H. Knott, Who Controls the Bureaucracy?: Presidential Power, Congressional Dominance, Legal Constraints, and Bureaucratic Autonomy in a Model of Multi-Institutional Policy-Making, 12 J.L. ECON. & ORG. 119 (1996) (suggesting that multiple principals are common for public agencies).
- 61. While courts almost always gauge the lawfulness of agency action by reference to the enacting Congress's intent, some scholars have argued that courts should interpret statutes dynamically, taking into account the preferences of the current Congress. See, e.g., GUIDO CALABRESI, A COMMON LAW FOR THE AGE OF STATUTES (1982); WILLIAM N. ESKRIDGE JR., DYNAMIC STATUTORY INTERPRETATION (1994); Note, A Chevron for the House and Senate: Deferring to Post-Enactment Congressional Resolutions that Interpret Ambiguous Statutes, 124 HARV. L. REV. 1507 (2011).

and commands that the agency exercise that authority. Congress typically does so through authorizing language incorporating the words "shall" or "must." For example, a delegating statute might establish that "the Secretary [of the relevant federal department] *shall issue* regulations defining" certain ambiguous terms in the statutory scheme.⁶² Words like "must" and "shall" are widely understood by lawyers and regulators as establishing a legal obligation to do what is commanded.⁶³ We contrast these mandatory delegations with permissive delegations, which typically tell an agency that it "may" issue regulations.⁶⁴

Our basic empirical strategy consists of four moves. First, we identify a set of statutes that delegate regulatory authority to agencies. Second, we classify those delegations as mandatory or permissive, as described above. The first two steps provide the core data for the statutes side of our database. Third, we identify the set of regulations issued by agencies in response to those statutes. This third step provides the core data for the regulation side of our database. And fourth, we link the statutes and regulations sides of the database to examine whether mandatory delegations are more likely to result in regulations than are permissive delegations. This last step is our test of the control thesis.

Our working hypothesis, based on the control literature, is that mandatory delegations—those that command agencies to regulate, using language including "shall"—will be more likely to result in regulations than permissive delegations. This is because mandatory language arguably provides agencies with a clearer sense of what Congress wants the agency to do. In the case of a mandatory delegation, Congress wants the agency to issue a regulation. Should the agency fail to do so, it will have failed to comply with a clear congressional command and will more likely be subject to formal or informal congressional sanction, formal legal petitions by private parties for rulemaking, and orders by courts to regulate. In the case

^{62.} Examples of mandatory delegations included in our dataset include the following: shall issue; shall make; shall prescribe; shall promulgate; shall publish; must be developed; shall be made; shall by regulation; shall develop; shall devise; shall establish. In our experience, delegations are always or nearly always made to the "Secretary" and not to a specific agency. This practice is presumably intended by Congress to allow a department sufficient flexibility to reorganize itself without contradicting the underlying delegation.

^{63.} See Gertrude Block, Language Tips, 65 N.Y. St. B.J. 56 (1993) (describing "shall" as routinely interpreted by courts as mandatory).

^{64.} In some cases, we coded a delegation as permissive even if it did not include the word "may." For example, the phrases "regulations to be established by the Secretary" and "pursuant to regulations adopted by the Secretary" were coded as permissive. A more difficult case occurred where the delegating language stated that the Secretary "shall" issue a rule, but only when the Secretary believes certain circumstances hold. We coded these kinds of delegations as "permissive," despite the use of "shall," on the ground that such delegations nonetheless provide the agency with significant discretion to not regulate.

of permissive delegations, however, it is not clear whether Congress really cares all that much whether the agency regulates. In those cases, agencies may perceive lower risk of sanction should they fail to regulate, and accordingly be less likely to regulate when it is not otherwise in the agency's interest to do so.

B. The Data

Our dataset is organized as a collection of delegating statutes and associated Final Rules. On the statute side, we include all delegating statutes authorizing regulation by the agencies of the U.S. Department of the Interior (Interior or the Department or DOI), from January 1, 1947 to December 31, 1987. On the regulation side, we include all "notice-and-comment" notices of proposed rulemaking (NPRMs) issued by all rule-writing Interior agencies between 1947 and 1990 that cite as their statutory authority at least one of our delegating statutes, along with any Final Rules that result from those NPRMs. Once we identified an NPRM, we then searched Westlaw to identify whether the NPRM resulted in a Final Rule. We understand "notice-and-comment" regulations as those promulgated under the authority of Section 553 of the APA.

In total, we cover seventeen agencies: the Bureau of Indian Affairs (BIA), the Bureau of Land Management (BLM), the Fish and Wildlife Service (FWS), the National Park Service (NPS), the Office of Oil and Gas (OOG), the Oil Import Administration (OIA), the Office of the Secretary (OOS), the Bureau of Mines (BOM), the Bureau of Reclamation (BOR), the U.S. Geological Survey (GES), the Heritage Conservation and Recreation Service (HCR), the Minerals Management Service (MMS), the Office of Minerals Exploration (OME), the Office of Surface Mining, Reclamation, and Enforcement (OSM), the Office of Saline Water (OSW), the Federal Water Pollution Control Administration (WPC), and the Mining Enforcement and Safety Administration (MES). The first four agencies—BIA, BLM, FWS, and NPS—are Interior's main rule-writing agencies, and promulgate the bulk of DOI rules.

The additional three years of data collection on the regulation side are intended to reflect the fact that agencies will sometimes take several years to issue a proposed rule in response to a statutory delegation.⁶⁶ In more technical terms, we use the additional three-year period to help deal with the fact that our dataset is "censored." Censoring is common in studies,

^{65. 5} U.S.C. § 553 (2012).

^{66.} The median time between the passage of a public law and the issuance of a notice of proposed rulemaking (NPRM) by the U.S. Department of the Interior (DOI) in our dataset is 1.7 years.

like ours, in which the researcher is examining whether an event occurs, or fails to occur, within a set period of time. We know if the event does or does not occur within that period of time, but we are unable to tell whether the event occurs at a later time. For example, our study allows us to know, with certainty, whether a statute enacted between 1947 and 1987 produced an NPRM by 1990, but it does not allow us to observe whether such a statute produced an NPRM in, say, 2003. Censoring can pose certain complications for statistical inference.⁶⁷ In our case, it means that when we code a statute as never producing a DOI regulation, it may in fact be the case that the statute produced an NPRM, and eventually a Final Rule, in a year after 1990. We address this potential problem further below, in our results section, by providing evidence that censoring does *not* appear to be a problem for our analysis.

We identified delegating statutes through a structured set of electronic searches of HeinOnline's *U.S. Statutes at Large* database.⁶⁸ Sample search language is reproduced in the footnotes.⁶⁹ Statute identification was time-consuming because there were many false positives that had to be closely read, resolved, and screened by us or trained graduate research assistants. We identified 390 public laws giving rulemaking authority to the DOI Secretary over the period of study.

It is important to emphasize that we only recorded a statute as delegating if it provided *new* rulemaking authority to DOI. We did not include public laws that merely referred to regulatory authority provided to DOI in the past. We also did not include statutes that remove previously granted regulatory authority. Our sense from working closely with the data is that retractions of regulatory authority were rare. Finally, we did not include those public laws that ask DOI to perform non-regulation-writing tasks,

^{67.} On those complications, see Janet M. Box-Steffensmeier & Bradford S. Jones, Event History Modeling: A Guide for Social Scientists (2004).

^{68.} There is some debate in the academic legal literature about the particular statutory language necessary to authorize an agency to engage in APA § 553 rulemaking, particularly before the APA passed in 1946. Merrill and Watts argue, for example, that under the "original convention" (or understanding), agencies had no authority to issue legally binding rules unless the delegating statute authorized the agency to impose penalties for noncompliance. See Thomas W. Merrill & Kathryn Tongue Watts, Agency Rules with the Force of Law: The Original Convention, 116 HARV. L. REV. 467, 472 (2002). In practice, though, and as Merrill and Watts complain, courts and agencies in the era of the APA routinely accept that statutory language of the sort identified by our electronic searches is sufficient to permit the agency to promulgate a regulation under APA § 553.

^{69.} Our primary search strategy included references to the ("secretary of the interior" OR "interior") AND (regulation* OR rule* OR standard*). Congress rarely delegates regulatory authority to a particular agency within a department, preferring instead to delegate to the Secretary and allowing the Secretary to sub-delegate as he determines appropriate, which is why our standard search language did not include agency names.

such as drafting a report for Congress, issuing licenses, procuring services, or the like. Statutes including such grants or commands are included in our database only if they also authorize the promulgation of rules and regulations.

The rule side of our dataset recorded all proposed and final DOI noticeand-comment rules issued by DOI agencies over our period of study.⁷⁰ To identify relevant rules, we first conducted a series of electronic searches of Westlaw's Federal Register database for all DOI NPRMs. The APA and the Federal Register Act require agencies to publish their proposals and final rules in the Federal Register, and if they fail to do so they may not enforce those rules against the public.⁷¹ Sample search language is provided in the footnotes.⁷² To be included in our dataset, the regulatory document had to seek to modify the Code of Federal Regulations (CFR), the official codification of generally applicable and legally binding federal agency rules. The coded document also had to request public feedback on the proposed modifications; solicitation of public feedback indicates that the agency is regulating pursuant to APA § 553, the primary means by which agencies seek to regulate with the force of law. Our search language was broad and returned a large number of false positives. Along with a number of trained graduate research assistants, we read each item to determine whether it met our two core criteria (CFR modification and solicitation of public comment) and coded it appropriately.

