Testing the Ossification Thesis: An Empirical Examination of Federal Regulatory Volume and Speed, 1950–1990

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ABSTRACT

Federal agencies promulgate hundreds of regulations per year, and rules made by agencies greatly affect the structure and quality of our lives, perhaps even more so than the laws made by Congress. Given this reality, administrative law scholarship has long focused on the importance of the informal rulemaking process, which is governed by the notice and comment procedures set forth in § 553 of the Administrative Procedure Act ("APA"). Rulemaking through notice and comment was once believed to be both effective and efficient; however, for the past two decades, administrative law scholars have argued that rulemaking is so overburdened by outside constraints that it is effectively "ossified." Since the mid-1970s, Congress, the White House, and especially the courts have competed in a zero-sum "oversight" game, in which each of the three branches aggressively has sought to impose its own conception of good regulation. As a result, agencies are unable to promulgate necessary rules within a reasonable time period, and they often seek ways to avoid rulemaking altogether. This undesirable, ossified state of affairs yields a mismatch between the regulations produced and those that would advance the public interest. Prominent administrative law scholars have widely embraced the ossification thesis, but as of yet it has not been subjected to serious empirical testing. This is important because drastic reforms with far-reaching conse-

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^{*} Associate Professor of Public Affairs and Political Science. The research underlying this Article was funded in part by a generous grant from the Federalist Society for Law and Public Policy Studies' Searle Young Legal Scholars Research Fellowship program. Draft versions of this Article were presented at the University of Wisconsin Law School Junior Faculty Workshop series, at faculty workshops at the law schools of the University of Texas at Austin, Florida State University, and Vanderbilt University, and at the 2011 Federalist Society Faculty Division Annual Faculty Conference. Professors Brad Snyder, Alex Huneeus, Michael Livermore, David Zaring, Anuj Desai, Richard Epstein, Melinda Taylor, Wendy Wagner, Matthew Spitzer, Lisa Bressman, Ed Rubin, Dan Markel, and Mark Seidenfeld offered especially helpful feedback. Amnon Cavari, Elizabeth Sanger, and Amy Hansen provided excellent research assistance. Finally, we would like to especially thank Professor Tom McGarity for his gracious and helpful criticisms and suggestions, and Professor Richard Pierce for his spirited engagement with our argument.

quences have been proposed on the assumption that ossification is both real and problematic.

This Article challenges the ossification literature and tests four key hypotheses of the ossification thesis. It analyzes notice and comment rulemaking at the Department of the Interior from 1950 through 1990 by using a comparative-statics approach to examine success rates of proposed rules. Extrapolating from this data, evidence that ossification generally is either a serious or widespread problem is mixed at best, and appears relatively weak overall. Even in the allegedly ossified era, federal agencies remain able to propose and promulgate historically large numbers of regulations, and to do so relatively quickly.

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Introduction

Federal agencies function as a veritable fourth branch of our national government.¹ Tasked with "filling up the details" and "gaps" in legislation, agencies routinely propose and promulgate regulations (or, synonymously, "rules") that are as legally binding on regulated persons and entities as are the laws passed by Congress and signed by the President.² Each year, federal agencies promulgate hundreds of regulations, the subjects and effects of which are often far from trivial. For example, federal rules—decisions made by unelected bureaucrats, rather than elected members of Congress—govern the use of the word "organic" in the marketing of agricultural products,³ set minimum fuel economy standards for motor vehicles,⁴ determine whether particular species of plants and animals shall enjoy the protections of the Endangered Species Act,⁵ and largely will guide the shape of the new financial services regulations to be implemented in the wake of the current economic crisis.⁶ Even regulatory decisions that might appear to be

From the beginning of the Government various acts have been passed conferring upon executive officers power to make rules and regulations—not for the government of their departments, but for administering the laws which did govern. None of these statutes could confer legislative power. But when Congress had legislated and indicated its will, it could give to those who were to act under such general provisions 'power to fill up the details' by the establishment of administrative rules and regulations, the violation of which could be punished by fine or imprisonment fixed by Congress, or by penalties fixed by Congress or measured by the injury done.

Id.; see also United States v. Mead Corp., 533 U.S. 218, 227 (2001) ("When Congress has 'explicitly left a gap for an agency to fill, there is an express delegation of authority to the agency to elucidate a specific provision of the statute by regulation," and any ensuing regulation is binding in the courts unless procedurally defective, arbitrary or capricious in substance, or manifestly contrary to the statute." (citation omitted)); Morton v. Ruiz, 415 U.S. 199, 231 (1974) ("The power of an administrative agency to administer a congressionally created and funded program necessarily requires the formulation of policy and the making of rules to fill any gap left, implicitly or explicitly, by Congress."). Chief Justice Marshall appears to be the first member of the federal judiciary to describe the role of federal agencies as entailing the "filling up" of "details" missing from statutes. See Wayman v. Southard, 23 U.S. 1, 43 (1825).

- 3 See 7 C.F.R. § 205.102 (2011).
- 4 See 40 C.F.R. pt. 600 (2011).

¹ For a discussion on federal agencies as the "fourth branch" in our formally three-branch system of federal government, see generally Peter L. Strauss, *The Place of Agencies in Government: Separation of Powers and the Fourth Branch*, 84 COLUM. L. REV. 573 (1984).

² See, e.g., United States v. Grimaud, 220 U.S. 506, 517 (1911). According to the Supreme Court in Grimaud:

⁵ See, e.g., Endangered and Threatened Wildlife and Plants, 41 Fed. Reg. 24,062 (June 14, 1976) (establishing endangered status for 159 taxa of animals).

⁶ Sewell Chan, Regulators to Write New Financial Rules in the Open, N.Y. TIMES, Aug. 14, 2010, at B2 ("[T]he financial regulatory legislation . . . requires regulators to draft hundreds of rules governing everything from bank capital standards to derivatives trades.").

trivial on their face—e.g., the decision of the Federal Highway Administration to "recommend, rather than merely allow, a fluorescent yellow-green background for warning signs regarding conditions associated with pedestrians, bicyclists, and playgrounds"—can have a surprisingly high level of salience for impacted parties.⁷

Simply put, bureaucratic rules are all around us, and they often matter greatly to the structure and quality of our lives—perhaps even more so, or at least more directly, than the statutes that grant agencies the power to regulate in the first place.⁸ Indeed, estimates suggest that more than ninety percent of modern American laws are rules written by agency officials.⁹ Given this reality, the rulemaking process has come to be the primary focal point of administrative law scholarship.¹⁰

Most substantively important, federal agency rulemaking is subject to the notice and comment procedures of § 553 of the Administrative Procedure Act ("APA").¹¹ Under § 553, agencies must provide the public with notice of a proposed rulemaking (published in the *Federal Register*) and solicit public input (often in the form of written public comments) on the proposal prior to its promulgation as a legally binding final rule.¹²

In recent years, administrative law scholars have complained that rulemaking via § 553's notice and comment procedures has become "ossified." This "ossification thesis" proceeds from the observation that the federal courts, the executive branch, and Congress have com-

⁷ National Standards for Traffic Control Devices, 74 Fed. Reg. 66,730, 66,756 (Dec. 16, 2009) (to be codified at 23 C.F.R. pt. 655) (discussing numerous public comments received objecting to the proposed regulatory change regarding fluorescent yellow-green warning signs).

⁸ See, e.g., Richard J. Pierce, Jr., The Role of Constitutional and Political Theory in Administrative Law, 64 Tex. L. Rev. 469, 481 (1985) (arguing that "administrative agencies today have enormous power to make fundamental policy decisions that the Constitution assigns to Congress as the branch of government most representative of the majority's views"). The observation that administrative decisions are more numerous and perhaps even more important than legislative commands is an old one. See James M. Landis, The Administrative Process 17–19 (1938).

⁹ Kenneth F. Warren, Administrative Law in the Political System 260 (4th ed. 2004) ("[S]cholars estimate that well over 90 percent of the laws that regulate our lives, whether at work or at play, are now made by our public administrators, not by our legislators or traditional lawmakers.").

¹⁰ Id. at 213 ("If the field of administrative law has a primary focal point, it would have to be rulemaking.").

^{11 5} U.S.C. § 553 (2006).

¹² Id. § 553(b)-(c). The APA has two broad classes of exemptions from § 553 requirements: regulations dealing with the military or foreign affairs and those dealing with agency management, including grants, loans, and public property. Id. § 553(a).

peted in a zero-sum "oversight game," in which each of the three branches has sought to impose its own conception of good regulation (or of good regulatory process) on the federal bureaucracy, stifling the ability of bureaucrats to regulate on the basis of technocratic expertise. 13 Agencies previously were able to regulate in the public interest relatively efficiently, while allowing the broader public some meaningful opportunity to participate in the regulatory process. By the mid-1970s, however, these various judicially, presidentially, and congressionally imposed constraints allegedly prevented agencies from promulgating necessary or desirable regulations, or at least excessively delayed promulgation.¹⁴ Rulemaking became "costly, rigid, and cumbersome" and afflicted by "perverse incentives that conspire to undermine sound public policy."15 According to these scholars, this undesirable (ossified) state of regulatory affairs continues in the present day.¹⁶ The result is a mismatch between the regulations society needs and the regulations that agencies are able to provide.

The ossification thesis has attracted and continues to attract a large amount of attention in the administrative law literature. The seminal exposition is Professor Thomas O. McGarity's 1992 article, Some Thoughts on "Deossifying" the Rulemaking Process, 17 which has been cited by more than 350 law reviews and other secondary legal sources. 18 Prominent administrative law scholars, including Professors Seidenfeld, 19 Pierce, 20 Verkuil, 21 and Jordan, 22 have made important

¹³ See generally Sidney A. Shapiro, Political Oversight and the Deterioration of Regulatory Policy, 46 ADMIN. L. REV. 1 (1994) (discussing the "oversight game").

¹⁴ See generally, Thomas O. McGarity, Some Thoughts on "Deossifying" the Rulemaking Process, 41 DUKE L.J. 1385 (1992).

¹⁵ Jody Freeman, Collaborative Governance in the Administrative State, 45 UCLA L. Rev. 1, 9 n.19 (1997).

¹⁶ See generally, e.g., Richard J. Pierce, Jr., Rulemaking Ossification Is Real: A Response to "Testing the Ossification Hypothesis," 80 Geo. WASH. L. Rev. 1493 (2012).

¹⁷ McGarity, supra note 14. Professor McGarity vigorously defended his ossification thesis in a second article. See generally Thomas O. McGarity, The Courts and the Ossification of Rulemaking: A Response to Professor Seidenfeld, 75 Tex. L. Rev. 525 (1997).

¹⁸ Citation information is taken from Westlaw's Journals and Law Reviews ("JLR") database. The term "ossification" appears in more than 1000 JLR documents.

¹⁹ Mark Seidenfeld, Demystifying Deossification: Rethinking Recent Proposals to Modify Judicial Review of Notice and Comment Rulemaking, 75 Tex. L. Rev. 483, 489-90, 514 (1997) [hereinafter Seidenfeld, Demystifying Deossification]; Mark Seidenfeld, Hard Look Review in a World of Techno-Bureaucratic Decisionmaking: A Reply to Professor McGarity, 75 Tex. L. Rev. 559 (1997) [hereinafter Seidenfeld, Reply].

²⁰ Richard J. Pierce, Jr., Seven Ways to Deossify Agency Rulemaking, 47 Admin. L. Rev. 59 (1995).

²¹ Paul R. Verkuil, Comment: Rulemaking Ossification—A Modest Proposal, 47 ADMIN. L. REV. 453 (1995).

contributions to the ossification literature as well, and belief in the reality of ossification is widespread.²³

Although a handful of scholars recently have begun to question the accuracy of this belief,²⁴ the thesis itself unfortunately has been subjected to only limited empirical testing.²⁵ This is problematic because the belief that ossification is a fact of modern regulatory life has led some observers to promote potentially far-reaching changes in the legal and administrative frameworks in which agencies operate, such as the elimination of judicial review of agency rulemaking.²⁶ Such reforms might make it easier for federal agencies to regulate as they see fit, but they also might have the deleterious consequence of making it more difficult for the elected and judicial branches, and the public at large, to monitor, influence, and check undesirable agency action.

In short, the question of whether ossification is in fact a reality of modern federal administrative practice is an exceedingly important one. The ossification literature routinely paints a picture of a fundamentally broken regulatory system, and prominent scholars use that picture to advocate relatively radical, systemic reforms.²⁷ Many of the aspects of the current system that allegedly cause ossification, however, may also have the potential to provide important regulatory benefits, such as increased bureaucratic accountability and regulatory

²² William S. Jordan, III, Ossification Revisited: Does Arbitrary and Capricious Review Significantly Interfere with Agency Ability to Achieve Regulatory Goals Through Informal Rulemaking?, 94 Nw. U. L. Rev. 393 (2000).

²³ Indeed, the notion of ossification plays a prominent role in modern administrative law textbooks and treatises. *See, e.g.*, Stephen G. Breyer et al., Administrative Law and Regulatory Policy: Problems, Text, and Cases 730–37 (5th ed. 2002); 1 Richard J. Pierce, Jr., Administrative Law Treatise § 7.11 (4th ed. 2002).