^{70.} The collection of our rules data is described in more detail in our earlier article on the ossification thesis. See Yackee & Yackee, Testing the Ossification Thesis, supra note 51. We are confident that our dataset contains the universe, or nearly so, of all DOI NPRMs issued between January 1, 1950 and December 31, 1990, and the accompanying Final Rules issued by DOI between January 1, 1950 and December 31, 2011. As such, we are able to construct a much more accurate count of the "amount" of regulation than are scholars using less data-intensive measures, such as counts of the number of pages in the Federal Register or counts of the number of entries within the "Proposed Rules" or "Final Rules and Regulations" sections of the Federal Register. Both of those sections of the Federal Register contain a large number of entries that are associated with notice-and-comment regulations (such as notices of hearings or extensions of comment periods) but that are not NPRMs or Final Rules themselves. Simply counting up entries would give an inflated count of regulatory activity. On counting regulations, see generally MAEVE P. CAREY, CONG. RESEARCH SERV., R43056, COUNTING REGULATIONS: AN OVERVIEW OF RULEMAKING, TYPES OF FEDERAL REGULATIONS, AND PAGES IN THE FEDERAL REGISTER (2014).

^{71.} See 5 U.S.C. § 553(b) (2012) (containing the APA's publication requirement for NPRMs); Id. § 552(a)(1)(D) (containing the APA's publication requirement as to final rules). The publication requirement is reinforced by the Federal Register Act, 44 U.S.C. §§ 1501–1511 (2012). For an influential case refusing to enforce a DOI regulation that had not been published, see Hotch v. United States, 212 F.2d 280, 282–84 (9th Cir. 1954).

^{72.} To identify relevant proposed rules, we ran variations on the following basic Westlaw search in the FR-ALL database: PR("INTERIOR" & "FISH AND WILDLIFE" & "PROPOSED RULE") & "COMMENT" "PARTICIPAT!" & DA(AFT 1949 & BEF 1991).

After identifying the population of NPRMs, we matched each NPRM with its associated Final Rule. Not all NPRMs lead to a Final Rule, however. In our dataset, about 80% of NPRMs resulted in a Final Rule. Typically, the preamble to a Final Rule references the *Federal Register* citation of its associated NPRM or will mention the NPRM's date of publication. These two pieces of information functioned as our main initial search terms. In some cases, the Final Rule failed to mention either piece of information, so the Final Rule had to be matched to its NPRM on some other basis (such as the title or subject of the NPRM). Our research team then verified that the Final Rule returned in the Westlaw search matched the selected NPRM. We recorded several pieces of information for each Final Rule in our dataset: the *Federal Register* citation, the date, the DOI agency writing the rule, and, most importantly for this Article, the statutory authority listed by the agency as permitting the regulation.

What allows us to link the statute and rules sides of our database is the fact that the APA requires agencies to cite the statutory authority for their regulatory proposals in the NPRM.⁷³ Because the non-inherency principle holds that agencies may not regulate unless statutorily authorized to do so, we expect that agencies have a strong incentive to identify the statute or statutes that authorize their regulations. And in fact, in many cases the NPRM's legal authority was clearly listed within the first few paragraphs of the text using language such as, "Notice is hereby given that pursuant to the authority contained in" such-and-such statute.⁷⁴ This was particularly true through the late 1960s. In subsequent years, it became more common to include a specific section in the proposal's preamble, labeled "authority," which would contain the statutory reference or references.⁷⁵ Typically, the

^{73.} See 5 U.S.C. § 553(b)(2) (providing that "(b) General notice of proposed rule making shall be published in the Federal Register . . . The notice shall include . . . (2) reference to the legal authority under which the rule is proposed"); see also Jim Rossi, "Statutory Nondelegation": Learning from Florida's Recent Experience in Administrative Procedure Reform, 8 WIDENER J. PUB. L. 301, 305 (1999) (finding that courts have invalidated agency rules for failure to comply with the APA's statutory reference requirement).

^{74.} Many of our NPRMs cite as their authority statutes that were promulgated prior to 1947. We do not examine the degree to which those earlier statutes prompt agencies to regulate. The fact that we exclude pre-1947 statutes from our analysis does not impact the conclusions that we are able to draw. This is because our unit of analysis is the delegating statute, and because we accordingly claim only to be able to say something about what agencies do (or fail to do) in response to the statutes that are in fact in our database.

^{75.} Citations to statutory authority were not, however, always prominent. Some rules buried their citation to authority in the middle or at the end of their regulatory "basis and purpose" statement. Indeed, a small number (approximately 6%) failed to cite any legal authority at all. We suggest that agency "best practice" would be to clearly list statutory authority at the beginning of the regulatory document, in order to ensure that the public can easily determine the agency's asserted authority over them.

statement of legal authority referenced a public law number. Other NPRMs listed the referenced law's citation in the *Statutes at Large*, and others would cite the statute as codified in the *United States Code* (U.S.C.). For example, the National Wildlife Refuge System Administration Act of 1966 can be cited as P.L. 89-669, as 80 Stat. 927, or as 16 U.S.C. § 668dd. For U.S.C. citations, we consulted the historical versions of the U.S.C. to identify the underlying public law to which the DOI U.S.C. citation was intended to refer. Because the U.S.C. is continuously updated, a reference to a particular section of the U.S.C. in 1950 may not correspond to the same section of the U.S.C. as it exists in 2016.76 Many NPRMs listed only one source of legal authority. However, some NPRMs listed multiple sources of authority. In that latter case, we attempted to record all cited statutes and recorded each cited statute as producing an NPRM. This means, for example, that the same NPRM can be produced by several different delegating statutes.

Our dataset and general empirical approach has a number of advantages over other possible approaches. For one, our dataset covers a relatively large number of agencies, it covers the universe—and not a sample—of the delegating and regulatory activity involving those agencies, and it covers a very long period of time. We are thus better able to uncover generalizable and historically stable relationships. Our approach also incorporates a theoretically and empirically clean way of differentiating delegating statutes along a more-discretion/less-discretion continuum. For example, Huber and Shipan's study proxies the amount of discretion by counting up the words of the statute.⁷⁷ Wordier statutes are presumed to be more constraining on bureaucratic autonomy. Our approach is instead based upon the well-settled legal distinction between "shall" and "may," and allows us to identify with less chance of error those statutes that legally require an agency to do something from those that do not. Finally, unlike most other studies, we look at how agencies actually respond to more- or less-constraining delegations. Existing studies tend to focus only on explaining the drafting choices of Congress and pay little or no attention to the actual responsiveness of agencies to those choices.

There are, however, a number of limiting characteristics of our dataset

^{76.} From a bureaucratic-accountability perspective, citation to the *United States Code* (U.S.C.), which is regularly re-organized, is problematic because it is difficult for future members of Congress, or the public, to locate the referenced statutory language. It would be preferable for agencies to cite their authorities using chronologically stable references to public law or statute numbers, and not to the U.S.C. Agencies could also do a better job identifying the precise provisions in a given public law that grant them with the authority to regulate.

^{77.} See Huber & Shipan, supra note 46.

that the reader should keep in mind. We discuss four of them in turn.

First, we do not attempt to gauge whether the *content* of a regulation accords with congressional intent. We look only at whether a statute commands or merely authorizes a regulation, and whether a regulation is promulgated. It is quite possible, and perhaps likely, that an agency responding to a mandatory delegation will promulgate a regulation that differs in content from what the enacting Congress would have preferred. The problem, which at least in the context of a large-observation project like ours, seems intractable, is that we—like the agencies themselves—have no reliable way of determining from the text of ambiguous delegating statutes precisely what Congress wanted the regulations to contain, even if Congress actually had a particular, shared intent.

Despite this limitation, our approach provides leverage over the question of the degree of consonance between congressional authorizations to regulate and agency outputs. This is because the decision to regulate or not to regulate is itself often of substantive importance. As Zaller puts it,

Agencies often set policy by not doing anything at all. When an agency does not make the requisite regulations through either rulemaking or adjudication, the agency maintains the status quo. This inaction is thus itself a form of policymaking in the sense that it prevents the legislative and executive branches from implementing enacted legislation. Congress needs the agencies to carry out its laws by passing specific rules. Otherwise, congressional mandates are thwarted.⁷⁸

Should we find evidence that agencies ignore substantial numbers of regulatory commands, we can conclude that congressional control over agencies is imperfect. Moreover, if it turns out that agencies often fail to regulate even when commanded to do so, we might suspect that they enjoy even more freedom to adopt regulations that substantively depart from congressional desires. This is because substantive departures will presumably be more difficult for Congress to identify, and thus to punish), than obvious failures to act.

Second, and on the regulations side, we focus only on what administrative lawyers call "informal" rules. An informal rule is a regulation issued by an agency under APA § 553 through a process of public notice-and-comment.⁷⁹ Under that section, an agency may promulgate a legally binding regulation only if it has published a notice of proposed rulemaking that explains the proposed rule and that invites the public to provide written comments; the agency is then supposed to consider those comments when drafting the Final Rule, which itself must be

^{78.} Catherine Zaller, The Case for Strict Statutory Construction of Mandatory Agency Deadlines under Section 706(1), 42 WM. & MARY L. REV. 1545, 1545–46 (2001).

^{79. 5} U.S.C. § 553(b) (2012).

published.⁸⁰ Upon publication, the Final Rule is considered "the generic equivalent of legislation"—that is, it is as legally binding upon regulated entities as would be a federal statute.⁸¹

However, agencies have access to other regulatory mechanisms. For example, under the APA they are authorized to regulate through a "formal" process that entails trial-like hearings, or through "adjudications." However, informal rulemaking has developed into the most common agency practice for issuing legally binding regulations, and formal rulemaking is rarely used. We acknowledge that it is possible that some of our statutes might have resulted in formal regulatory action outside of the § 553 process. However, we suspect, based on our close working with the data, that such instances are rare. We have no evidence that DOI routinely or even occasionally used formal processes to accomplish what it could have accomplished through notice-and-comment.

Our analysis also does not capture the use of what might be called "pseudo-rules"—that is, regulatory mechanisms that do not formally have the force of law but which agencies attempt to use as substitutes for regulatory mechanisms that do. Examples include interpretive rules that in actuality do more than merely "interpret," policy statements, and advice and guidance letters. Agencies have been criticized in recent years for improperly avoiding the rigors of notice-and-comment in favor of these alternative, and arguably illegal, approaches, and our dataset does not

^{80.} Id.

^{81.} David H. Rosenbloom, Federalist No. 10: How Do Factions Affect the President as Administrator-in-Chief?, 71 Pub. Admin. Rev. S22, S23 (2011).

^{82.} See 5 U.S.C. § 554.

^{83.} See Cornelius M. Kerwin & Scott R. Furlong, Time and Rulemaking: An Empirical Test of Theory, 2 J. Pub. Admin. Research & Theory 113, 114 (1992) ("Put simply, [informal] rulemaking has become the most common and instrumental form of lawmaking."); Thomas O. McGarity, Regulatory Analysis and Regulatory Reform, 65 Tex. L. Rev. 1243, 1243–45 (1987) (describing the shift from adjudication to informal rulemaking); Aaron L. Nielsen, In Defense of Formal Rulemaking, 75 Ohio St. L.J. 237, 238–40 (2014) (describing how adjudication is rarely used to make rules).

^{84.} See, e.g., Robert A. Anthony, Interpretive Rules, Policy Statements, Guidances, Manuals, and the Like—Should Federal Agencies Use Them to Bind the Public?, 41 DUKE L.J. 1311, 1374 (1992); Robert A. Anthony, "Well, You Want the Permit, Don't You?" Agency Efforts to Make Nonlegislative Documents Bind the Public, 44 ADMIN. L. REV. 31, 35–38 (1992) (detailing "misuse of nonlegislative rules"); James T. Hamilton & Christopher H. Schroeder, Strategic Regulators and the Choice of Rulemaking Procedures: The Selection of Formal vs. Informal Rules in Regulating Hazardous Waste, 57 L. & CONTEMP. PROBS. 111, 144, 147 (1994) (providing empirical evidence that the EPA is more likely to regulate via non-rule rules when supplementing "major" and "controversial" regulatory efforts, and characterizing this tendency as "strategic"); Sam Kalen, The Transformation of Modern Administrative Law: Changing Administrations and Environmental Guidance Documents, 35 ECOLOGY L.Q. 657, 660, 665–66 (2008) (asserting that "agencies' use of informal devices [to regulate] is . . . pervasive").

capture the extent to which agencies might be responding to congressional delegations through these alternative mechanisms. To an important extent, however, our inability to track pseudo-rules is irrelevant, as such rules are not regulations with the force of law, and are not what Congress commands agencies to promulgate when it delegates regulatory authority.⁸⁵ Furthermore, recent empirical evidence suggests that agencies may not resort to pseudo-rules nearly as often as critics suggest.⁸⁶ In any event, our data, which ends in 1990, covers a period prior to that in which scholars assert that pseudo-rules have become substantially more common.

A third limitation of our dataset is that it does not include a comprehensive selection of all federal rulemaking agencies. Instead, we focus on all of the agencies within Interior, and as such it is possible that our findings are specific to DOI, and not to the modern administrative state writ large. However, there is good reason to believe that our results and conclusions are in fact generalizable (and much more likely to be generalizable than the single-regulation or single-agency studies that one often finds in the empirical administrative law literature). This is primarily because DOI's regulatory portfolio is large and includes a diverse array of topics. Indeed, the diversity of the DOI's portfolio is illustrated by its informal nickname, "the Department of Everything Else."87 portfolio also includes both high and low salience issue-areas, helping to ensure that we are analyzing a cross-section of what federal agencies do on a daily basis. In contrast, studies that only examine the most controversial regulatory topics, such as Endangered Species Act regulations, are unable to confidently say much about the "normal" regulatory work that comprises the bulk of what agencies do. It is also important to note that DOI's organizational structure has remained relatively stable across our study period, with the four major rule-writing DOI agencies—BIA, BLM, FWS, and NPS—all in existence over our entire study period.88 These long agency lifespans allow us to incorporate a substantial dynamic element into

^{85.} See Cornelius M. Kerwin & Scott R. Furlong, Rulemaking: How Government Agencies Write Law and Make Policy (2011).

^{86.} See Raso, supra note 6, at 787.

^{87.} See ROBERT M. UTLEY & BARRY MACKINTOSH, THE DEPARTMENT OF EVERYTHING ELSE: HIGHLIGHTS OF INTERIOR HISTORY (1989), http://www.nps.gov/history/online_books/utley-mackintosh; see also Robert L. McCarty, A View of the Decision-Making Process Within the Department of the Interior, 19 ADMIN. L. REV. 147, 147 (1967) (noting the "almost unbelievable range of affairs touching us within the jurisdiction of the Secretary [of the Interior]," and noting the Department's "tremendous scope of activity").

^{88.} In contrast, many other federal departments worthy of study endured major organizational changes or terminations during our period of analysis. *See* David E. Lewis, *The Politics of Agency Termination: Confronting the Myth of Agency Immortality*, 64 J. Pol. 89, 89–90, 93, 102 (2002).

our analysis that is often missing from existing studies.

A fourth limitation is that, as noted previously, our collection of DOI NPRMs ends in 1990. This limitation is due to the fact that the rules side of our database was originally collected for an earlier project. ⁸⁹ The data collection for that project was very time-consuming, and we were unable to extend those efforts to the current project. It is possible that the trends and relationships that we identify here no longer apply to the legislation-regulation relationship in more recent years. On the other hand, we strongly suspect that our analysis continues to hold. This is because today's administrative law regime operates under the same essential legal framework—most importantly, the APA—as governed the regime over our period of study, and it includes a decade of statutory and regulatory activity in the years following the major doctrinal change in the APA framework, the development of the "hard look" doctrine in the 1970s.

To briefly summarize this Part: our dataset allows us to link statutes delegating regulatory authority to exercises of that authority. Unlike many existing empirical administrative law studies, our dataset covers a relatively large number of federal agencies, administering a diverse array of federal programs, across a very long period of time. While the dataset has some limitations, it nonetheless provides a unique and powerful opportunity to examine the responsiveness of agencies to statutory delegations of regulatory authorities, and, by extension, the extent to which we might view agencies as being controlled by Congress. We do this by examining the extent to which mandatory and permissive delegations of regulatory authority lead to regulations.

III. GRAPHICAL OVERVIEW

In this Part, we provide a graphical overview of our data, before presenting our statistical analysis in Part IV. Figure 1 shows congressional demand for DOI regulation between 1900 and 1990, as measured by the total number of public laws enacted annually that authorize new DOI regulations. While the main focus of our statistical analysis is on the post-APA time period, Figure 1 provides a longer historical context. The Figure shows that Congress enacted, on average, 11.5 delegating laws per year. One thousand and fifty-six statutes delegated regulatory authority to DOI over the period 1900–1990, and 390 statutes delegated such authority over the period 1947–1987. We use the latter period in our statistical analysis. The Figure shows a large spike in grants of regulatory authority in the interwar years (perhaps not surprising, given the New Deal's focus on empowering the federal bureaucracy to address the challenges of the Great

Depression). Note also that Congress delegates new rulemaking authority on a regular basis, in the sense that DOI received new authority in every single year of our study.

Political scientists have long been interested in the effects of divided government on legislative and bureaucratic activity. Divided government refers to periods in which the same political party does not control the presidency and Congress. For example, we might hypothesize that in periods of divided government, Congress will be less likely to delegate authority to executive branch agencies out of fear that such agencies, controlled by a president of the opposite party, will enact regulations that fail to reflect congressional preference. In Figure 1, areas shaded in gray indicate periods of divided government. Later in the article, we assess the possible effects of divided government on regulatory production within a multivariate context. As an initial examination, however, Figure 1 demonstrates a statistically insignificant difference. The average annual number of delegating statutes for periods of unified government is 12.3 (with a standard deviation of 6.8), and for periods of divided government it is 10.2 (standard deviation of 5.3).