²⁴ See, e.g., Mark Seidenfeld, Why Agencies Act: A Reassessment of the Ossification Critique of Judicial Review, 70 Ohio St. L.J. 251 (2009); see also Connor N. Raso, Note, Strategic or Sincere? Analyzing Agency Use of Guidance Documents, 119 Yale L.J. 782, 787 (2010).

²⁵ See Cary Coglianese, Empirical Analysis and Administrative Law, 2002 U. ILL. L. REV. 1111, 1127–31 (suggesting that available evidence does not support the ossification thesis, but calling for further research); Raso, supra note 24, at 823. For the main existing empirical examinations, see Stuart Shapiro, Speed Bumps and Roadblocks: Procedural Controls and Regulatory Change, 12 J. Pub. Admin. Res. & Theory 29, 51–55 (2002) (finding little evidence of ossification at the state level); Jason Webb Yackee & Susan Webb Yackee, Administrative Procedures and Bureaucratic Performance: Is Federal Rule-making "Ossified"?, 20 J. Pub. Admin. Res. & Theory 261, 261–62, 268–80 (2010) (providing an empirical test of the ossification thesis that finds little evidence of ossification using data from 1983 to 2006).

²⁶ Frank B. Cross, *Pragmatic Pathologies of Judicial Review of Administrative Rulemaking*, 78 N.C. L. Rev. 1013, 1014 (2000); see also Carnegie Comm'n on Sci., Tech., & Gov't, Risk and the Environment: Improving Regulatory Decision Making 109–12 (1993), available at http://www.ccstg.org/pdfs/RiskEnvironment0693.pdf (justifying ambitious proposals for reform on the basis of the ossification thesis).

²⁷ See infra Part I.E.

rationality. Much of the ossification literature implies that the high costs of such constraints outweigh the benefits, and this Article subjects this implication to careful empirical analysis.

This Article is largely descriptive (or positive) rather than normative in nature, and takes no position on such important questions as whether judicial review of rulemaking or other procedural requirements that constrain bureaucratic autonomy and discretion are good or bad, desirable or undesirable. Its empirical strategy, described below, is relatively simple—though implementation proved difficult and time consuming because of the need to collect a large amount of original data.

The ossification literature argues that in the mid-to-late 1970s, federal rulemaking became ossified, and this Article proceeds from that observation. One fair implication of the italicized word is that prior to the judicial, presidential, and legislative developments associated with ossification, rulemaking was something other than ossified. Our research design uses these two time periods—pre- and post-mid 1970s—to its advantage. We compiled a large, original dataset of the universe of notice and comment rules proposed and promulgated by the various agencies of the United States Department of the Interior ("DOI") from 1950 through 1990, as published in various issues of the Federal Register. We also collected information regarding the DOI's use of other, more informal policy devices. These data are used to compare essential, ossification-related attributes of the regulatory system in the nonossified period (1950–1975), with the allegedly ossified regulatory regime (1976–1990).²⁸ The Study ends in 1990 because that year corresponds with the appearance of the ossification literature.²⁹ The phenomenon of ossification was first explicitly articulated as such in a 1990 conference at Duke Law School, and Professor McGarity's

²⁸ The use of 1975/1976 as the dividing line between preossified and (allegedly) ossified eras also corresponds to Professors Mashaw and Harft's analysis of ossification-like trends in auto safety regulation, which dates important shifts in the National Highway and Transportation Safety Administration's regulatory practice to the "mid-1970s." See Jerry L. Mashaw & David L. Harfst, The Struggle for Auto Safety 10, 11 (1990).

²⁹ See McGarity, supra note 14, at 1385–86 (crediting Professor Donald Elliott as inventing the term "ossification" at a Duke Law School conference in 1990). Future research may benefit from extending this data collection or analysis to include the 1990s or 2000s. In an earlier article, however, different data were used (which included rules from across the federal bureaucracy, and not just from the DOI) to analyze delay in rulemaking from the 1980s to 2006, and no strong evidence of ossification was found in this later sample of rules. See Yackee & Yackee, supra note 25, at 268–80. Based on this previous work, the conclusions reached in this Article are expected to continue to hold in the present day.

influential article on the subject was published in 1992.³⁰ In his article, McGarity observed that ossification had been a reality of the federal regulatory environment since the second half of the 1970s.³¹

Our data, and the comparative-statics approach used to analyze it, have the advantage of both being methodologically accessible and providing a means of directly assessing the accuracy of four key hypotheses—each relating to regulatory volume and speed—that can be derived from the ossification literature.

Our dataset offers significant improvements over existing research, both for the purpose of assessing the ossification thesis in particular and for the purpose of shedding light on the development of the modern regulatory state more generally. Although administrative law scholars recently have begun to offer important statistical portraits of federal rulemaking activity,32 those studies typically rely on data housed by the federal government's Regulatory Information Service Center ("RISC").33 The RISC data, however, only go back to 1983—well after the ossification era is said to have begun.³⁴ This Study is, to our knowledge, the first to collect and analyze basic information on the rulemaking activities of the federal bureaucracy dating back to the very earliest days of the APA. Furthermore, while other scholars have presented empirical descriptions of the growth of federal regulatory activity over time, this Study proceeds by identifying actual proposed and promulgated rules as the unit of analysis, rather than using other, less accurate proxies of regulatory volume, such as the number of pages contained in the Federal Register or the Code of Federal Regulations ("CFR").35

To briefly summarize this Article's results and conclusions, evidence that ossification is either a serious or widespread problem is mixed and relatively weak. Even in the allegedly ossified era, federal

³⁰ See generally McGarity, supra note 14.

³¹ See id. at 1385.

³² See Anne Joseph O'Connell, Political Cycles of Rulemaking: An Empirical Portrait of the Modern Administrative State, 94 Va. L. Rev. 889, 922-63 (2008); see also Jacob E. Gersen & Anne Joseph O'Connell, Deadlines in Administrative Law, 156 U. Pa. L. Rev. 923, 937-49 (2008).

³³ See O'Connell, supra note 32, at 922-63; see also Gersen & O'Connell, supra note 32, at 937-49.

³⁴ See O'Connell, supra note 32, at 922-63; see also Gersen & O'Connell, supra note 32, at 937-49.

³⁵ See, e.g., William Lilley III & James C. Miller III, The New "Social Regulation", 47 Pub. Int. 49, 49–50 (1977) (measuring the "growth in federal regulatory activity" by counting pages in the Federal Register and the CFR).

agencies remain able to propose and promulgate historically large numbers of regulations, and to do so relatively quickly.

Of course, this does not suggest that specific bureaucratic initiatives are never unduly delayed, or that socially worthwhile regulations are always promulgated. In certain well-known cases, procedural and other constraints on bureaucratic autonomy seem to have delayed rule promulgation for long periods of time, or prevented agencies from promulgating rules despite years of considered study and effort. The Occupational Safety and Hazard Administration's ("OSHA") long and ultimately unsuccessful struggle to implement workplace ergonomics standards is an obvious potential example, 36 as may be the Environmental Protection Agency's ("EPA") implementation of the original Clean Air Act ("CAA")37 or the National Highway Transportation and Safety Administration's regulation of motor vehicle safety.38 But scholars who draw on these examples to make general claims about the ossified state of everyday federal administrative practice risk committing a sort of reverse ecological fallacy, whereby the experiences of specific rulemakings are imputed to rulemaking as a whole.39 This Study does not deny that ossification may be a useful way of describing certain individual regulatory actions. But it also suggests that ossification may not be a particularly helpful or accurate way of describing the state of modern rulemaking in general. The experience of the average rule may be very different from the experience of the highly atypical, ossified rule.

This Article proceeds as follows. Part I provides a more detailed overview of the ossification thesis. Part II summarizes critiques and tests of the ossification thesis. Part III presents four testable hypotheses. Part IV describes the data collection and research design processes employed. Parts V through VIII present the data analysis, using four distinct tests of the ossification thesis. First, it analyzes the volume of proposed rules and final rule activity. Second, it studies regulatory success rates. Third, it examines delay in rule promulgation. Finally, it examines the use of alternatives to notice and com-

³⁶ See Andrew P. Morriss & Susan E. Dudley, Defining What to Regulate: Silica and the Problem of Regulatory Categorization, 58 ADMIN. L. Rev. 269, 327–28 (2006) (summarizing the battle over OSHA's ergonomics regulations).

³⁷ See R. Shep Melnick, Regulation and the Courts: The Case of the Clean Air Act 53–70 (1983) (discussing court-imposed delay on implementation of the CAA).

³⁸ See Mashaw & Harfst, supra note 28, at 10-11.

³⁹ The ecological fallacy refers to the imputation of group characteristics to individuals. The classic discussion of the fallacy is presented in W.S. Robinson, *Ecological Correlations and the Behavior of Individuals*, 15 Am. Soc. Rev. 351 (1950).

ment regulation. Part IX provides a brief discussion of implications, and Part X concludes with a candid discussion of the weaknesses of this Study and provides suggestions for future research.

I. OVERVIEW OF THE OSSIFICATION THESIS

The classic statement of the ossification thesis is Professor Mc-Garity's 1992 article, Some Thoughts on 'Deossifying' the Rulemaking Process.⁴⁰ In this deservedly influential piece, McGarity argues that

[d]uring the last fifteen years the rulemaking process has become increasingly rigid and burdensome. An assortment of analytical requirements have been imposed on the simple rulemaking model, and evolving judicial doctrines have obliged agencies to take greater pains to ensure that the technical bases for rules are capable of withstanding judicial scrutiny.⁴¹

These analytical requirements and doctrinal developments are responsible for four main ills: failure to regulate, delays in regulation, abandonment of proposed regulations prior to promulgation, and resort to improper modes of regulation.⁴²

McGarity's main focus is on the so-called "informal" (or "notice and comment" or "legislative") rulemaking process under § 553 of the

For a precursor to Professor McGarity's notion of ossification, see Philip J. Harter, Negotiating Regulations: A Cure for Malaise, 71 GEO. L.J. 1 (1982). Professor Harter argues that the courts and Congress have imposed various procedural constraints on agencies that have turned the informal rulemaking process into a "hybrid" and "adversarial" system that is characterized by "malaise": excessive cost, delay, and declining legitimacy. Id. at 5-6, 18. Thirty years earlier, Justice Jackson had also complained of "malaise in the administrative scheme," though he meant, among other problems, the failure of agencies to provide sufficiently detailed findings to permit judicial review, or, more generally, the failure to "perform the function of completing unfinished law" by "translating an abstract statute into a concrete . . . order." FTC v. Ruberoid Co., 343 U.S. 470, 482, 487, 490 (1952) (Jackson, J., dissenting) (emphasis removed).

⁴⁰ McGarity, supra note 14. Although Professor McGarity is often credited with inventing the term "ossification," McGarity himself credits Donald Elliott, a former general counsel of the EPA and a former Yale Law professor. See id. at 1385–86. We recently contacted Elliott, who is currently a regulatory lawyer in Washington, D.C., to ask his thoughts about the attribution. Mr. Elliot confirmed that he had indeed used the word in his oral remarks at a 1990 symposium at Duke University School of Law. His then-wife was enrolled in medical school at the time, and he thought this probably accounted for his decision to use a medical metaphor to describe the phenomenon of delay in rulemaking. Elliot also considered to be relevant his experiences working on the famous Vermont Yankee case as a law clerk for Judge Bazelon, and his later experience at EPA implementing the 1990 amendments to the CAA. He recounts his CAA experience in a recent article, E. Donald Elliott, Lessons from Implementing the 1990 CAA Amendments, 40 Envtl. L. Rep. 10592 (2010).

⁴¹ McGarity, supra note 14, at 1385.

⁴² See id. at 1386.

APA.⁴³ Subsequent ossification scholarship shares this focus, in part because formal rulemaking—retroactive, case-by-case rulemaking by adjudication and the principal APA alternative to notice and comment rulemaking—has become increasingly rare.⁴⁴

Notice and comment procedures are thought to provide important benefits compared to other methods of bureaucratic governance. For instance, notice and comment may improve the effectiveness of regulation by ensuring that the rule-writing agency is exposed to all relevant information about the likely causes and consequences of a particular regulatory proposal, perhaps promoting substantively better regulation.⁴⁵ Notice and comment may also improve the legitimacy of regulations by ensuring that those impacted by a proposed regulation are given a chance to have their say.⁴⁶ Furthermore, by facilitating the creation of a record of agency decisionmaking, notice and comment may help prevent arbitrary agency actions by facilitating judicial review.⁴⁷ Finally, notice and comment may help to promote political accountability by assisting congressional and presidential oversight of agency actions,⁴⁸ and it may also help prevent "overregulation."⁴⁹

⁴³ See id. at 1385-96.

⁴⁴ With relatively few exceptions, the APA requires agencies to issue regulations through either of two main procedures: trial-like "adjudications," often referred to as "formal" rulemaking, or § 553's informal notice and comment procedures. See Paul A. Dame, Note, Stare Decisis, Chevron, and Skidmore: Do Administrative Agencies Have the Power to Overrule Courts?, 44 Wm. & Mary L. Rev. 405, 410–11 (2002). As noted previously, formal rulemaking is relatively rare. See id. at 411 ("'Formal rulemaking has become increasingly rare. With a few exceptions, agencies [need only] use the informal rulemaking procedure to issue rules that have binding, substantive effect.' The 'increasingly rare' instances when agencies use formal rulemaking occur when Congress mandates compliance with the procedure in the agency's organic statute." (footnotes omitted)).