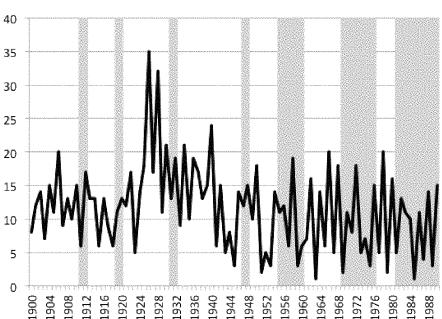


Figure 1: Count of DOI Statutes Providing Rulemaking Authority, 1900–1990

Figure 2 shows the same data on legislative demand for DOI regulation

^{90.} This is the central argument of Epstein and O'Halloran's work, *supra* note 46.

but between 1947 and 1987 (the period used for our statistical analysis) and is normalized as the percent of all public laws enacted in the given year. Normalization allows us to track the number of DOI-delegating statutes relative to Congress's overall legislative activity. On average, such statutes represent 2.5% of annual laws, though the precise percentage is rather variable on a year-to-year basis, ranging from less than 1 percent to over 5 percent. The trend over time is toward slightly more DOI-delegating statutes as a percentage of overall legislative activity.

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Figure 2: Normalized Legislative Demand for DOI Regulation, 1947–1987

Figure 3 shows the frequency of authorizing language in statutes by year, broken into the mandatory or permissive categories defined earlier. From the figure, it is clear that mandatory statutes are usually a minority of the delegating statutes promulgated in a given year, although their use grows somewhat over time. Overall, 19% of the statutes in the dataset contain a mandatory delegation of authority, while the remaining 318 (81%) are purely permissive.

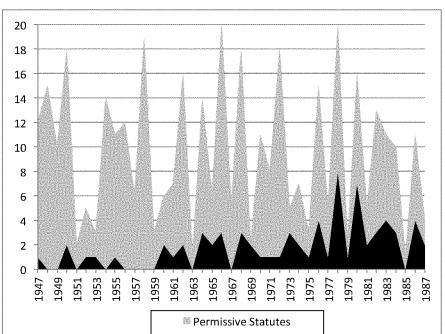


Figure 3: Count of DOI Authorizing Statutes by Type and Year, 1947–1987

Figure 4 provides the percentage of each year's DOI statutes with rulemaking deadlines. Scholars have suggested that Congress can use deadlines as a way to force agencies to act, 91 and in our statistical analysis we include a deadlines variable. The figure suggests that the use of deadlines is a relatively recent development. We found no deadlines until 1967. This finding is interesting because it suggests that methods of control may be historically specific, where use is dependent on Congress inventing a particular method or recognizing its potential utility. Moreover, the use of deadlines—once the practice was initiated—varies considerably on a Across the full analysis period, only 27 of the 390 year-to-year basis. statutes (7%) contained deadlines. Across the period 1967–1987, twentyseven out of 185 statutes (15%) contain deadlines. The use of deadlines thus appears to be relatively rare, a finding consistent with Gersen and O'Connell's research demonstrating that less than 10% of rulemakings take place under a statutory deadline.92

■ Mandatory Statutes

^{91.} See Gersen & O'Connell, supra note 22, at 929.

^{92.} See Gersen & O'Connell, supra note 22, at 983; see also Sant'Ambrogio, supra note 51, at 1415 (describing the use of deadlines by Congress as relatively rare, and explaining its rarity as a function of the fact that it is often difficult for Congress to determine ex ante what an appropriate length of time to act would be).

Figure 4: Percentage of DOI Statutes with Rulemaking Deadlines, 1947–1987

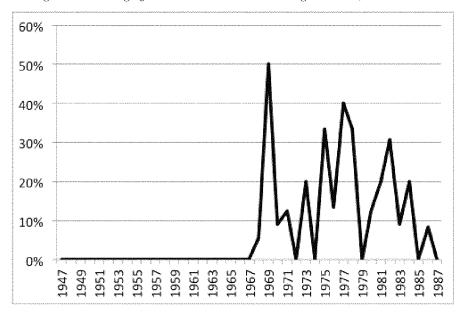
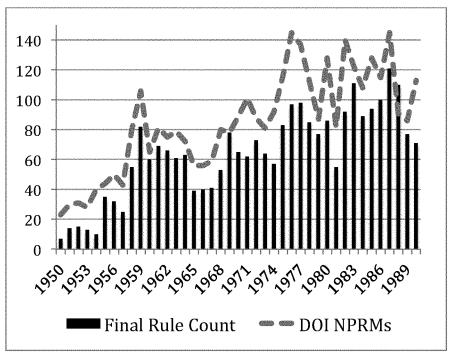


Figure 5 shows the total number of DOI NPRMs and associated Final Rules issued between 1950 and 1990. The Figure suggests that DOI entered the APA era slowly, issuing few notice-and-comment regulations in the early years of the data. Since the late 1950s, however, DOI has issued anywhere between 39 and 121 legally binding Final Rules in a given year, with yearly activity somewhat variable. Not all NPRMs result in Final Rules, as DOI—like other Departments—sometimes abandons regulatory proposals. Overall, though, the large majority of NPRMs become Final Rules (about 80%). In other words, when DOI initiates a regulatory process, that process is highly likely to result in a legally binding regulation.

Figure 5: DOI NPRM and Final Rules, 1950–1990



Our task in the next Part is to link the data illustrated in Figure 5 to the statutes data illustrated in the earlier figures. We do this by constructing a statistical model of the probability that a given delegating statute will produce at least one Final Rule over our period of study.

IV. STATISTICAL ANALYSIS

In this Part, we present a statistical examination of our dataset. We can think about the literature on bureaucratic control, and particularly its optimistic strand, as suggesting two basic, empirically observable implications. First, agencies should convert a relatively high percentage of delegations into regulations. When Congress delegates authority to regulate, it presumably desires agencies to exercise that authority. Statutes inevitably contain gaps that must be filled by the agency in order to make the statute workable on the ground, and a failure to regulate risks undermining congressional intent by rendering a statutory scheme ineffective. Second, mandatory grants of authority should be more likely to result in regulations than permissive grants of authority. This is because a mandatory grant of authority indicates congressional preferences relatively clearly, and agencies that ignore those preferences are more likely to face

punishment. We test these intuitions, first, by offering some basic descriptive analysis (IV.A). We then present the results for a more sophisticated multivariate statistical model (IV.B).

A. Descriptive Statistics

Table 1 provides an initial examination. Our dependent variable takes a value of one when a statute results in at least one Final Rule over the period of study, and a zero otherwise. We can think about this variable as measuring "Regulatory Response." An agency fails to respond to a delegating statute when it issues no regulations listing the statute as a basis for its regulatory action (a zero); an agency responds when it does issue a regulation citing the statute as a basis for its authority.

Table 1: The Link Between Legislation and Regulation

	All Statutes (1947-1987)			
1	All Statutes	Final Rule Issued 160 (41%)	No Final Rule Issued 230 (59%)	Total 390
2	Mandatory Statutes	45 (63%)	27 (36%)	72
	Permissive Statutes	115 (36%)	203 (63%)	318

	Select Statutes (1947-1980)				
		Final Rule Issued	No Final Rule Issued	Total	
3	All Statutes	140 (42%)	195 (58%)	335	
4	Mandatory Statutes	36 (67%)	18 (33%)	54	
	Permissive Statutes	104 (37%)	177 (63%)	281	

Our main independent variable indicates whether the delegation is mandatory (1) or permissive (0). A statute is mandatory if it contains at least one delegation that contains any of the following: shall issue; shall make; shall prescribe; shall promulgate; shall publish; must be developed.

Some statutes contain multiple delegations of authority, some of which are mandatory and some of which are permissive. In those cases, we coded the statute as mandatory if at least one of the DOI delegations was mandatory, and as permissive if all of the delegations were permissive. ⁹³ All other delegations are coded as permissive. The top half of Table 1 provides frequencies for our entire dataset, covering all delegating statutes from 1947–1987. As the Table indicates, of the 390 delegating statutes, only 160—or 41%—produced at least one Final Rule.⁹⁴ On average, then, only a minority of delegations to DOI produce at least one regulation. If we break out the data by the mandatory or permissive nature of the delegation, we see that mandatory statutes are more likely to result in at least one regulation. Of the seventy-two mandatory statutes in the data, forty-five (63%) resulted in at least one Final Rule.⁹⁵ In contrast, only 115 out of 203 permissive delegations (36%) resulted in at least one final rule. This difference is, unsurprisingly, statistically significant.

The bottom half of Table 1 is designed to address the fact that our data are censored. Recall that the problem here is that we do not record whether a given statute produced an NPRM (that eventually leads to a Final Rule) in a year later than 1990. This means that it is possible that some of our statutes that are recorded as *not* producing a regulation are miscoded. As noted earlier, we attempt to minimize this possibility by recording delegating statutes through 1987, but looking for resulting NPRMs through 1990. This allows at least three years for a statute to produce at least one NPRM, a reasonable period of time given that the median time for a delegating statute in our database to produce its first NPRM is nineteen months.⁹⁶ We can also test the sensitivity of the results to the censored nature of our data by examining whether results change when we limit the analysis to a subset of earlier data, such that included

^{93.} When agencies cite statutory authority, they rarely if ever specify which of several delegations in a particular statute they are relying upon. That failure makes it impossible for us to track regulations to specific delegations, rather than to delegating statutes.

^{94.} Forty-six percent of the statutes produced at least one NPRM (as opposed to 41% resulting in an NPRM and then a Final Rule).

^{95.} Sixty-nine percent of the mandatory statutes produced at least one NPRM (as opposed to 63% resulting in an NPRM and then a Final Rule).

^{96.} Sant'Ambrogio, *supra* note 51, at 1442, argues that as a normative matter agencies should generally complete a rulemaking within two years of the delegation. As he puts it, "Accordingly, rulemaking proceedings not completed within two years should be presumed unreasonably delayed. Two years is the length of a congressional session. From a principal—agent perspective, the agency's timeline for a delegated decision should not exceed the enacting coalition's own event horizon, unless Congress has expressly contemplated more prolonged decisionmaking in the statute itself." Our data suggests that agencies have historically tended, on average, to meet this preferred deadline, at least when they choose to issue a regulation.

statutes are given more time to produce NPRMs. For example, in the bottom half of Table 1 we look only at delegating statutes enacted up through 1980. This means that for the most recent statute in the second, time-limited analysis, we allow ten years (from 1980 to 1990) for an NPRM to be promulgated. We see that the reported percentages barely change: 42% of all statutes result in at least one regulation, including 67% of mandatory regulations and just 37% of permissive regulations. The similarity of results suggests that very few delegating statutes that in fact end up producing an NPRM within ten years fail to do so within three years. These results suggest that we are able to draw reliable inferences from main reported results, despite the censored nature of our data.

B. Multiple Regression Model

In this section, we explore the relationship between the nature of the delegation and regulatory outcomes in a more sophisticated statistical framework that allows us to control for a number of potentially confounding factors. Constructing a reasonably fully specified model required a significant amount of original data collection, entry, and organization. We first describe our variables (IV.B.1) and our estimation strategy (IV.B.2) before presenting our results (IV.B.3).

1. Variables

Our dependent variable—the outcome that we are attempting to predict—is the previously described dichotomous variable indicating whether a delegating statute results in at least one DOI notice-and-comment regulation in our dataset. The variable is coded as "1" when at least one Final Rule citing the statute as authority is promulgated, and as "0" otherwise.

Our main independent variable is the previously described dichotomous indicator of the mandatory or permissive nature of a statute's delegation of regulatory authority. Our models also contain a number of control variables.⁹⁸ For instance, Congress may attempt to force agency regulatory

^{97.} See John H. Matheson, The Modern Law of Corporate Groups: An Empirical Study of Piercing the Corporate Veil in the Parent-Subsidiary Context, 87 N.C. L. Rev. 1091, 1133–37 (2009) (providing a basic description of multiple regression in legal research, as well as cites to fuller discussions).

^{98.} Note from our discussion of our control variables that we construct them on the basis of the delegating statute itself, or as of the year of the delegating statute. Given that our empirical analysis uses the delegating statute as the unit of analysis, and that it aims to predict whether or not a delegating statute produces a Final Rule, it would be impossible for us to include control variables based upon, or as of the year of, the NPRM or Final Rule, as many of our observations simply do not have an associated NPRM or Final Rule.

action by ordering the agency to issue a regulation within a particular period of time by inserting a deadline for agency action in the statute. A recent empirical study by Gersen and O'Connell finds, in fact, that such deadlines are modestly effective in prompting agencies to act.⁹⁹ Our deadline variable is coded as "1" if the delegating statute contained a regulatory deadline, and "0" if otherwise.

Depending on the model, we also include several other statute-level control variables. First, we include a variable (1,0) indicating whether or not a House–Senate Conference Committee was formed to reconcile differences in House and Senate versions of a delegating statute. This variable is intended to provide a measure of statute importance. We assume that conference committees are typically formed for important rather than unimportant legislation, and that agencies may tend to prioritize regulatory development for important statutes. This is because Congress may be more likely to care that its important legislation is implemented, and more likely to punish agencies for failing to promulgate implementing regulations.

We also include a variable (1,0) indicating whether the congressional votes on the delegating statute were unanimous. The intuition here is that a unanimously passed statute may send a stronger signal to the agency that Congress cares about implementation.

We include a continuous variable indicating the number of congressional co-sponsors for each delegating statute. Statutes with a greater number of co-sponsors are more likely to be viewed by agencies as substantively important to Congress, and such statutes may be more likely to prompt agency regulatory action.

We also include an alternative measure of statute importance (labeled "statute salience" in our results table). This measure uses HeinOnline's "scholar check" feature to code the number of times that a given delegating statute has been cited in scholarly research. We assume that statutes that are cited more often are more likely to be substantively important, and that, as already suggested above, agencies may be more likely to prioritize the implementation of important rather the unimportant statutes.

We also include a variable counting the length of the delegating statute

^{99.} Gersen & O'Connell, *supra* note 22, at 951–53. Gersen and O'Connell speculate that the modest size of the effect of deadlines is due to the fact that federal courts have limited remedies for violations. In some cases, Congress may attempt to make a deadline more effective by specifying a default regulatory outcome should the agency miss the deadline. This statute-writing strategy is known as the "hammer." M. Elizabeth Magill, *Congressional Control Over Agency Rulemaking: The Nutrition Labeling and Education Act's Hammer Provisions*, 50 FOOD & DRUG L.J. 149 (1995). We did not find any hammer provisions in our set of statutes.

in pages. This variable follows Huber and Shipan's argument that statute length is a proxy for the amount of discretion given to the agency. ¹⁰⁰ If that is the case, then longer statutes may be more likely to produce Final Rules.

In addition to these statute-level control variables, we explore the effect of a number of other variables that measure various aspects of the overall political environment in which a delegating statute was passed. In some models, we include a dichotomous variable indicating whether there was divided government at the time the delegating statute was enacted. Scholars of the political process have often focused on whether divided government influences congressional—agency interactions. ¹⁰¹ In particular, scholars have suggested that delegating statutes passed during times of divided government tend to provide less discretion to agencies. In that case, we might expect such statutes to be more likely to result in regulations.

In some models we also include a variable indicating the number of Senate hearings on DOI-related topics during the year in which the delegating statute was passed. This variable may be understood as indicating whether the Senate was especially focused on monitoring the department's activities in the given year. We might expect that DOI agencies would be more likely to implement a statute if the statute is enacted at a time of high monitoring. Similarly, we include a count of the number of times the U.S. President discussed DOI-related issues in the State of the Union speech. This variable may be understood as indicating whether the President was especially concerned with DOI activities in the given year. Again, it might be expected that agencies would be more likely to implement a statute that is passed during a year of heightened Presidential interest in the department.

Courts can play a role in forcing agency action, and we attempt to control for variation in the amount of court attention to DOI by creating a variable that sums the number of times that the DOI Secretary was named as a party in U.S. Court of Appeals cases in the year of the delegating statute.¹⁰³ The intuition here is that when the courts are especially focused on DOI activities, DOI agencies may be more likely to implement

^{100.} Huber & Shipan, supra note 46.

^{101.} Epstein & O'Halloran, Divided Government and the Design of Administrative Procedures, supra note 46; Huber & Shipan, supra note 46.

^{102.} The hearings and State of the Union data were gathered from the Policy Agendas Project. See POL'Y AGENDAS PROJECT, http://www.policyagendas.org (last visited June 2011).

^{103.} The variable was created by searching the "party" field of Westlaw's database of Federal courts of appeals decisions, by year. The reader should bear in mind, however, that this variable is not restricted to cases alleging that an agency exceeded or ignored a congressional mandate. Rather, it includes all cases, regardless of the particular legal issues at stake, to which DOI was a party.

delegating statutes.

Finally, we include in some models a set of control variables intended to roughly proxy variations in DOI's regulatory workload and resources. When DOI agencies have a heavy workload, they may ignore congressional mandates to regulate at a higher rate. Likewise, when resources are scarce, regulatory efforts may, out of sheer necessity, be slowed down and set aside. We operationalize workload by counting the number of NPRMs issued by DOI in the year of the delegating statute. We assume that DOI's workload is higher (and that it has less time to promulgate Final Rules) when it is busy promulgating NPRMs. We also include a variable counting the number of DOI employees in the year of the delegating statute. Here, the idea is that fewer employees mean fewer resources to devote to promulgating regulations; more employees means more resources. 104 Finally, we include a variable tracking DOI's total annual budget. Our budget data was taken from the Office of Management and Budget (OMB) and is available from 1962 on.¹⁰⁵ The budget variable is intended to control for the possibility that in lean budget years DOI agencies will be less able to complete rulemakings.