⁴⁵ See 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) (arguing that notice and comment "deters casual and sloppy action, and thereby forestalls the confusion and needless litigation that can result from such action").

⁴⁶ See generally Jessica Mantel, Procedural Safeguards for Agency Guidance: A Source of Legitimacy for the Administrative State, 61 Admin. L. Rev. 343 (2009) (discussing the role of administrative procedural safeguards, including notice and comment requirements, in promoting agency legitimacy). See also Kenneth Culp Davis, Discretionary Justice: A Preliminary Inquiry 65–68 (1969) (arguing that agencies should make greater use of rulemaking in order to make administrative decisions a more "fair and efficient" substitute).

⁴⁷ See, e.g., Lisa Schultz Bressman, Beyond Accountability: Arbitrariness and Legitimacy in the Administrative State, 78 N.Y.U. L. Rev. 461, 541–44 (2003).

⁴⁸ See Matthew D. McCubbins et al., Structure and Process, Politics and Policy: Administrative Arrangements and the Political Control of Agencies, 75 Va. L. Rev. 431, 442 (1989) ("Administrative procedures erect a barrier against an agency carrying out such a fait accompli by forcing the agency to move slowly and publicly, giving politicians (informed by their constituents) time to act before the status quo is changed."); see also Michael Kolber, Rulemaking With-

Some prominent scholars, including Justice Kagan, have questioned whether the purported benefits of notice and comment are overstated;⁵⁰ however, most observers argue that notice and comment rulemaking typically should serve as the normatively preferred mode of developing regulation.⁵¹

Modern complaints about ossification, then, are at heart complaints about the inability of agencies to effectively and efficiently use these normatively preferable notice and comment procedures to accomplish their regulatory duties. The ossification literature points to the courts, the White House, and Congress as the primary sources of ossification, assigning different levels of culpability to each. The following Sections discuss each of these sources in turn.

A. Judicial Causes of Ossification

Ossification scholars, including Professor McGarity, tend to fault all three branches of government for the gross inefficiencies in mod-

out Rules: An Empirical Study of Direct Final Rulemaking, 72 Alb. L. Rev. 79, 86 (2009) ("Notice-and-comment ensures some level of political accountability because it gives visibility to internal agency deliberations that would otherwise be hidden both from the media and Congress.").

⁴⁹ See Anthony, supra note 45, at 1317 (suggesting that notice and comment discourages "the tendency to overregulate").

⁵⁰ See David J. Barron & Elena Kagan, Chevron's Nondelegation Doctrine, 2001 Sup. Ct. Rev. 201, 231 (describing notice and comment as a "charade" and "Kabuki theater" and asserting that "[e]ven the ostensible virtues of notice-and-comment procedures are today open to serious question" (quoting E. Donald Elliot, Re-Inventing Rulemaking, 41 Duke L.J. 1490, 1492 (1992)); Elliot, supra, at 1492 ("No administrator in Washington turns to full-scale notice-and-comment rulemaking when she is genuinely interested in obtaining input from interested parties. Notice-and-comment rulemaking is to public participation as Japanese Kabuki theater is to human passions—a highly stylized process for displaying in a formal way the essence of something which in real life takes place in other venues."); see also Dorit Rubinstein Reiss, Tailored Participation: Modernizing the APA Rulemaking Procedures, 12 N.Y.U. J. Legis. & Pub. Pol'y 321, 331 (2009) (citing literature suggesting that notice and comment procedures fail to "actually achieve[] effective public participation in many cases").

⁵¹ See, e.g., Warren E. Baker, Policy by Rule or Ad Hoc Approach—Which Should it Be?, 22 Law & Contemp. Probs. 658, 660 (1957) ("It is . . . almost axiomatic that, wherever feasible or appropriate, [agency] policy should not be 'sprung' upon the surprised party in a particular adjudicatory decision, but rather should be made clear through prior rule-making proceedings."); Ben C. Fisher, Rule Making Activities in Federal Administrative Agencies, 17 Admin. L. Rev. 252, 259 (1965) ("[I]t . . . remains a fact that all commentators and even the agencies themselves favor greater utilization of 'rule making.'" (citations omitted)); see also Davis, supra note 46, at 65-67. Despite this widespread normative preference for notice and comment, the APA itself does not require agencies to choose a particular mode of regulation for a particular regulatory action, and agencies enjoy largely unfettered discretion to choose the mode by which they regulate. See M. Elizabeth Magill, Agency Choice of Policymaking Form, 71 U. Chi. L. Rev. 1383, 1386-90 (2004).

ern day rulemaking.⁵² Their main criticisms, however, are aimed at the courts.⁵³ McGarity points in particular to the development of the "hard look" doctrine, which aggressively reinterpreted the APA's judicial review provisions that allow informal rules to be set aside only if they are "arbitrary or capricious," an "abuse of discretion," or "otherwise not in accordance with law."⁵⁴ The ossification literature's focus on the courts can be viewed as an attempt to generalize claims made by Professor Melnick and by Professors Mashaw and Harfst in widely cited case studies on the implementation of the CAA and motor vehicle safety regulations, respectively.⁵⁵

The hard look doctrine originated in the United States Court of Appeals for the D.C. Circuit in the early 1970s.⁵⁶ Under this doctrine, courts would require agencies to offer detailed explanations for their decisions, to provide strong justifications for any departures from past decisions, to permit widespread public participation in the rulemaking process, and to consider alternative regulatory measures to those proposed.⁵⁷ Failure to comply with the new regime could lead to vacatur or remand for further agency action.⁵⁸ The Supreme Court is widely viewed as having endorsed a version of the hard look doctrine in its

⁵² See McGarity, supra note 14, at 1396-436.

⁵³ See id. at 1400-03, 1410-26.

^{54 5} U.S.C. § 706(2)(A) (2006); McGarity, supra note 14, at 1410-12.

⁵⁵ See generally Mashaw & Harfst, supra note 28; Melnick, supra note 37. Mashaw and Harfst document the National Highway Transportation and Safety Administration's ("NHTSA") retreat from prospective rulemaking (and toward a regulatory regime consisting almost entirely of after-the-fact recalls) in the face of repeated and successful court challenges to its regulations. Jerry L. Mashaw & David L. Harfst, Regulation and Legal Culture: The Case of Motor Vehicle Safety, 4 Yale J. on Reg. 257, 273–74 (1987) (noting that NHTSA lost six out of twelve rulemaking cases, but lost only one recall case).

⁵⁶ D.C. Circuit Judge Leventhal was the first to use the term "hard look" in the context of judicial review of agency action. See Greater Bos. Television Corp. v. FCC 444 F.2d 841, 851 (D.C. Cir. 1970). Judge Leventhal referred to the agency's duty to give a "hard look at the issues" before making a regulatory decision, id. at 851, though in practice the doctrine evolved to refer to the court's duty to give a "hard look" at whether the agency had adequately conducted its own hard look, see Harold Leventhal, Environmental Decisionmaking and the Role of the Courts, 122 U. Pa. L. Rev. 509, 514 (1974). For a good historical discussion of the doctrine's development, see Reuel E. Schiller, Rulemaking's Promise: Administrative Law and Legal Culture in the 1960s and 1970s, 53 Admin. L. Rev. 1139, 1155-66 (2001).

⁵⁷ See Cass R. Sunstein, Deregulation and the Hard-Look Doctrine, 1983 SUP. Ct. Rev. 177, 181-82.

⁵⁸ See generally Kristina Daugirdas, Note, Evaluating Remand Without Vacatur: A New Judicial Remedy for Defective Agency Rulemakings, 80 N.Y.U. L. Rev. 278 (2005) (discussing vacatur and remand and remand without vacatur as remedies for "defective agency rulemaking," with special reference to the D.C. Circuit).

1983 decision in Motor Vehicle Manufacturers Ass'n v. State Farm Mutual Automobile Insurance Co.⁵⁹

It is probably misleading to attribute a single, coherent doctrine of judicial review to the entire D.C. Circuit, let alone to the judges of all of the federal circuits. As Professor Pierce has suggested, democratic and republican judges on the D.C. Circuit may approach hard look review through "dramatically different" ideological "prisms," and McGarity himself acknowledges that "[t]he practical application of the hard look doctrine has varied widely from circuit to circuit and from case to case within circuits." Furthermore, as discussed later in this Article, there is some compelling evidence that hard look review is not, in practice, all that "hard." But putting those warnings aside, it probably is fair to say that since the 1970s, the federal courts have been more aggressive in reviewing the propriety of agency actions than they were previously, and that this relatively aggressive review is considered to be a primary cause of ossification. 63

How precisely does heightened judicial review lead to ossification? As Professor McGarity explains it, heightened standards of judicial review force agencies to undertake a "Herculean effort of assembling the record and drafting a preamble [explaining the rule as published in the *Federal Register*] capable of meeting judicial require-

⁵⁹ Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins. Co., 463 U.S. 29, 57 (1983). The Court, however, arrested the development of an even harder "hard look" doctrine in its well-known decision in 1978, Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 558 (1978). In that case, the Court rebuked the D.C. Circuit for imposing additional, non-APA procedural requirements upon agencies. See id.

⁶⁰ See Richard J. Pierce, Jr., Two Problems in Administrative Law: Political Polarity on the District of Columbia Circuit and Judicial Deterrence of Agency Rulemaking, 1988 DUKE L.J. 300, 300. Even in the formative years of the doctrine, judges on the D.C. Circuit maintained relatively different conceptions of the proper role of the reviewing judge. See Jordan, supra note 22, at 397–400. In Judge Bazelon's view, for example, judges should ensure that regulation resulted from a reasoned decisionmaking process. Id. at 397–98. By contrast, Judge Leventhal urged courts to review the technical substance of agency regulations—an approach that would require judges to become technically proficient experts in the subject of regulation. Id. at 398. The Supreme Court initially seemed to endorse Judge Leventhal's approach. Id.

⁶¹ McGarity, supra note 14, at 1411.

⁶² See infra Part IX.

⁶³ See Jordan, supra note 22, at 393-94 ("Despite a few dissenting voices, it has become a virtual article of faith that judicial review of agency rules under the current hard look version of the 'arbitrary, capricious, or abuse of discretion' standard has been a major culprit in the 'ossification' of informal rulemaking." (footnotes omitted)); see also Patricia M. Wald, Judicial Review in Midpassage: The Uneasy Partnership Between Courts and Agencies Plays On, 32 Tulsa L.J. 221, 224 (1996) (tracing the development of the hard look doctrine and contrasting it with an earlier era of "almost obsequious deference to agency decisions").

ments for written justification."⁶⁴ As a result, "the process of assimilating the record and drafting the preambles to proposed and final rules may well be the most time-consuming aspect of informal rulemaking."⁶⁵ The prospect of these efforts and the resulting delays "impel the agencies to seek ways to avoid rulemaking."⁶⁶

Or, as Professor Pierce claims, the judicial branch has reinterpreted the APA so as to "transform[] the simple, efficient notice and comment process into an extraordinarily lengthy, complicated, and expensive process" through which courts will vacate agency regulations at the rate of fifty percent.⁶⁷ As Pierce reasonably speculates: "If an agency expects a rulemaking to require five to ten years and tens of thousands of staff hours to complete, with only a 50 percent probability of judicial affirmance of the resulting rule, it will use rulemaking infrequently." In this way, therefore, the judicial branch is responsible for most of the ossification of the rulemaking process.⁶⁹

B. Presidential Causes of Ossification

Although primary blame is directed at the courts, ossification scholars express concern that the White House contributes to ossification as well, particularly through Office of Management and Budget ("OMB") review of rulemaking.⁷⁰ Presidential oversight of the bureaucracy in its modern form can be traced back to President Nixon's "Quality of Life" program, under which "OMB established a procedure for improving the interagency coordination of proposed agency regulations, standards, guidelines and similar materials pertaining to environmental quality, consumer protection, and occupational and public health and safety."⁷¹ OMB review under Nixon was relatively toothless; nonetheless, it was criticized for "add[ing] layers of bureaucratic review [that] created significant delays" in the regulatory process.⁷²

⁶⁴ McGarity, supra note 14, at 1401.

⁶⁵ Id.

⁶⁶ *Id*

⁶⁷ Pierce, supra note 20, at 65.

⁶⁸ Id. at 66-67.

⁶⁹ See id. at 65.

⁷⁰ See, e.g., McGarity, supra note 14, at 1405-07, 1428-36.

⁷¹ John D. Graham et al., Managing the Regulatory State: The Experience of the Bush Administration, 33 FORDHAM URB. L.J. 953, 956 (2006) (internal quotation marks omitted).

 $^{^{72}}$ Kenneth R. Mayer, With the Stroke of a Pen: Executive Orders and Presidential Power 124 (2001).