2. Estimation Method

We use a series of logistical (or "logit") regression estimations to model the factors that increase (or decrease) the probability that a delegating statute will result in the promulgation of at least one Final Rule. Logit is an appropriate method where the dependent variable is in dichotomous form, as it is here. Logistic regression has been used in a number of important law review-based studies of legal phenomena, including the corporate law doctrine of veil piercing, ¹⁰⁶ bias in American courts, ¹⁰⁷ and affirmative action in law faculty hiring, ¹⁰⁸ and it is a well-established estimation strategy in the social science fields.

^{104.} We compiled our count of DOI employees by consulting archival copies of the DOI telephone directory. Unfortunately, the employee data was only available for employees working in DOI's Washington, D.C. offices.

^{105.} The budget data is reported in 2005 constant dollars.

^{106.} Matheson, *supra* note 97, at 1135. For a good, short discussion of logistic regression techniques, *see id.* at 1153 nn.123–24.

^{107.} Kevin M. Clermont & Theodore Eisenberg, *Xenophilia in American Courts*, 109 HARV. L. REV. 1120, 1129–32 (1996).

^{108.} Deborah Jones Merritt & Barbara F. Reskin, Sex, Race, and Credentials: The Truth about Affirmative Action in Law Faculty Hiring, 97 COLUM. L. REV. 199, 238–40 (1997).

3. Model Results

Table 2 shows results for six models. The first three (Models A, B, and C) cover all delegating statutes between 1947 and 1987. Models D, E, and F restrict the dataset to statutes enacted between 1947 and 1980. These latter three models are included to examine whether the results are influenced by the censored nature of our data. Note also that the size of our sample declines as we add additional variables to the model. This is because of data limitations. For example, budget data are only available beginning in 1962.

All specifications include agency and decade fixed effects.¹⁰⁹ The use of fixed effects is common practice in econometric research. Agency fixed effects help to control for the possibility that the agencies in our sample differ consistently with each other along unobserved dimensions. Decade fixed effects help to control for the possibility that statutes enacted in particular decades differ consistently from statutes enacted in other decades along unobserved dimensions. In either case, including fixed effects helps to control for potential omitted variable bias by controlling for agency- and decade-specific differences that are not otherwise included as variables in the models.

As is standard econometric practice, Table 2 reports logit coefficients and standard errors. It is important to understand that logistic regression produces coefficients that reflect the relationship between the dependent and independent variable in terms of changes in "odds." Odds are not synonymous with probabilities. A probability is defined as the number of times that an event occurs divided by the total number of times that the event could have occurred, whether it did so or not. In contrast, odds are defined as the ratio of the probability of success over the probability of failure. For example, if the probability of Jimmy getting an "A" on a law school exam is 20 percent, then the probability of Jimmy getting some other grade is 80 percent. The odds of Jimmy getting an "A" are thus 0.2/0.8, 0.25, or one to (or in) four. Logit regression examines how those odds change in response to changes in independent variables. For example, if Jimmy were Jane—that is, female rather than male—would the odds of getting an "A" increase, decrease, or stay the same?

The results of logistic regression can thus be difficult to interpret, and not

^{109.} The fixed effects are equivalent to including dummy variables for agency and decade. In the interest of space we do not report results for the fixed effects variables. In unreported models we also controlled for Presidential administration at the time of the delegating statute. Results for those versions were substantially similar to those presented here.

just because of widespread popular confusion over the concept of odds,¹¹⁰ but also because coefficients are computed on a logarithmic scale.¹¹¹ To aid interpretation we will discuss the major results in terms of predicted probabilities and/or odds ratios.¹¹² An odds ratio is simply an exponentiated log odds, and it represents the factor by which the odds of an observation scoring a "1" on the dependent variable change upon a one-unit increase in the independent variable.¹¹³ Predicted probabilities are the probabilities that the dependent variable will score "1" when the independent variables take particular values. To gauge the effect of a specific independent variable, we calculate probabilities at various values of the independent variable change.¹¹⁴

^{110.} See Lawrence V. Fulton et al., Confusion Between Odds and Probability, A Pandemic?, 20 J. EDUC. STAT. Nov. 2012, at 1, http://www.amstat.org/publications/jse/v20n3/fulton.pdf (explaining the "pandemic" of confusion over the concept of odds).

^{111.} That is, logit coefficients represent an estimate of the amount of increase in the "log odds" that the dependent variable will be "1" when the independent variable increases by one unit. (Independent variables do not have to be dichotomous in logistic regression, and can be continuous in form).

^{112.} For a good, accessible discussion of odds ratios and predicted probabilities, see Karen Grace-Martin, Why Use Odds Ratios in Logistic Regression, http://www.theanalysisfactor.com/why-use-odds-ratios/ (last visited July 6, 2016).

^{113.} The odds ratio represents a constant effect; that is, its estimated value is independent of the values of the other independent variables. The odds ratio is thus useful in providing a relatively easily interpretable single summary measure of the direction and magnitude of the effect of an independent variable on the dependent variable.

^{114.} For example, where the independent variable of interest is a dichotomous variable, we would predict the probabilities of a "1" outcome on the dependent variable in two cases: that where the independent variable is "0" and that where it is "1." We would then compare the two predictions to estimate the effect of a move from "0" to "1" on the independent variable. Imagine, for example, a study of the effects of sex on law school performance. The dependent variable is "grade on the exam," and scored "1" for an "A" and "0" for any other grade; the independent variable is sex, scored "0" for female and "1" for male. If our model predicts a probability of getting an "A" of 10% for females, and a probability of 20% for males, we can say that the effect of being male on law school performance is an increase in predicted probability of getting an "A" of 10%. However, predicted probabilities, in contrast to odds ratios, are not constant. Their values depend on the values taken by the other independent variables in the model. When we report predicted probabilities below, we are holding all of the other independent variables at their mean level. Setting the independent variables at some other level would change the predicted probabilities reported.

Table 2: The Drivers of Regulatory Supply

	All Statutes (1947-1987)			Select Statutes (1947-1980)		
Key Variable	Model A	Model B	Model C	Model D	Model E	Model F
Mandatory Statute	0.754 **	0.818 **	0.932 **	0.854 **	0.959 **	1.084 **
	0.342	0.347	0.446	0.394	0.405	0.513
Other Statute Measures						
Statute Deadline	0.815	0.893 *	1.320 *	0.781	1.017	1.476 *
	0.536	0.540	0.712	0.680	0.698	0.871
Conference Committee	-0.018	-0.013	-0.374	-0.102	-0.014	-0.228
	0.304	0.323	0.483	0.326	0.353	0.538
Unanimous Vote	0.022	-0.050	0.341	-0.085	-0.171	0.293
	0.359	0.368	0.481	0.392	0.410	0.541
Congressional Co-Sponsors	-0.007	-0.008	-0.001	-0.013	-0.012	-0.010
	0.010	0.010	0.013	0.013	0.014	0.018
Statute Pages	-0.001	0.000	0.004	-0.001	-0.001	0.004
	0.002	0.002	0.005	0.002	0.002	0.006
Statute Salience	0.009 **	0.007 **	0.006 **	0.008 **	0.007 **	0.007
	0.003	0.003	0.003	0.003	0.003	0.003
Political Environment						
Divided Government	-	0.485	-1.385	-	0.640 *	-1.321
		0.311	0.867		0.372	1.201
Senate Hearings	-	0.013	0.012	-	0.007	-0.009
		0.011	0.017		0.011	0.022
State of the Union	-	0.019	0.025	-	-0.038	-0.023
		0.017	0.025		0.031	0.048
Court Attention	-	0.039	-0.062	-	0.048	-0.032
		0.066	0.097		0.075	0.109
Dept. Workload & Resources			0.044 **			-0.0/1 *
NPRMs Issued	-	-	-0.044 **	-	-	-0.0-1
Faralanasa			0.020 0.000			0.024 0.000
Employees	-	-	0.000	-	-	0.000
Budgets			0.000			0.000
	-	-	0.000	-	-	0.000
Constant	-1.395 **	-3.213 **	5.844	-0.951	-1.364	9.452 *
Constant	0.543	1.082	4.567	0.752	1.407	5.603
Sample Size	388	351	218	333	296	176
LR chi ² ; prob > chi ²	87.2; 0.0	86.9; 0.0	76.9; 0.0	75.32; 0.0	76.03; 0.0	61.59; 0.0
LK CHI ; prob > CHI	٥/.2; ۵.0	00.9; 0.0	70.9; 0.0	/3.32; U.U	70.03; 0.0	01.59; 0.0

Notes: The authors' dataset is used for all figures and tables. The statistical significance is drawn from **<=0.05, *<=0.10 (two-tailed tests). Agency and decade fixed effects are included in all model specifications, but are not shown due to space constraints. The dependent variable is the dichotomous Regulatory Reponses. See text for additional details.

Looking over the Table as a whole, note the likelihood ratio (LR) chi² statistic is statistically significant across all models. This indicates that the models, taking all independent variables into account, have a statistically significant effect on the dependent variable. This suggests that the overall models are generally successful.

As to individual variables, we will focus most intensively on the mandatory/permissive variable (*Mandatory Statute*), our main independent variable of interest, which is statistically significant in all six models. In other words, and even when controlling for a number of other plausibly confounding factors, the mandatory nature of a delegating statute has a statistically significant effect on the probability that an agency will

promulgate at least one Final Rule that cites the mandatory delegation as authority for the regulation.

To help us gauge the magnitude and direction of the effect of mandatoriness, Table 3 shows predicted probabilities of regulatory responsiveness for mandatory and permissive delegations, and it shows odds ratios of responsiveness for the two kinds of statutes. We see that the results are similar across the models. In all cases, mandatory delegations are more likely to result in at least one Final Rule than are permissive delegations. For example, in Model A, our most basic model, permissive statutes (which take the minimum value (0) on the *Mandatory Statute* variable) have a predicted probability of resulting in a Final Rule of just over 37%. In contrast, when *Mandatory Statute* takes its highest value ("1"), the predicted probability is just over 56%. We can say, then, that the effect of mandatoriness on agency responsiveness is to increase the probability that the agency will issue at least one Final Rule by over 18%. This difference—the change in probabilities—is the effect of a mandatory over a permissive delegation.

Table 3: Predicted Probabilities and Odds Ratios for Mandatory Statute Variable

	All Statutes (1947-1987)			Select Statutes (1947-1980)			
Mandatory Statute	Model A	Model B	Model C	Model D	Model E	Model F	
Predicted Probabilities							
Probability DV=1 at Min.	37.6%	36.5%	34.6%	39.1%	37.3%	38.4%	
Probability DV=1 at Max.	56.2%	56.0%	56.9%	59.6%	60.9%	64.4%	
Change in Probabilities	18.5%	19.5%	22.3%	20.4%	23.7%	26.0%	
Odds Ratios	2.126	2.266	2.540	2.349	2.610	2.956	

We see roughly similar differences in predicted probabilities in the other models. Thus, in Model B mandatory statutes have a predicted probability that is 19.5% higher than the predicted probability for permissive statutes, while in Model C the difference is 22.3%. Note too that the models that restrict the sample to pre-1981 statutes show similar differences. That similarity of results again suggests that the censored nature of our data does not interfere with our ability to draw valid inferences.

Now look at the odds ratios in Table 3 (the bottom row). The figures here represent a summary, constant effect of mandatoriness. We see that for Model A, mandatory statutes have odds of producing at least one Final Rule that are just over twice as favorable as the odds that a permissive statute will result in a Final Rule. In Models B and C, the odds for mandatory statutes are also over twice as favorable as the odds for

permissive statutes.

The results thus suggest that mandatoriness matters. Agencies respond more reliably to mandatory delegations by promulgating rules, even when controlling for other factors. On the other hand, Table 3 also shows that mandatoriness is far from a guarantee that an agency will promulgate a rule. Models A–C estimate that mandatory statutes will result in a Final Rule less than 60% of the time. Permissive statues are estimated to result in rules less than 40% of the time. In other words, the models predict that nearly half of all mandatory delegations will not result in rules, and that over half of all permissive delegations will not result in rules. These findings suggest that agencies fail to use a large proportion of their outstanding delegations of regulatory authority, even when commanded to regulate.

Few of the other variables are consistently significant. We will discuss three of these other variables in more detail, while leaving the others to what the reader can glean from Table 2 itself. We also will not discuss Models D-F, which, as already indicated, are included as a check of the potential problem caused by censoring. First, note that our deadlines variable is statistically significant in two of the first three models, but only at the 0.10 level. In Model B, statutes that have deadlines have an odds ratio of 2.44, indicating that a deadline increases the odds of rule promulgation by 2.44 times. Alternatively, a deadline statute's predicted probability of resulting in a Final Rule is 22% higher than the predicted probability for a non-deadline rule, holding all other variables constant at their mean. ¹¹⁵ In Model C, the odds ratio for the deadline variable is 3.74, meaning that deadline statutes have odds of resulting in a rule that are 3.74 times higher than the odds for a non-deadline statute. In terms of predicted probabilities, the Model C results estimate deadlines to increase by 31% the probability that a delegation will produce at least one Final Rule, Models B and C's results for the deadlines variable are thus consistent with earlier work by Gersen and O'Connell, 116 and by ourselves, 117 in that we find here that deadlines matter for responsiveness. While we are not testing whether deadlines speed up rulemaking, or whether agencies tend to meet or exceed their deadlines, we have some support for the notion that deadlines can be effective in spurring agencies to act.

Note also that our statute importance (salience) variable is statistically significant in all three of the main models. However, the estimated substantive magnitude of the variable is not large. The odds ratio for *Statute*

¹¹⁵. The probability of a Final Rule increases from 0.386 for a non-deadline statute to 0.601 for a deadline statute.

^{116.} Gersen & O'Connell, supra note 22, at 986.

^{117.} Yackee & Yackee, Administrative Procedures and Bureaucratic Performance, supra note 51, at 1483-84.

Salience is less than 1.01 for all three models and the predicted probabilities of agency responsiveness increase by only 11% when we vary the value of the statutory importance variable from its first-decile value (low) to its ninth-decile value (high).¹¹⁸

Finally, note that only one of our workload and resources variables is significant: the number of NPRMs issued in the year that the delegating statute was enacted. The negative sign indicates that as the number of NPRMs issued increases, the odds that that the statute will produce a Final Rule decreases. The odds ratio is 0.96, meaning that for every additional NPRM issued, the odds that at least one Final Rule will be promulgated is lower by a factor of 0.96 for every additional NPRM that the Department is dealing with.

V. POTENTIAL EXPLANATIONS

We can briefly summarize our empirical findings as follows: mandatory delegations of regulatory authority more reliably prompt agencies to promulgate at least one regulation in response to the statute than do permissive delegations. Congress, it appears, can increase agency responsiveness by signaling to agencies, through delegating language, that Congress wants the agency to regulate. It may signal that desire by commanding rather than merely authorizing regulation. On the other hand, even in the case of mandatory delegations, agencies routinely fail to promulgate rules.

What are the implications of these findings? The implications probably depend on difficult and debatable normative judgments about how responsive agencies should be to delegating statutes. Do the results suggest that Congress is capable of adequately controlling agencies, because it can control regulatory response rates by strongly signaling its desire for regulation? Or does it suggest that despite the apparent ability of Congress to influence response rates, agencies still maintain (too much?) ability to "shirk"—that is, to avoid doing what Congress tells them to do? We suspect that most readers will view a response rate of 63% (for mandatory statutes) or of 41% (overall) as being objectively "low." If that judgment is correct, then the challenge is to explain *why* it is so low. We offer three potential explanations that deserve exploration in future research.

First, one obvious possibility is that agencies suffer from resource constraints that prevent them from doing all that Congress orders them to do. While we attempt to control for resources in some of our models, our budget and employee data suffers from important limitations that we have

^{118.} In a sensitivity test, we removed the *Statute Importance* variable from all Table 2 model specifications. Results were substantively equivalent to those reported in the Table.

already discussed. That said, the results for the variable counting the number of NPRMs that the Department issues in the year of the delegating statute at least hint at the possibility that DOI's success in promulgating legally binding regulations declines as a function of its NPRM workload, a result which can be read as supporting the resource argument.

Second, our results could indicate support for the ossification thesis. That thesis holds that agencies are too overburdened by oversight mechanisms (such as mandatory White House review of important rules, through OMB, or through "hard look" review by the courts), and that such mechanisms have made rulemaking too time-consuming and costly for agencies. The result, the thesis suggests, is that agencies fail to regulate when they otherwise should or would.

A final potential explanation of our results is that the patterns of arguable non-responsiveness is due to a disconnect between congressional and agency preferences. Agencies may fail to promulgate implementing regulations not because they lack the resources to do so, but because they do not support the underlying policy goals of the delegating statute. This is, of course, the familiar problem of agency "slack" (or "drift") that is emphasized by the control literature as the essential problem that bureaucratic control mechanisms are meant to resolve.¹²⁰

The appropriate policy response to the problem—if it is one—depends on which causal mechanism is primarily at play. If resources are the cause, then the solution is to better fund agency rule-writing capacity. If ossification is the problem, then we might consider restricting judicial review of rulemaking, or of restructuring OMB review. And if a disjuncture between congressional and agency preferences is to blame, then the solution is to devise more effective ways for Congress to influence agency policymaking. While our analysis doesn't allow us to fully adjudicate between these three plausible explanations, we can provide two preliminary tests of sorts.

First, consider the possibility that our results are driven by resource constraints. Figure 6, below, plots the unmet congressional demand for regulations against the production of DOI Final Rules that cite only permissive statutory authority.¹²¹ The gray bars show the cumulative

^{119.} See generally Pierce, supra note 32; McGarity, supra note 32; Seidenfeld, supra note 51 (all clarifying the ossification thesis).

^{120.} For an overview of the slack/drift argument, which is ubiquitous in the literature, see DeShazo & Freeman, supra note 5, at 1452–55.