Despite these criticisms, both Presidents Ford and Carter expanded OMB review of rulemaking, with Carter requiring by executive order that agencies prepare cost-benefit analyses for major regulations.⁷³ Carter's actions were influenced in large part by the fear that, absent White House action implementing stronger executive oversight, Congress would pass legislation requiring cost-benefit analysis as to *all* federal regulations.⁷⁴

President Reagan further formalized and strengthened executive branch oversight through his well-known Executive Order 12,291.75 The order "require[d] all executive agencies to submit all proposed rules and policy documents to OMB prior to their release," with OMB ensuring that the agencies were basing their regulations on "adequate information concerning the need for and consequences of the proposed action."76 Agencies also were required to submit a formal "Regulatory Impact Analysis" for so-called "major rules" that analyzed the costs and benefits and the comparative cost-effectiveness of the proposed action.⁷⁷ Further, they were required under Reagan's Executive Order 12,498 to submit annual regulatory plans to a specialized office within OMB: the Office of Information and Regulatory Affairs ("OIRA").78 President George H. W. Bush maintained Reagan's supervisory framework, and President Clinton implemented a somewhat modified oversight regime through his Executive Order 12,886.79 President George W. Bush further strengthened Clinton's review framework by requiring OIRA to "sign[] off on the conclusion that the benefits of the rule will exceed its costs" and mandating that agencies get approval to commence rulemakings from an agency "Regulatory Policy Officer."80 President Obama is currently considering a major revision of past practices, though it is difficult to imagine that he will establish a regime in which his level of control over bureaucratic decisions is meaningfully less than that of his predecessors.81

⁷³ See id. at 124-25.

⁷⁴ See id.

⁷⁵ Exec. Order No. 12,291, 3 C.F.R. 127 (1981), revoked by Exec. Order No. 12,866, 3 C.F.R. 638 (1994), reprinted in 5 U.S.C. § 601 (2006).

⁷⁶ Michael Herz, Imposing Unified Executive Branch Statutory Interpretation, 15 Cardozo L. Rev. 219, 222 (1993) (footnote omitted).

⁷⁷ Id.

⁷⁸ Exec. Order No. 12,498 § 1(d), 3 C.F.R. 323, 323 (1986), revoked by 3 C.F.R. 638.

^{79 3} C.F.R. 638.

⁸⁰ Seidenfeld, supra note 24, at 299 n.171.

⁸¹ See id.; see also Exec. Order No. 13,497, 3 C.F.R. 218 (2010) (revoking past executive orders concerning regulatory planning and review).

The modern regime of presidential oversight was intended to promote "political accountability, interagency coordination, rational priority setting, and cost-effective rulemaking" and to "curb[]... the regulatory excesses of overzealous bureaucrats bent on promoting their agencies' narrow agendas."82 Its potential capacity to contribute to ossification is straightforward. The mere act of oversight itself may delay rule promulgation, as agencies must wait for OMB to review proposals and must respond to any OMB concerns.83 Compiling costbenefit (or regulatory impact) analyses can also be costly and time consuming.84 As agencies devote more resources to meeting White House analytic demands, they will have fewer resources to devote to their core regulatory functions. This diversion of resources may prevent agencies from developing desired regulations, or create important incentives to avoid undertaking certain regulatory efforts in order to avoid oversight-imposed costs.85 The mere fact that OMB can reverse a regulatory decision might also inject significant uncertainty into the regulatory process, further discouraging the agency from acting.86

C. Congressional Causes of Ossification

Congress allegedly has done its part to promote ossification as well, by "enact[ing] statutes specifying broad analytical requirements for all agency rulemaking."⁸⁷ Professor McGarity points in particular to the Regulatory Flexibility Act ("RFA"),⁸⁸ which requires agencies to prepare a special analysis whenever a proposed rule will pose a

⁸² Nicholas Bagley & Richard L. Revesz, Centralized Oversight of the Regulatory State, 106 COLUM. L. REV. 1260, 1261 (2006).

⁸³ See, e.g., Alan B. Morrison, OMB Interference with Agency Rulemaking: The Wrong Way to Write a Regulation, 99 HARV. L. REV. 1059, 1064 (1986) (arguing that OMB review imposes "costly delays" on regulation that put American health and safety at risk.); see also David C. Vladeck, O.M.B.: A Dangerous Superagency, N.Y. TIMES, Sept. 6, 1989, at A25 (arguing that "O.M.B. review adds extensive and needless delay, which inevitably costs lives").

⁸⁴ See McGarity, supra note 14, at 1406 (noting that regulatory impact analyses may cost more than two million dollars and require one or more person-years of agency staff effort).

⁸⁵ See id.

⁸⁶ See id. at 1433 (arguing that "agency officials cannot know whether internally generated solutions to problems that arise in the early development of a rule will withstand OMB review").

⁸⁷ Id. at 1404. Congress also enjoys a number of more traditional oversight and control mechanisms, such as congressional hearings and investigations and threats to cut agency budgets. See Mark Seidenfeld, The Psychology of Accountability and Political Review of Agency Rules, 51 DUKE L.J. 1059, 1075-91 (2001) (discussing congressional mechanisms of oversight and control); see also Jack M. Beermann, Congressional Administration, 43 SAN DIEGO L. Rev. 61 (2006) (discussing Congress's involvement in administrative law).

⁸⁸ Regulatory Flexibility Act, Pub. L. No. 96-354, 94 Stat. 1164 (1980) (codified at 5 U.S.C. §§ 601-612 (2006)).

"significant economic impact on a substantial number of small entities." Congress also passed the Paperwork Reduction Act ("PRA") in the early 1980s, which requires agencies to consider how their rules may increase the information collection costs of the regulated public. Another example is the National Environmental Policy Act, craim originally passed in 1969 and amended in 1982, which requires agencies to prepare environmental impact statements for major federal actions that may significantly affect the environment. According to the ossification literature, these analytic and reporting requirements take time to complete and consume scarce agency resources, creating disincentives to regulate (or difficulties in regulating) through notice and comment.

D. Ossification and Non-Rule Rules

One important strand of the ossification literature emphasizes the ways in which the various procedural constraints discussed above may encourage agencies to regulate outside of the overburdened notice and comment process, by issuing what Professor Morton Rosenberg has called "non-rule rules," or what Professor Robert Anthony refers to as "non-legislative rules." The notion of a non-rule rule is not necessarily obvious, and therefore it merits some discussion.

The APA recognizes a distinction between "legislative rules" that have binding legal effect and that must normally be promulgated through notice and comment, and "interpretative rules" that are exempt from procedural requirements.⁹⁷ Legislative rules "grant new

^{89 5} U.S.C. § 602(a)(1).

⁹⁰ Paperwork Reduction Act of 1995, Pub. L. No. 104-13, 109 Stat. 163 (codified at 44 U.S.C. §§ 3501-3520 (2006)).

⁹¹ See 44 U.S.C. § 3501.

⁹² National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852, amended by Pub. L. No. 97-258, § 4(b), 96 Stat. 995 (1982).

⁹³ See id.

⁹⁴ See, e.g., McGarity, supra note 14, at 1427-28.

⁹⁵ See Morton Rosenberg, Whatever Happened to Congressional Review of Agency Rulemaking?: A Brief Overview, Assessment, and Proposal for Reform, 51 Admin. L. Rev. 1051, 1076 (1999) (discussing "non-rule rules").

⁹⁶ See Anthony, supra note 45, at 1324–25 (defining "non-legislative rules" as including "interpretive rules" and all other "policy documents" that impose "binding norms" on the public without passing through notice and comment).

⁹⁷ For a description and history of the distinction between substantive and interpretative rules, see Kevin W. Saunders, *Interpretative Rules with Legislative Effect: An Analysis and a Proposal for Public Participation*, 1986 DUKE L.J. 346, 346, 348–52. The boundaries, however, between these categories of agency action tend to be rather blurry. *See id.* at 347 ("[T]here has always been doubt whether one could reliably tell the difference between a rule that interpreted

rights and impose new obligations," whereas interpretative rules are said to "merely explain [the agency's understanding of] the rights and obligations already created . . . by . . . statute." The APA also exempts from § 553's procedural requirements agency "general statements of policy"—which, unlike legislative rules, do not have binding legal force—and "rules of agency organization, procedure, or practice"—which may be contrasted with the "substantive" nature of legislative rules. 99

Of course, formally nonbinding and purportedly nonsubstantive non-rule rules may nonetheless be both substantively important to regulated parties and, practically speaking, as binding an agency norm as a proper legislative rule.¹⁰⁰ Although a court may refuse to enforce a non-rule rule against a regulated party that has the temerity to challenge the agency's application of it, the prospect of suing an agency over its improper use of non-rule rules often will be an unattractive one, and agencies may be able to regulate via non-rule rules with relative impunity.¹⁰¹

If one accepts the premise that legislative rules have become dramatically more costly for agencies to develop and promulgate, it would not be terribly surprising to see that agencies increasingly are willing to risk court sanction for misuse of non-rule rules by attempting to issue substantively important regulations disguised as mere "interpretations" or "policies." Indeed, that is precisely what Professor Anthony and others argue has happened.¹⁰² Anthony asserts that "it

a statute and one that extrapolated from the statute."); see also Michael Asimow, Nonlegislative Rulemaking and Regulatory Reform, 1985 DUKE L.J. 381, 384 (discussing the difficulties courts have experienced in drawing the line between legislative and nonlegislative rules because the "practical impact of either type of rule on members of the public is the same").

⁹⁸ Saunders, supra note 97, at 350.

⁹⁹ See generally Charles H. Koch, Jr., Public Procedures for the Promulgation of Interpretative Rules and General Statements of Policy, 64 Geo. L.J. 1047 (1976) (distinguishing between legislative rules, interpretative rules, and general statements of policy). A statement of policy is not usually conceived of as law, but rather "merely announces how the agency intends to interpret the law." Reginald Parker, The Administrative Procedure Act: A Study in Overestimation, 60 Yale L.J. 581, 598 (1951). Such an announcement "may be express or implied; it may follow from the agency's conduct or it may be deduced from press releases or newspaper interviews." Id. According to Professor Arthur Bonfield, policy statements may often be "directed primarily at the staff of an agency describing how it will conduct agency discretionary functions, while other [e.g. legislative] rules are directed primarily at the public in an effort to impose obligations on them." Arthur Earl Bonfield, Some Tentative Thoughts on Public Participation in the Making of Interpretative Rules and General Statements of Policy Under the A.P.A., 23 ADMIN. L. Rev. 101, 115 (1970).

¹⁰⁰ See Anthony, supra note 45, at 1315; see also Asimow, supra note 97, at 384.

¹⁰¹ See Anthony, supra note 45, at 1316.

¹⁰² See id. at 1316-17; see also Robert A. Anthony, "Well, You Want the Permit, Don't

is manifest that nonobservance of APA rulemaking requirements is widespread," and he provides numerous examples of agencies attempting to regulate through non-rule rules—though, interestingly, all of his examples appear to involve courts disapproving of the practice. The consequence of non-rule rules, he says, is public confusion over content of regulatory law, as well as the "[d]oubtless more costly... tendency to overregulate that is nurtured when the practice of making binding law by guidances, manuals, and memoranda is tolerated." Or, as Professor Pierce has put it, the increased use of non-rule rules "is not an acceptable solution to the problem of ossification of [notice and comment] rulemaking. It will produce many more binding rules, but those rules will be of lower quality and will have less political legitimacy" because of the lack of public participation. 105

E. Proposed Responses to Ossification

Belief in the existence of ossification, and its normative undesirability, has led prominent observers of the federal administrative process to call for ambitious reforms to the regulatory system. For example, a 1993 Carnegie Commission report on "improving regulatory decision making" used the threat of ossification to support its recommendation that agencies make greater use of so-called "negotiated rulemaking." The report called on agencies to develop a complicated "menu" of rulemaking procedures containing "various degrees of public participation and comment," from which agencies could choose depending on the needs of a particular rulemaking. 107

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 "[a]gencies" use of informal devices [to regulate] is . . . pervasive," and linking the use of "informal devices" to "ossification").

¹⁰³ Anthony, supra note 45, at 1316.

¹⁰⁴ Id. at 1317.

¹⁰⁵ Pierce, supra note 20, at 86.

¹⁰⁶ CARNEGIE COMM'N ON SCI., TECH., & GOV'T, supra note 26, at 111.

¹⁰⁷ Id. at 110-11. Professor Cary Coglianese explains negotiated rulemaking as supplement[ing] the notice-and-comment procedures of the . . . (APA) with a negotiation process that takes place before an agency issues a proposed regulation. The agency establishes a committee comprised of representatives from regulated firms, trade associations, citizen groups, and other affected organizations, as well as members of the agency staff. The committee meets publicly to negotiate a proposed

Professor Jody Freeman similarly cites the problem of ossification to support her call to shift the regulatory process toward a model of "collaborative governance." Freeman's model "views the administrative process as a problem-solving exercise in which parties share responsibility for all stages of the rule-making process, in which solutions are provisional, and in which the state plays an active, if varied, role." For Freeman, negotiated rulemaking is a prime example of how agencies should develop regulations, though in current administrative practice negotiated rulemaking is rarely used. 110

Professor Frank Cross has argued forcefully that ossification and related "pathological consequences" have turned judicial review of agency decisions into a "lose-lose proposition for the public."¹¹¹ Cross's proposed solution is not negotiated rulemaking, but rather the total elimination of judicial review¹¹²—a proposal that, if followed, would significantly impact courts' ability to protect the public from arbitrary or illegal bureaucratic actions.¹¹³

Other scholars use the threat of ossification to attack presidential oversight of the rulemaking process. For example, it has been suggested that OMB-mandated cost-benefit analysis ("CBA"), which requires the societal benefits of a regulation to demonstrably outweigh the costs, has contributed to ossification by requiring "fruitless num-

rule. If the committee reaches consensus, the agency typically adopts the consensus rule as its proposed rule and then proceeds according to the notice-and-comment procedures specified in the APA. Proponents of negotiated rulemaking claim that these procedures—which encourage affected parties to reach an agreement at the outset—will decrease the amount of time it takes to develop regulations and, more notably, reduce or eliminate subsequent judicial challenges.

Cary Coglianese, Assessing Consensus: The Promise and Performance of Negotiated Rulemaking, 46 DUKE L.J. 1255, 1256-57 (1997) (footnotes omitted).

- 108 Freeman, supra note 15, at 8-10.
- 109 Id. at 6.

¹¹⁰ See Jeffrey S. Lubbers, Achieving Policymaking Consensus: The (Unfortunate) Waning of Negotiated Rulemaking, 49 S. Tex. L. Rev. 987, 996 (2008) (documenting the decline of negotiated rulemaking to its current low level).

¹¹¹ Cross, supra note 26, at 1019-44, 1067-69.

¹¹² See id. at 1069. See generally Frank B. Cross, Shattering the Fragile Case for Judicial Review of Rulemaking, 85 VA. L. REV. 1243 (1999).

¹¹³ See Cass R. Sunstein, On the Costs and Benefits of Aggressive Judicial Review of Agency Action, 1989 DUKE L.J. 522, 527 ("Even in the absence of a systematic treatment... it is possible to point to reasons to believe that aggressive judicial review, evaluated under any criterion, has been desirable in many contexts."); see also Sandra B. Zellmer, The Devil, the Details, and the Dawn of the 21st Century Administrative State: Beyond the New Deal, 32 ARIZ. ST. L.J. 941, 1019 (2000) ("[I]ncreased accountability and public confidence resulting from full and open [rulemaking] processes, safeguarded by judicial review, will likely outweigh the costs of delay in most cases.").

ber crunching, which tends to delay agency action, or stymie it altogether, without producing any significant increase in the efficiency or rationality of regulation."¹¹⁴ The obvious reform is to eliminate OMB review or CBA.¹¹⁵ But doing the former would negate any possible benefits arising from strong presidential control of regulation, such as greater political accountability.¹¹⁶ And doing the latter would remove a potentially promising, intuitively attractive method for disciplining the regulatory process.¹¹⁷

Most recently, Professor Dorit Reiss has invoked ossification to support her call for allowing agencies to choose between three distinct "models for overseeing proposed rules" depending on the nature of individual rulemakings, including "peer review" and "deliberative democracy mechanisms." Reiss's proposal echoes the spirit of the 1993 Carnegie Commission report cited above, in that she would grant

Michael A. Livermore, Reviving Environmental Protection: Preference-Directed Regulation and Regulatory Ossification, 25 Va. Envtl. L.J. 311, 340 (2007) (discussing this argument, and citing Morrison, supra note 83). Professor McGarity himself adopts a nuanced view of CBA and other analytic requirements: he is sensitive to their various practical and normative limitations, but he also suggests that analytic requirements may have some ability to improve regulatory outcomes. See Thomas O. McGarity, Reinventing Rationality: The Rule of Regulatory Analysis in the Federal Bureaucracy 111–64 (1991).

¹¹⁵ See Morrison, supra note 83, at 1071 (discussing elimination of OMB review); see also LISA HEINZERLING & FRANK ACKERMAN, PRICING THE PRICELESS: COST-BENEFIT ANALYSIS OF ENVIRONMENTAL PROTECTION 1-3 (2002) (arguing that CBA is "deeply flawed" and "incapable of delivering what it promises" and therefore should be rejected in favor of effective alternatives).

⁽arguing that strong presidential control of the bureaucracy "renders the bureaucratic sphere more transparent and responsive to the public, while also better promoting important kinds of regulatory competence and dynamism"); see also Christopher C. DeMuth & Douglas H. Ginsburg, White House Review of Agency Rulemaking, 99 Harv. L. Rev. 1075, 1080–82 (1986) (discussing the potential benefits of centralized review of rulemaking); Herz, supra note 76, at 221 (noting the "striking support for the general principle of presidential oversight of rulemaking" and providing numerous citations to proponents of presidential oversight). Others argue, however, that strong presidential oversight is undesirable. See Rachel E. Barkow, Insulating Agencies: Avoiding Capture Through Institutional Design, 89 Tex. L. Rev. 15, 43–44, 60 (2010) (arguing that OMB review may increase the risk of agency "capture" by special interests, a prospect that she views as normatively undesirable); see also Thomas O. McGarity, Presidential Control of Regulatory Agency Decisionmaking, 36 Am. U. L. Rev. 443, 454–62 (1987) (suggesting that presidential oversight may actually decrease political accountability, in addition to posing due process concerns and conflicting with principles of judicial review).

On the potential benefits of cost-benefit analysis, see generally Robert W. Hahn & Cass R. Sunstein, A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis, 150 U. Pa. L. Rev. 1489 (2002); see also McGarity, supra note 114, at 111–23 (discussing the "virtues" of requirements that agencies engage in "regulatory impact analysis," a form of cost-benefit analysis). But see McGarity, supra note 114, at 124–64 (discussing "limitations" of cost-benefit requirements).

¹¹⁸ Reiss, supra note 50, at 321.

agencies enhanced discretion to choose among various rulemaking procedures, which, in her view, necessarily would entail expanded agency choice over "how their [regulatory] decisions will be reviewed."¹¹⁹

In sum, the threat of ossification has led scholars to propose a number of potentially far reaching reforms to the federal regulatory process. It is difficult to determine what effect these reforms would have on regulatory outcomes. But it does seem clear, at least, that there is a real risk that certain of these reform proposals could decrease opportunities for the elected and judicial branches of the federal government, and for the public at large, to monitor, influence, and check undesirable agency actions. For example, Professor Reiss herself notes that her proposed reform, which lets agencies determine "how their decisions will be reviewed" by courts, "assume[s] a high level of trust in agencies" and so may be "prone to abuse" or even "to guarantee abuse." Furthermore (and again to quote Reiss):

Any reform [of the APA's notice and comment scheme] carries substantial costs in terms of effort expended in adjusting to a new system and in dealing with the inevitable unintended consequences. It is always hard to change, especially when the change is substantial and affects a large system. Therefore, those suggesting reform should have the burden of demonstrating that the costs associated with their suggested changes are worthwhile.¹²¹

This Article does not address the benefits that might arise from reforming the notice and comment regime, but it seems clear that whether such reforms are worth pursuing also depends, in part, on whether current arrangements are truly plagued by the ills that the ossification literature identifies.

II. Critiques of the Ossification Thesis

The ossification thesis has long been accepted as a matter of faith. With relatively few exceptions, scholars have failed to subject the notion of ossification to much empirical testing. This is not to say that skeptics haven't challenged certain aspects of the thesis. In particular, Professor Mark Seidenfeld has been a persistent and thoughtful par-

¹¹⁹ Id. at 372-73.

¹²⁰ Id.

¹²¹ Id. at 370.

¹²² For examples of the limited empirical testing to which the ossification thesis has been subjected, see *supra* note 25 and accompanying text.

tial critic. In a 1997 article (that elicited a spirited response from McGarity), Seidenfeld generally agreed that the rulemaking process has become "unnecessarily cumbersome," but argued that ossification was "not a foregone conclusion" of meaningful judicial review, which itself performs a "valuable function by encouraging agencies to think through the full implications of their policies." Seidenfeld essentially agreed that "aggressive judicial review of agency reasoning has contributed to ossification," but did not believe that "merely easing the standard of review will deossify [the rulemaking] process." 124

In a recent and important article, Seidenfeld revisited his concession that judicial review necessarily contributes to ossification.¹²⁵ Drawing on economic and organizational theories of decisionmaking, he now suggests that any ossifying effects of stringent judicial review may be offset by the variety of other factors that influence an agency's decisions to act: for example, decisional heuristics and biases, and professional incentives to take or to avoid certain courses of action.¹²⁶

Seidenfeld's critiques of the ossification thesis are more speculative and theoretical than they are empirical.¹²⁷ Self-consciously empirical challenges are rare. Professor Jordan's 2000 article is a principal exception.¹²⁸ Jordan identified all legislative rules remanded by the D.C. Circuit from 1985 to 1995.¹²⁹ He then sought to determine what happened to the regulatory initiatives after remand.¹³⁰ Jordan found that agencies were often able to "recover" from a remand relatively quickly and successfully by re-explaining the rules.¹³¹ He identified only five instances (out of sixty-one total remands) in which an agency was unable to "recover" completely or partially its initial regulatory achievement after remand.¹³² As he claims, his findings have "profound implications for our understanding of the causes of the ossification of informal rulemaking and the possible solutions to that problem."¹³³

¹²³ Seidenfeld, Demystifying Deossification, supra note 19, at 489, 514; see McGarity, Response, supra note 17. Seidenfeld also supplied a reply to McGarity's response. See Seidenfeld, Reply, supra note 19.

¹²⁴ Seidenfeld, Demystifying Deossification, supra note 19, at 523.

¹²⁵ See Seidenfeld, supra note 24, at 252.

¹²⁶ See id. at 281-85, 287-93.

¹²⁷ See id. at 258 (describing the theoretical approach to the article).

¹²⁸ Jordan, supra note 22.

¹²⁹ See id. at 407.

¹³⁰ See id.

¹³¹ See id. at 424.

¹³² See id. at 413, 433.

¹³³ Id. at 439.

In particular, Professor Jordan's research suggests that courts are much less likely to seriously interfere with agency decisions than the ossification literature commonly assumes.¹³⁴ His survey of D.C. Circuit remands provides evidence that hard look review, as it is applied in practice, is unlikely to "stifle[] or deter[] informal rulemaking... [by] impos[ing] excessive and unnecessary costs on financially strapped agencies."¹³⁵ Instead, the D.C. Circuit generally seems to respect agency decisions; when it does not, agencies are able to satisfy judicial concerns relatively quickly.¹³⁶

Our own recently published study provides another empirical test.¹³⁷ Since the early 1980s, agencies have been required to publish their various regulatory activities in the Unified Agenda, a twiceyearly document published in the Federal Register¹³⁸. The Unified Agenda records regulatory proposals and initiatives using a unique regulatory identification number ("RIN"), and agencies regularly update the progress of each action (identified by RIN) throughout the regulatory process, up until promulgation as a final rule. 139 The study used a database supplied by RISC to analyze all notice and comment rules published in the Unified Agenda from 1983 to 2006.140 It examined whether notices of proposed rulemaking ("NPRM") that were subject to procedural constraints, such as OMB review and analysis required by the Regulatory Flexibility Act, took significantly longer to be promulgated than unconstrained rules. The statistical analysis showed that procedural constraints did not significantly increase time to completion.141

And what about an agency's resort to non-rule rules? Very little empirical research has been done on the subject, with the recent exception of a student note published in the *Yale Law Journal*.¹⁴² Connor Raso presents what he calls the "first large-scale empirical analysis" of agency use of non-rule rules.¹⁴³ Raso relies on informa-

¹³⁴ See id. at 442.

¹³⁵ Id. at 445.

¹³⁶ See id. at 443.

¹³⁷ Yackee & Yackee, supra note 25.

¹³⁸ See id. at 267-68.

¹³⁹ See id.

¹⁴⁰ See id. at 262, 267-68.

¹⁴¹ See id. at 274-80.

¹⁴² Raso, supra note 24. For two other interesting empirical studies on the use of non-rule rules, see James T. Hamilton, Going by the (Informal) Book: The EPA's Use of Informal Rules in Enforcing Hazardous Waste Laws, in 7 Advances in the Study of Entrepreneurship, Innovation, & Growth 109 (1996); see also Hamilton & Schroeder, supra note 102.