^{121.} Both of these trend lines are underestimates. That is because there is likely to be mandatory statutes from pre-1947 that DOI had not yet fulfilled during our analysis period, and there are numerous DOI Final Rules that cite only permissive authority but from congressional statutes pre-1947.

number of outstanding mandatory delegations of regulatory authority that have not produced any Final Rules; the black line shows the annual number of Final Rules promulgated by DOI agencies that only cite permissive regulatory authority. The former series trends upward because it is cumulative, representing the accumulated backlog of mandatory delegations that the Department's agencies have not yet addressed; the second fluctuates up and down because it is annual rather than cumulative. The interesting and relevant point is that DOI agencies continue to churn out discretionary rules (the black line) while persistently failing to clear some of their backlog of mandatory delegations. Indeed, some of the mandatory delegations in our database persist unaddressed by DOI for 20 This hints that DOI's reason for not regulating when years or more. commanded to do so is not because it lacks the resources to do so; after all, it is regulating in other areas, even as mandatory delegations remain unused.

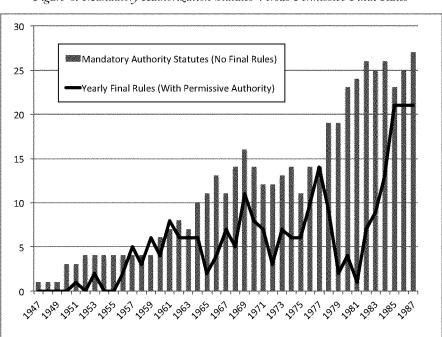


Figure 6: Mandatory Authorization Statutes Versus Permissive Final Rules

Second, consider the possibility that ossification dynamics are driving our results. In our previous empirical work, we suggested that there is not much empirical evidence of ossification. One challenge in that work—and one that the ossification literature more generally also shares—is the difficulty of determining how much regulation agencies should be promulgating. Ossification theorists assert that agencies do not produce enough regulation, but don't provide any mechanism for determining the regulatory baseline—the amount of regulation that agencies should produce in an ideal administrative law regime—from which ossified agencies are allegedly departing. The present study, in contrast to any other empirical administrative law study of which we are aware, goes some way toward allowing us to determine a theoretically appropriate baseline. If statutory delegations represent the objective demand for regulation, then our analysis shows that agencies routinely fail to provide all that is demanded.

We are not convinced, however, that our results provide strong evidence in favor of the ossification thesis. This is so for two reasons. First, the ossification literature tends to focus its critique on regulatory efforts that drag on without ever resulting in a Final Rule, or Final Rules that are overturned by the courts or that are rejected by OMB. In other words, the focus of the ossification literature is on the failure of proposals to become finalized (legally binding) regulations, and not on the failure to issue regulatory proposals. However, the patterns that we identify above also hold when we analyze agency responsiveness to statutory delegations based upon publication of proposals to regulate (NPRMs), and not just upon promulgation of Final Rules. This suggests that what is driving agency responsiveness is not ossification dynamics, which might be thought to differentially effect agency willingness to publish NPRMs as compared to their ability to promulgate a Final Rule. Second, and more importantly, our sample-limited models, which were primarily designed to address the issue of data censoring, also do not support an ossification story. Ossification theorists generally assert that ossification became a problem in the 1990s. Yet the patterns we identify hold not just through the 1990s, but also when the data is restricted to delegating statutes from 1980 and earlier, when ossification was allegedly not a problem.

In sum, we would suggest, albeit on a quite provisional basis, that our data do not support resource-based or ossification explanations for the level of observed agency responsiveness. A more definitive explanation of the causal dynamics underlying our results must, however, await future

^{122.} Yackee & Yackee, Testing the Ossification Thesis, supra note 51; Yackee & Yackee, Administrative Procedures and Bureaucratic Performance, supra note 51.

research.

Before concluding, let us add one final wrinkle, one that we hinted at earlier above. Whether the patterns of agency responsiveness that we identify is a problem depends in part on whether we think agencies should do what the enacting Congress wanted them to do, or whether we think they should do what the present Congress wants them to do.¹²³ The literature on bureaucratic accountability frequently elides that debate, in large part, perhaps, because it is a normatively and empirically difficult one.¹²⁴ Our study design does not allow us to test what we have called the "two Congresses" problem, but it is possible that agency non-responsiveness is due not so much to the ability of agencies to ignore "Congress," but to the fact that the contemporaneous Congress, unlike the enacting Congress, doesn't actually want the agency to regulate. In that case, the relative non-responsiveness that our data illustrates may actually reflect agencies being faithful to Congress—albeit faithful to a different Congress than the one that commanded regulation in the first place.

VI. CONCLUDING THOUGHTS & FUTURE RESEARCH

As DeShazo and Freeman have put it, "political scientists and legal scholars... share a deep and abiding concern about the risks of delegating power to administrative agencies and the need for agency accountability to Congress." That anxiety has led to a vast literature that either bemoans the problem, or that suggests that Congress has the tools to adequately deal with it. To date, though, few scholars have attempted to examine empirically the actual extent to which federal agencies do what Congress wants. The result is a bipolar and incomplete debate that has too little to say about what agencies actually do when Congress delegates them the authority to make regulatory policy decisions.

Our Article is intended to provide an examination of the path from legislation to regulation as a way of examining the extent of agency responsiveness to Congress. We have identified a large collection of

^{123.} Jonathan R. Macey, Organizational Design and Political Control of Administrative Agencies, 8 J.L. Econ. & Org. 93, 94 (1992); Kenneth A. Shepsle, Bureaucratic Drift, Coalition Drift, and Time Consistency: A Comment on Macey, 8 J.L. Econ. & Org. 111, 112 (1992).

^{124.} It is normatively difficult because it asks us to decide whether agencies should act in accord with past or present political priorities; it is empirically difficult because of the challenges of identifying congressional preferences in the absence of a formal statement (e.g., a statute) reflecting those preferences. For a discussion of the "two Congresses" (or "multiple principal") problem, see DeShazo & Freeman, supra note 5. DeShazo and Freeman highlight the possibility, which they view as "alarming," "that later congressional committees might divert agencies from duly enacted statutory mandates without Congress going to the trouble of repeal or amendment." Id. at 1448.

^{125.} DeShazo & Freeman, supra note 5, at 1449.

delegating statutes, and we have systematically traced the regulations that result from those statutes. The conclusions that we can draw from that analysis are both simple and complicated. On the simple side of things, agencies appear to be imperfectly responsive to congressional demands to regulate. When Congress demands regulation, agencies more often than not produce it—but they also fail to produce it in a significant minority of cases. Agency responsiveness is even worse when Congress—as it often does—authorizes new regulatory policymaking authority but doesn't command that regulations be designed and promulgated. Indeed, the sheer bulk of permissive delegations suggests that Congress routinely chooses to delegate authority without providing agencies with much guidance as to whether they should use that authority, an observation that fits neatly with more impressionistic claims that Congress too often punts policy decisions to agencies without adequately cabining agency freedom of action or inaction.

Perhaps just as strikingly, our examination of hundreds of delegating statutes suggests that Congress uses standard tools of control much less frequently than the control literature might be read to suggest. Deadlines were completely unused until the 1960s, and since then were used in only a minority of DOI delegating statutes. Nor does the inclusion of a deadline ensure that a regulation will be issued. If deadlines are a theoretically important tool of control, then they may not be a practically effective one, either because Congress rarely imposes them or because agencies retain some ability to ignore them.¹²⁶ And while we did not systematically code our delegating statutes for other potential control mechanisms (apart from our distinction between mandatory and permissive statutes), from our reading through our set of delegating statutes it seems that Congress rarely gives much thought—at least on a statute-specific basis—to fine-tuning the amount of discretion afforded to the agency. Most delegations, as noted, are discretionary, most don't contain deadlines, and many don't contain other obvious mechanisms or procedures that would prevent an agency from acting, or not acting, as it wishes. The implication is that merely identifying or inventing new mechanisms of control may not be enough to solve the problem, if there is one. Congress seems to not be taking full advantage of the tools that it already enjoys. If that is the case, then Rubin is perhaps correct in suggesting that scholars should get over a naively romantic notion of what "democracy" in the world of the modern administrative state can entail.¹²⁷ It may necessarily entail agencies that

^{126.} Stéphane Lavertu & Susan Webb Yackee, Regulatory Delay and Rulemaking Deadlines, 24 J. Pub. Admin. Res. & Theory 209 (2014).

^{127.} EDWARD L. RUBIN, BEYOND CAMELOT: RETHINKING POLITICS AND LAW FOR THE MODERN STATE (2007).

enjoy a significant zone of discretion in which to operate.

Our empirical examination is obviously not definitive. Nor is it meant to be. Testing the extent of congressional control over the bureaucracy, or of agency responsiveness to Congress, is a daunting task, one bedeviled by a number of conceptual and empirical difficulties that we have only imperfectly addressed. We have also ignored a number of other important and related issues, such as analyzing the timeliness of regulations (a question of obvious importance to debates about agency delay or ossification) or the legal adequacy of citations to authority (a question of import to debates about whether agencies abuse their delegations not just in a negative sense—by failing to regulate—but in a positive one—by regulating when they are not authorized to do so). We hope that future scholars will build upon our initial efforts. The question of agency responsiveness to the demands of Congress is a hugely important one, and it deserves significantly more empirical attention than it has received to date.