¹⁴³ Raso, supra note 24, at 786.

tion provided by agencies on their websites to compile a list of "guidance documents" issued by five federal agencies from 1996 to 2006.¹⁴⁴ He then compares the number of "significant" guidance documents to the number of legislative rules promulgated by each agency. He finds that the proportion of guidance documents to rules is remarkably low.¹⁴⁵ For example, the average ratio of significant guidance documents to legislative rules is just 0.08.¹⁴⁶ In other words, Raso finds no evidence that agencies are substituting non-rule rules for legislative rules. Agencies generally issue relatively few significant non-rule rules, and they continue to issue large numbers of legislative rules.¹⁴⁷

These various studies have begun to call into question the accuracy of the ossification thesis, but, as of yet, none has compared the volume and speed of rulemaking in the allegedly ossified modern era to the volume and speed of rulemaking in the days before the imposition of the hard look doctrine and expanded opportunities for presidential and congressional oversight. This failure to provide a true "before-and-after" picture of the administrative state, in which administrative practice in the preossified era is compared and contrasted with administrative practice in the ossified era, is a result of the lack of readily accessible data on pre-1980s rulemaking. The RISC data exist in computerized database form, which obviously facilitates quantitative analysis for rules made after 1983, but no equivalent database exists for pre-1983 rules. And while case studies of early rulemakings certainly are possible, in our view, the ossification literature has relied too frequently on case studies to make generalized claims about the failings of modern regulatory practice.148

III. Hypothesized Consequences of Ossification

The ossification literature predicts (or at least can be read to suggest) that the accretion of the various procedural constraints imposed by the courts, the White House, and Congress on bureaucratic autonomy has severely impacted the ability of federal agencies to fulfill their § 553 notice and comment rule-writing obligations.¹⁴⁹ Drawing

¹⁴⁴ *Id.* at 805 (analyzing the Environmental Protection Agency, the Food and Drug Administration, the Federal Communications Commission, the Occupational Safety and Health Administration, and the Internal Revenue Service).

¹⁴⁵ See id. at 814.

¹⁴⁶ Id. at 813 tbl.3.

¹⁴⁷ See id. at 813-14.

¹⁴⁸ For examples of case studies on ossification, see generally Mashaw & Harfst, *supra* note 28; Melnick, *supra* note 37.

¹⁴⁹ See supra Part I.

on the discussion presented above, it is possible to identify four main hypothesized consequences of ossification.

First, because notice and comment rulemaking has become more costly since the mid-1970s, agencies will fail to utilize notice and comment as much as they should. Thus, the volume of notice and comment NPRMs and final rules would be expected to decline since that period.¹⁵⁰

Second, when agencies choose to regulate via notice and comment, compliance with various procedural hoops and hurdles will significantly delay rule promulgation, so that it will take longer to promulgate rules in the ossified period than it did in the past.¹⁵¹

Third, where agencies persist in proposing notice and comment rules, the proposal process may bring to light unforeseen objections by key constituents. The likely costs associated with adequately responding to those objections (compiling an improved record, drafting adequate responses) or the threat of an eventual lawsuit may encourage the agencies to abandon their NPRMs at higher rates.¹⁵²

Fourth, the rigors and uncertainties of the notice and comment process may encourage agencies to increasingly resort to the use of non-rule rules to achieve important regulatory objectives.¹⁵³

The next Part describes our strategy for conducting a large, multirule, quantitative comparison of pre- and post-ossification rulemaking that aims to test each of these hypotheses.

IV. Designing an Empirical Test of the Ossification Thesis

In designing a test of the ossification thesis, the main challenge was constructing a dataset of notice and comment NPRMs and final rules that covered a large number of regulatory actions across a long span of years. We relied on the fact that the APA and the Federal Register Act ("FRA")¹⁵⁴ require agencies to publish their NPRMs

¹⁵⁰ As Professor Pierce asserts in his treatise: "[T]here is mounting evidence that agency use of rulemaking is declining [and] [s]ome agencies that used to rely extensively on rulemaking have very nearly given up the process." Pierce, supra note 23, § 7.11. He goes on to suggest that the causes are those discussed in the ossification literature. See id. The notion that agencies have abandoned notice and comment also permeates the work by Professor McGarity and other ossification scholars already cited above. See supra notes 14, 20–24 and accompanying text.

¹⁵¹ See, e.g., STEPHEN BREYER, BREAKING THE VICIOUS CIRCLE: TOWARD EFFECTIVE RISK REGULATION 49 (1993) (asserting that OMB and judicial review of rulemaking "take[s] time" and that agencies have responded to hard look review by "adopt[ing] complex, time-consuming procedures . . . for making rules").

¹⁵² See, e.g., McGarity, supra note 14, at 1388-90, 1397, 1448.

¹⁵³ See, e.g., Anthony, supra note 102, at 35-38.

^{154 44} U.S.C. § 1505 (2006).

and final rules in the *Federal Register*, the official daily journal of the federal bureaucracy.¹⁵⁵ Until recently, compiling a list of notice and comment proposals and final rules would have entailed laborious searching through hard copies of the *Federal Register*. Fortunately, Westlaw has developed a fully searchable digital database covering all past *Federal Register* issues.¹⁵⁶ This means that through structured electronic searches, it is possible to systematically identify virtually all theoretically relevant NPRMs and final rules without the need to rifle through thousands of paper volumes.

Despite the advantages offered by Westlaw, we experienced three particular challenges. First, the *Federal Register* is not organized in a way that distinguishes § 553 proposals from other kinds of regulatory proposals and notices. Although it has sections entitled "Proposed Rules" and "Final Rules and Regulations," there are many other items besides § 553 NPRMs and final rules that are published in these sections, and simply counting up the number of entries in these sections would return incorrect and grossly misleading results. Second, agencies themselves typically do not explicitly identify a given proposal or rule as a § 553 action. As a result, our searches returned a large number of false positives, which meant that all coding decisions had to

¹⁵⁵ See id. (requiring agencies to publish in the Federal Register all documents having "general applicability and legal effect"); see also 5 U.S.C. § 552(a)(1)(D) (2006) (requiring publication of "substantive rules of general applicability adopted as authorized by law, and statements of general policy or interpretations of general applicability formulated and adopted by the agency"). For a description of the APA and FRA publication requirements, see Randy S. Springer, Note, Gatekeeping and the Federal Register: An Analysis of the Publication Requirement of Section 552(a)(1)(D) of the Administrative Procedure Act, 41 ADMIN. L. REV. 533, 533–37 (1989).

Although it is certainly possible that agencies do not fully comply with these publication requirements, see id. at 541–43, it seems that agencies almost certainly comply as to the publication of their substantive proposals and final rules where the agencies are seeking public comment. Substantive proposals and final rules are clearly subject to both APA and FRA publication requirements, and the courts have long insisted that agencies publish notice of substantive regulatory actions if the actions are to be given legal effect. See, e.g., Hotch v. United States, 212 F.2d 280, 281–82, 284 (9th Cir. 1954), superseded by statute, 5 U.S.C. § 552(a)(1) (1967), as recognized in United States v. Mowat, 582 F.2d 1194, 1201 (9th Cir. 1978) (holding that a DOI action changing salmon fishing regulations in Alaska could not be enforced against defendant fisherman because the action had not been published in the Federal Register). Agencies may seek to avoid the costs of notice and comment by issuing (and failing to publish) nonrule rules, but if the agency decides to regulate via notice and comment, it faces no real incentive to avoid publication of both the NPRM and the final rule. Indeed, Springer suggests that agency decisions to publish substantive (notice and comment) rules are "virtually automatic." See Springer, supra, at 545.

¹⁵⁶ The Westlaw database is "FR-ALL." Westlaw, http://lawschool.westlaw.com/ (on main search page, look under the "Administrative Materials" tab; then select the "Federal Register" option) (last visited May 31, 2012).

be verified manually. Third, and as explained in more detail below, our analysis required us to "match" final rules with their proposals, something that often necessitated multiple Westlaw searches for a single regulation. In the end, the data collection took over a year to complete and involved the efforts of several research assistants.

A. Why the U.S. Department of Interior?

We elected to compile all § 553 (e.g. notice and comment or informal or legislative) NPRMs and final rules issued by the rule-writing agencies of the DOI. We limited our efforts to a single department because, despite the efficiencies that Westlaw facilitates, the search process remained arduous and time consuming. Extending the project to the entire federal government, or to multiple departments, would have exceeded our resources greatly. We concentrated on § 553 rules because the § 553 notice and comment process is the primary focus of the ossification literature.¹⁵⁷

We chose the DOI over the other agencies for three main reasons. First, the structure of the DOI has remained relatively stable since the early years of our Study, with the four major rule-writing DOI agencies—the Bureau of Indian Affairs ("BIA"), Bureau of Land Management ("BLM"), Fish and Wildlife Service ("FWS"), and National Park Service ("NPS")—all in existence over the entire period (the footnotes list thirteen other DOI agencies included in our Study). In contrast to the DOI, many other departments and agencies potentially worthy of study either were not created until the late 1960s or 1970s or endured fundamental organizational changes during the period of the Study, thereby limiting our ability to collect a significant sample of preossification rulemaking activity. For example, the Department of Labor's OSHA was not created until 1970. EPA dates back to the same year. The Department of Transportation did

¹⁵⁷ See generally, e.g., McGarity, supra note 14.

¹⁵⁸ The other DOI agencies included in our Study are 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").

¹⁵⁹ Occupational Safety and Health Act of 1970, Pub. L. No. 91-596, 84 Stat. 1590 (1970) (codified in scattered sections of 29 U.S.C.).

¹⁶⁰ EPA Order No. 1110.2 (Dec. 4, 1970).

not open its doors until 1967.¹⁶¹ Choosing a department like the DOI, with major agencies that have existed for many years, thus allows us to complete a proper "before-and-after" examination.

Second, and just as important, the DOI's regulatory portfolio includes a diverse array of subjects, which makes it easier to offer generalizable conclusions about the reality or magnitude of ossification and the historical development of federal notice and comment practice more broadly. Indeed, the diversity of the DOI's portfolio is illustrated by its semiofficial nickname, "the Department of Everything Else." ¹⁶²

Third, the DOI's regulatory portfolio is of potentially high salience to impacted members of the public.¹⁶³ Important issue areas include the regulation of endangered species, the regulation of hunting and grazing on federal lands, the regulation of free speech in national parks, and the regulation of mining and mine reclamation. The ossification literature generally is concerned with the ossification of substantively important rules, and our focus on DOI agencies helps to ensure that the dataset will contain enough of these rules to provide a valid test of the ossification thesis.

B. Compiling the Database

We initiated our project by compiling a database of all NPRMs issued by the DOI from January 1, 1950 through December 31, 1990 in which the agency sought public input on a proposal to modify the CFR. We consider NPRMs meeting those two basic requirements—a request for public input and a proposed modification to the CFR—to be "§ 553 NPRMs." To identify NPRMs, we ran a series of Westlaw searches. Sample search language is reproduced in the footnotes. 164

¹⁶¹ Department of Transportation Act, Pub L. No. 89-670, 80 Stat. 931 (1966) (codified in scattered sections of 49 U.S.C.).

¹⁶² See, e.g., ROBERT M. UTLEY & BARRY MACKINTOSH, THE DEPARTMENT OF EVERY-THING ELSE: HIGHLIGHTS OF INTERIOR HISTORY (1989), available at http://www.nps.gov/history/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").

¹⁶³ Edward Weinberg & John R. Little, Jr., Meandering Through the Interior Maze, 1 NAT. RESOURCES & Env't 17, 17 (1985) ("Interior's activities tend to attract unusual attention from the media and a wide variety of outside interests.").

¹⁶⁴ To identify § 553 NPRMs, 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). The "PR" term refers to the "Preliminary" (or header) section of each Westlaw document, which contains basic information about the document. In the case of Federal Register documents, it almost always

We recorded basic information about each § 553 NPRM, including the issuing agency, *Federal Register* citation, date of publication, proposal title, and CFR section affected. With a few exceptions, the identification of the NPRMs was time consuming but relatively straightforward.¹⁶⁵

After compiling the list of NPRMs, we attempted to match each NPRM with its associated final rule. To do this, we searched for entries in the *Federal Register*'s "Rules and Regulations" section that referenced each individual NPRM. 166 Typically, the preamble to a final rule will reference 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, and so the final rule had to be matched to its NPRM on some other basis (such as a reference to the title or subject of the NPRM). We (or our research assistants) verified that the final rule returned in the Westlaw search matched the selected NPRM by reading the final rule.

contains the issuing federal department and agency. The "PROPOSED RULE" term limits the search to notices listed in the "proposed rule" section of the *Federal Register*, which is itself divided into "Notices," "Proposed Rules," and "Rules and Regulations" sections. Not all entries in the Proposed Rules or Rules and Regulations sections are § 553 proposals or final rules. The terms "COMMENT" and "PARTICIPAT!" are the key search terms. They return documents in which the agency is offering the public a chance to provide "comment" on the proposal or otherwise to "participate." In our experience, agencies virtually always include some variant of the word "comment" or participate" whenever a proposal is seeking public input under § 553 of the APA.

will reissue an NPRM, incorporating modifications based on a first round of comments. In those cases we elected to retain the original NPRM as the NPRM of interest. This means, for example, that we do not include the revised proposal in our dataset as a distinct NPRM. Nor do we match final rules to revised NPRMs; instead, we match final rules to the original proposal. This strategy is particularly important for our analysis of regulatory delay, as the fact of reissue will tend to enter the dataset indirectly by lengthening the time to promulgation. Where a revised NPRM explicitly referred to the original NPRM as withdrawn, however, we coded the original NPRM as withdrawn, and entered and matched the new NPRM as a distinct proposal.

database: PR("INTERIOR" & "FISH AND WILDLIFE" & "RULES AND REGULATIONS") & "X FR Y " & DA(AFT 1949 & BEF 01/01/2009), where "X" and "Y" are the Federal Register volume and page numbers, respectively, of the NPRM whose final rule we were trying to locate. We ran additional searches where the initial search failed to turn up a final rule. For example, we replaced "X FR Y" with "X Fed. Reg. Y" or "X /5 Y," where "/5" means "within five words." That strategy dealt with the fact that Westlaw's scanned copies of the Federal Register sometimes incorrectly read "FR" as "PR." We also replaced the reference to the NPRM's Federal Register citation with references to the NPRM's date of publication (for example, "September 10, 1959"). As noted above, where we were unable to locate a final rule using the NPRM Federal Register citation or date of publication, we ran date-limited searches based on NPRM title or subject matter.

We recorded basic information about each matched final rule in our database, including, most importantly, the date of publication.

This brief description of our efforts demonstrates how three of the four core empirical implications of the ossification thesis presented in Part III might be tested.

First, because our database essentially counts the number of NPRMs and final rules issued by each agency over time, it is possible to track the volume of proposed and final rules over time, to see if regulatory activity declines as the agencies enter the ossified era.

Second, by recording the dates of NPRMs and associated final rules, it is possible to calculate the length of time that elapses between these two key stages in the regulatory process. This allows us to determine if, as the ossification literature suggests, there is a significantly longer period of time between the NPRM and the final rule in the ossified era.¹⁶⁷

Third, the regulatory "success rate" can be tracked by calculating the proportion of rules that reach finalization in the pre-ossified and the ossified eras. The ossification literature suggests that more NPRMs will fail to be promulgated in the ossified era.¹⁶⁸

As described above, our database does not provide for an examination of whether the use of non-rule rules has also increased over time. As we explain in Part VII, however, we did collect additional data and can present at least a preliminary test of that possibility.

The following four Parts discuss what our data show about trends in regulatory volume, regulatory success rates, regulatory delay, and the use of non-rule rules, respectively.

V. REGULATORY VOLUME

We identified 2792 unique § 553 NPRMs issued by the DOI over the period of study (1950–1990), and a total of 2718 final rules. Our dataset also contains 294 nonunique NPRMs, for a total of 3086 NPRM entries. Nonunique NPRMs are a function of the structure of our dataset and DOI practice. Occasionally an agency will issue a single NPRM, and that NPRM will result in two or more final rules. In essence, the agency divides the subject matter of the original NPRM into multiple pieces, issuing multiple final rules from the same initial proposal.

¹⁶⁷ See generally, e.g., McGarity, supra note 14.

¹⁶⁸ See generally id.

Our analysis of the time that it takes to regulate requires that each final rule be matched to an NPRM, and so in cases where a single NPRM led to multiple final rules, we created a duplicate entry in our database for that particular NPRM. For example, if FWS issued an NPRM, published at 100 Fed. Reg. 201, that resulted in four final rules, our dataset would contain four entries for an FWS NPRM published at 100 Fed. Reg. 201, with each of the duplicate entries matched to one of the four associated final rules. For ease of presentation, our figures and tables include data from both unique and nonunique NPRMs. 169 All figures and tables are printed in the Appendix.

A. Departmental Trends in Volume

Figure 1 provides a first glimpse at the data. Figure 1 illustrates the annual number of NPRMs issued by the DOI as a whole. A casual examination suggests little evidence of a wholesale abandonment of notice and comment rulemaking. In the early years of the APA, the DOI issued relatively few NPRMs—just nine in 1950, for example. By the late 1950s and early 1960s, however, the DOI typically was issuing between forty and seventy NPRMs per year.¹⁷⁰ From the late 1960s through the last year of our data, the DOI issued at least seventy NPRMs per year—and in some years, it issued many more. Indeed, peak NPRM production occurred in 1988, when the DOI issued 136 proposed rules—nearly *triple* the number of proposed rules typically issued in the early 1960s. Relatively high NPRM production also occurred in the late 1970s, the period of time during which the hard look doctrine might have been most severe.¹⁷¹ For example, in 1976, 1977, and 1978, the Department issued well over one hundred NPRMs per year.

Figure 2 provides an equivalent look at Department-level final rule production. A similar pattern emerges: very low production in the early years, with a significant rise in activity in the late 1950s and

¹⁶⁹ The use of nonunique NPRMs is especially important for our analysis of regulatory delay, as it provides a mechanism to account for the fact that various pieces of a single proposal may be promulgated in separate final rules at different times. Our decision to analyze both unique and nonunique NRPMs does not impact the substantive conclusions that we draw from our data.

¹⁷⁰ Professor Schiller observes a similar increase in rulemaking over the same years for the federal government as a whole. *See* Schiller, *supra* note 56, at 1147 ("Beginning in the 1960s federal agencies' neglect of rulemaking began to decline, gradually at first and then with such speed that by the early 1970s commentators declared that the administrative state had entered the 'age of rulemaking.'").

¹⁷¹ See id. at 1178 (noting that "[f]or better or worse, intense, hard look review won the day" in the late 1970s).

early 1960s. Rule production remains high through the 1970s and 1980s, with the peak year of activity occurring in 1988, when over 120 final rules were promulgated. Even in the late 1970s, at the presumed height of the hard look doctrine, final rule production typically reached over eighty per year.

While Figures 1 and 2 indicate relatively significant year to year (and perhaps cyclical) trends in rulemaking, one pattern evident in both Figures demands an explanation: why was rulemaking activity so rare in the early 1950s, and why did it increase so dramatically and enduringly in the late 1950s and early 1960s? We think the answer lies in the DOI's long-standing claim that most of its regulatory activities are technically exempt from APA rulemaking requirements under the APA's "public property" exception.¹⁷² As Professor Charles Wheatley observed in 1955, the Department has construed "public property" as including the "public domain."¹⁷³ Because most of what the DOI does concerns the public domain, the majority of its actions arguably should be exempt from APA procedural requirements.¹⁷⁴ The DOI's position was controversial, however, and as early as 1954 the Department was coming under pressure to comply with the APA.¹⁷⁵

Even though the D.C. Circuit eventually would uphold the Department's expansive definition of "public property," in 1958 the Department issued a Secretarial statement adopting a policy of compliance with notice and comment procedures whenever feasible. The Figures seem to reflect the effects of this policy statement. Note, for instance, that Figure 1 shows that the number of final rules more than doubles from 1954 to 1955 (from ten to thirty-five), a pattern that confirms Professor Strauss's somewhat impressionistic sense that by the late 1950s the Department had fully implemented a "firm policy of honoring those [APA-required] procedures in any important public lands matter." The DOI reaffirmed its policy encouraging resort to

^{172 5} U.S.C. § 553(a)(2) (2006); Charles F. Wheatley, Jr., A Study of Administrative Procedures—The Department of Interior, 43 GEO. L.J. 166, 177 (1955).

¹⁷³ See Wheatley, supra note 172, at 177.

¹⁷⁴ See id. (noting that no judicial ruling on this issue had been rendered by 1955).

¹⁷⁵ See McCarty, supra note 162, at 171 (discussing a Senate bill proposing to eliminate the public property exception); see also Wheatley, supra note 172, at 180 (noting a 1954 American Bar Association resolution calling on the DOI to abide by APA rulemaking requirements).

¹⁷⁶ See McNeil v. Seaton, 281 F.2d 931, 936 (D.C. Cir. 1960).

¹⁷⁷ See James D. Parriott, The Administrative Procedure Act and the Department of the Interior, 4 Rocky Mtn. Min. L. Inst. 431, 442 (1958).

¹⁷⁸ Peter L. Strauss, Rules, Adjudications, and Other Sources of Law in an Executive Department: Reflections on the Interior Department's Administration of the Mining Law, 74 COLUM. L. Rev. 1231, 1249 (1974).

notice and comment in a 1971 "Notice" published in the Federal Register, in which the Deputy Assistant Secretary declared it "the policy of the Department . . . to give notice of proposed rulemaking and to invite the public to participate in rule making instances where not required by law" and "to the fullest extent possible." Exceptions to the policy "are not to be favored and should be used sparingly." From the perspective of the ossification thesis, this is fairly ironic. Here, policy statements are being used to increase use of notice and comment, rather than to avoid it. It is even conceivable that the DOI's policy statement in some sense legally binds the Department to provide notice and opportunity to comment even if the DOI is not statutorily bound to do so. 181

B. Agency-Level Trends in Volume

Figures 3 and 4 provide equivalent looks at the production of NPRMs and final rules by the four main rule-writing agencies within the DOI: BIA, BLM, FWS, and NPS. Perhaps the clearest message from these Figures is that historical patterns in rulemaking are quite diverse across agencies, and that rulemaking varies tremendously from year to year. All of the figures show evidence of peaking, suggesting cycles of highly productive years followed by marked dropoffs in rule-writing activity.

Of the four agencies, two (BLM and FWS) show very noticeable increases in activity in the allegedly ossified years of our sample. The increase in FWS rulemaking is particularly striking. In the 1980s, FWS regularly issued over fifty NPRMs and a similar number of final rules per year, compared to approximately fifteen to twenty NPRMs and final rules, on average, in the 1960s. On the other hand, BIA

¹⁷⁹ Statement of Policy—Public Participation in Rule Making, 36 Fed. Reg. 8336, 8336-37 (May 4, 1971).

¹⁸⁰ Id. at 8337. At the time of the Notice, the DOI's regulatory process was receiving intense scrutiny and criticism. Congress had established a "Public Land Law Review Commission" that examined federal land policy in detail. Public Land Law Review Comm'n, One Third of the Nation's Land ix (1970). The Commission's investigation spanned more than six years, and it delivered its final report to the President and Congress in 1970. See id. at iii, x. The report recommended that Congress amend the APA to require the DOI to follow rulemaking procedures in public land matters. See 36 Fed. Reg. at 8337. The DOI's 1971 Notice appears to be an attempt to head off such a statutory change.

¹⁸¹ See Peter Raven-Hansen, Regulatory Estoppel: When Agencies Break Their Own "Laws," 64 Tex. L. Rev. 1, 48 (1985) ("A long-standing and well-known agency practice might also create a presumption of 'objective reliance' [justifying legal enforcement] because consistent agency adherence evidences the law's materiality to the public and often directs public attention to it.").

experienced a noticeable decrease in regulatory activity in the 1980s. BIA was issuing between twenty and twenty-five NPRMs per year in the 1970s, but in more recent years it has tended to issue well below fifteen NPRMs per year.

The Table presents a final way of viewing at the data on NPRM and final rule volume. We calculated average annual NPRM and final rule activity for the preossification and postossification periods for all seventeen DOI agencies individually, and for the Department as a whole. Data from 1950 to 1954 is omitted because of the evidence that the DOI did not make a serious effort to comply with the APA notice and comment requirements until the mid-1950s. 182

The first line in the Table shows that Department-level NPRM and final rule production increased by over fifty percent from the first to the second period. Agency performance is varied, though only three agencies out of the nine in existence across the two periods show a decrease in activity: BIA, NPS, and the Bureau of Mines ("BOM"). BIA's average annual NPRM production dropped by twenty-eight percent and its final rule production by thirty-six percent. NPS suffered declines of twenty and nineteen percent, respectively. BOM saw its regulatory program almost entirely collapse in the later period, issuing just three NPRMs in the 1980s. On the other hand, FWS increased its rulemaking activity by over 170 percent, while BLM saw more modest but still impressive increases of over thirty-four and forty-seven percent. Smaller agencies, such as the U.S. Geological Survey ("GES") and the Office of the Secretary ("OOS") also increased their regulatory activities significantly, although their levels of activity remained quite low in absolute terms. These two agencies proposed and promulgated only a handful of rules per year in the postossification period.

The most basic implication that can be drawn from the Table is that ossification, as measured by the volume of rulemaking, is not an obvious, widespread problem at the DOI. Although a few agencies tend to propose and promulgate fewer rules per year than they did prior to the emergence of the hard look doctrine, the majority of agencies seem to regulate more frequently. Furthermore, the significant year to year, within-agency variation in rulemaking activity illustrated in Figures 3 and 4 suggests that even though some agencies may, on average, propose and promulgate fewer rules than in the past,

they remain capable of bursts of activity at levels roughly commensurate with past practice.

C. Explanations of Trends

What explains the agency-level trends illustrated in the Figures and the Table? In some cases, the story may be a simple change of agency mandates (or change in congressional demand or support for regulation).¹⁸³ Take BOM, for example. The Bureau issued relatively few rules up through the 1960s. In a dramatic burst of activity, however, BOM issued eleven, twenty-one, and twelve NPRMs in 1970. 1971, and 1972, respectively. In earlier years, BOM typically issued just three or four NPRMs per year. The impetus for this upswing in activity most likely was the Federal Coal Mine Health and Safety Act of 1969,184 a statute passed, in part, in reaction to the well-publicized 1968 Farmington Mine explosion, in which seventy-eight coal miners died. 185 Section 101(a) of the Act gave the Secretary of the Interior a broad mandate to "develop, promulgate, and revise, as may be appropriate, improved mandatory safety standards for the protection of life and the prevention of injuries in a coal mine."186 In 1973, however, amid continued congressional concern about BOM's ability to adequately regulate mine health and safety, the Bureau's health and safety portfolio was transferred to the newly created Mining Enforcement and Safety Administration ("MES").187 In 1974, Congress transferred BOM's responsibility for mineral fuels research and development to the Energy Research and Development Administration.¹⁸⁸ And the 1977 Federal Mine Safety and Health Amendments Act¹⁸⁹ further consolidated responsibility for mine regulation within

¹⁸³ Professor Schiller similarly suggests that increases in rulemaking activity in the 1970s were due in part to congressional expansion of agency jurisdiction. *See* Schiller, *supra* note 56, at 1148.

¹⁸⁴ Federal Coal Mine Health and Safety Act of 1969, Pub. L. No. 91-173, 83 Stat. 742.

¹⁸⁵ See Ken Hechler, Introduction: The Development of the Federal Coal Mine Health and Safety Act of 1969, 77 W. Va. L. Rev. 613, 613–14 (1975) (discussing the role of the disaster in promoting passage of the Act). In a 1968 speech on the Farmington disaster, Secretary Udall proclaimed that "'the people of this country no longer will accept the disgraceful health and safety record that has characterized this major industry," an assertion that supported greater BOM regulation of the industry. Jeff Goodell, Big Coal: The Dirty Secret Behind America's Energy Future 61 (2006) (quoting Udall's speech).

¹⁸⁶ Federal Coal Mine Health and Safety Act of 1969, § 101(a), 83 Stat. at 745.

¹⁸⁷ See Secretary's Order No. 2953, Dep't of the Interior (May 7, 1973).

¹⁸⁸ See Energy Reorganization Act of 1974, Pub. L. No. 93-438, § 104(e), 88 Stat. 1233 (codified as amended at 42 U.S.C. § 5814 (2006)).

¹⁸⁹ Federal Mine Safety and Health Amendments Act of 1977, Pub. L. No. 95-164, 91 Stat. 1290 (codified as amended at 30 U.S.C. § 801).

the Department of Labor.¹⁹⁰ BOM limped on into the 1980s with its responsibilities largely restricted to mine-related research and factfinding,¹⁹¹ and in 1995, Congress abolished the Bureau in its entirety.¹⁹²

On the other hand, expanded regulatory mandates can lead to measurable increases in activity. Here, FWS is the clearest example. In December 1973, the Endangered Species Act ("ESA")¹⁹³ entered into force.¹⁹⁴ The Act assigns to FWS the principal administrative role in deciding whether particular species will enjoy federal protection.¹⁹⁵ Figure 5 illustrates how dramatically the ESA has impacted FWS activities. The Figure breaks out post-1974 NPRM and final rule activity in FWS by regulatory subject matter.¹⁹⁶ In the last five-year period of study, ESA regulations reliably comprised the majority of FWS § 553 activity. At the same time, non-ESA rulemaking remained relatively steady, fluctuating since 1975 around approximately sixteen NPRMs and final rules per year. This may suggest that FWS has been relatively successful at protecting its non-ESA regulatory capabilities despite the increased resource demands that the Act imposes upon the Service.

We are only able to offer relatively ad hoc and somewhat speculative explanations of the BIA patterns, but they too seem likely to reflect changing congressional demand for regulation. BIA policy was the subject of major political controversy in the 1970s. 197 Congress passed a number of important statutes that fundamentally altered

¹⁹⁰ See § 301, 91 Stat. at 1317 (codified as amended at 30 U.S.C. §§ 801 note, 802 note, 812, 951, 961).

¹⁹¹ See Office of Fed. Reg., United States Government Manual 1980–1981 350 (1980) (describing BOM's portfolio).

¹⁹² See Mining: Dismantling of Bureau Means Loss of Restoration Research, Official Says, 26 Env't Rep. 1378, 1378 (1995) (noting BOM's closure).

¹⁹³ Endangered Species Act of 1973, Pub L. No. 93-205, 87 Stat. 884 (codified as amended in scattered sections of 16 U.S.C.).

¹⁹⁴ See § 16, 87 Stat. at 903.

¹⁹⁵ See id.

¹⁹⁶ We counted an entry as an ESA rulemaking if the *Federal Register* listed "Endangered and Threatened Wildlife and Plants, 50 C.F.R. pt. 17" as the section of the Code affected by the action.

¹⁹⁷ Indeed, in 1969, American Indians forcibly occupied Alcatraz Island. See Chronological Historical Overview: 1960–1979—Indian Self-Determination, WILD RIVERS TEACHING AM. HIST. PROJECT, http://americanindiantah.com/history/cron_1960_1979.html (last visited May 31, 2012). In 1972, members of the militant American Indian Movement ("AIM") seized BIA's D.C. head-quarters, and AIM followers occupied the town of Wounded Knee, South Dakota in 1973. Id. In 1975, Congress established a special committee charged with investigating Indian policy, the "American Indian Policy Review Commission," which submitted its final report in 1977. Id.

BIA's regulatory relationship with the various tribes, such as the Indian Self-Determination and Education Assistance Act of 1975 ("IS-DEAA")¹⁹⁸ and the Indian Child Welfare Act of 1978 ("ICWA").¹⁹⁹ By the late 1970s, Congress's appetite for forcing change upon BIA had abated substantially,²⁰⁰ and in the 1980s Congress largely ignored the Bureau. Our figures may reflect both a flurry of regulatory activity designed to implement the new legislation, as well as a sort of reversion to the mean, or to a new regulatory equilibrium in the 1980s, where public and congressional agitation for BIA reforms had diminished substantially.²⁰¹

Figure 6 provides some support for the notion that congressional demand for regulation at least partially drives the macro trends illustrated above. In this Figure, we plot the number of times each of our four main agencies is mentioned annually in the *Congressional Record*—the official record of congressional proceedings and debates. Figure 6 represents, in a sense, the amount of attention that Congress is paying to each agency. It reasonably can be assumed that the more attention Congress is paying, the more likely it is to desire—and to informally or formally command—the particular agency to change the ways in which it operates or regulates. In fact, congressional attention to BLM remained relatively constant over the late 1970s and 1980s, during which time the level of BLM regulatory activity remained relatively constant as well. Attention to FWS rose significantly in the 1980s, in line with the Service's increase in ESA-related rulemaking.

¹⁹⁸ Indian Self-Determination and Education Assistance Act of 1975, Pub. L. No. 93-638, § 2, 88 Stat. 2203 (codified as amended in scattered sections of 5, 20, 25, 40, 42, 43, 50 U.S.C.). The Act is summarized in Michael P. Gross, *Indian Self-Determination and Tribal Sovereignty:* An Analysis of Recent Federal Indian Policy, 56 Tex. L. Rev. 1195 (1978).

¹⁹⁹ Indian Child Welfare Act of 1978, Pub. L. No. 95-608, 92 Stat. 3069 (1978) (codified as amended at 25 U.S.C. §§ 1901–1963).

²⁰⁰ See Russel Lawrence Barsh, The BIA Reorganization Follies of 1978: A Lesson in Bureaucratic Self-Defense, 7 Am. Indian L. Rev. 1, 48 (1979) (describing how "Congress [c]oncedes [d]efeat" in its attempt to reorganize BIA). Professor R.D. Folsom contrasts congressional activism in Indian affairs in the 1970s with a period of "congressional inertia" in the previous two decades. See R.D. Folsom, The Climate in Congress: Indians Face Period of Uncertainty, 4 Am. Indian L. Rev. 349, 350 (1976).

It probably is also relevant that the ISDEAA has served to lessen BIA involvement in tribal affairs by allowing tribes to undertake, via contract, projects and programs that previously would have been performed by BIA, and that the ICWA granted tribes and state courts exclusive jurisdiction over adoption matters. The two acts thus served to reduce the size of BIA's "to do" box and may, as a consequence, have reduced its need to issue regulations over the long term, at least once the acts were more or less fully implemented. In fact, the BIA interpreted the ICWA as largely precluding it from issuing legally binding regulations given that the ICWA grants primary responsibility for implementation and enforcement to tribes and state courts. See Guidelines for State Courts; Indian Custody Proceedings, 44 Fed. Reg. 67,584 (Nov. 26, 1979).

Additionally, congressional attention to BIA was at an historical low over the 1980s, mirroring BIA's historically low levels of rulemaking. Finally, attention to NPS also ebbed in the late 1970s and early 1980s, picking up again only at the tail end of our dataset, a pattern that may explain the decline in NPS rulemaking in the later period.

Variations in agency productivity might also be explained by agency budgets. Figure 7 shows trends in agency outlays since 1962, expressed in constant dollars.²⁰² It shows that outlays at both BIA and NPS have declined significantly since the mid-1970s. In the case of NPS, the reduction in outlays is quite dramatic. On the other hand, FWS and BLM saw increases in budget outlays. Perhaps not coincidentally, BIA and NPS saw declines in NPRM and final rule volume, while FWS and BLM experienced increases in productivity.

VI. REGULATORY SUCCESS RATE

One perceived consequence of ossification is that agencies abandon their regulatory proposals at an increased rate.²⁰³ An agency may be uncertain about the level of public support for a given proposal, or may mistakenly view a proposal as uncontroversial. The NPRM process alerts opponents to the proposal, giving them a chance to mobilize, to communicate their dissatisfaction to the agency, and to implicitly or explicitly threaten the policy by challenging it in court if it is promulgated.²⁰⁴ Faced with the daunting prospect of overcoming hard look review, the agency may consider it wiser to simply abandon the rulemaking rather than to incur the costs of defending its efforts in court. Similarly, OMB review may lead agencies to withdraw proposals in the face of unanticipated White House opposition.²⁰⁵

To test this possibility, we examined the rate at which NPRMs fail to become promulgated as final rules. We compared these NPRM "success rates" in the pre- and post-ossification periods. We counted an NPRM as failed if we were unable to locate an associated final rule in the *Federal Register* or if there was evidence that the NPRM had been formally withdrawn.²⁰⁶ Agencies sometimes report the withdrawal of a proposal through an announcement in the "Proposed

Agency budget numbers come from OMB's Presidential Budget as compiled at *Federal Budget: Detailed Numbers*, TruthAndPolitics.org, http://www.truthandpolitics.org/budget-numbers-intro.php (last visited May 31, 2012).

²⁰³ See McGarity, supra note 14, at 1388-90.

²⁰⁴ See, e.g., id. at 1397, 1426; see also Pierce, supra note 20, at 69.

²⁰⁵ See McGarity, supra note 14, at 1433.

²⁰⁶ On the other hand, where an NPRM was revised and reissued as a new NPRM, we did not count the revision as a "failure" of the original proposal. For most revisions, we elected to

Rules" section of the *Federal Register* or through an entry in the *Unified Agenda*. In many cases, however, agencies fail to issue notice that a rulemaking has been abandoned, and NPRM failure must be inferred from the lack of a published final rule.

Figure 8 plots success rates for the DOI as a whole and for the four main agencies. It shows a remarkable stability in rates across the two periods. The Department finalized nearly eighty-nine percent of its NPRMs in the pre-ossification period, and nearly eighty-eight percent in the post-ossification period. BLM and NPS both enjoyed success rates of over eighty percent in both periods, and FWS of over ninety percent. BIA was the only major agency to see its success rate decline noticeably—from eighty-nine percent to a still impressive seventy-eight percent.²⁰⁷

In short, Figure 8 provides little evidence that ossification has caused agency proposals to fail or to be withdrawn at a higher rate than in the past. Agencies appear able to push virtually all of their NPRMs through to promulgation. Of course, it is possible that agencies anticipate the effects of ossification on certain would-be proposals, and rationally decide to forgo issuing controversial NPRMs. We are unable to test the existence of this sort of selection effect. These results, however, in combination with our findings on regulatory volume, do not suggest that rulemaking came to a dramatic halt as a result of the accretion of procedural hoops and hurdles imposed by the courts, the White House, and Congress in the mid-to-late 1970s.

VII. DELAY IN REGULATION

Our third test of the ossification thesis is a comparison of the time that it takes agencies to move rules from proposal to promulgation. To make this comparison, we calculated the number of days elapsing between the date of publication of each NPRM and its final rule, and determined whether NPRMs in the ossified period take significantly

retain the original NPRM in our dataset, and to match any final rule to the original proposal. See supra note 165.

The decline in BIA's success rate was driven in part by its failure to promulgate a group of six NPRMs concerning the implementation of various aspects of the Indian Self Determination Act, all issued on September 13, 1982. School Construction Grants for Public Schools, 47 Fed. Reg. 40,356-01 (Sept. 13, 1982); Uniform Administrative Requirements for Grants, 47 Fed. Reg. 40,353-01 (Sept. 13, 1982); Staffing; Grants Operations, 47 Fed. Reg. 40,352-01 (Sept. 13, 1982); School Construction Grants or Services for Tribally Operated Previously Private Schools, 47 Fed. Reg. 40,348-01 (Sept. 13, 1982); Section 104 Grants Under Indian Self-Determination Act, 47 Fed. Reg. 40,338-01 (Sept. 13, 1982); Grants Under Indian Self Determination Act, 47 Fed. Reg. 40,326-01 (Sept. 13, 1982).

longer to promulgate than did proposals from the earlier period.²⁰⁸ Here, we find the strongest evidence of a potential shift in the character of rulemaking.

A. Delay in Regulation: A Departmental View

Figure 9 presents a Department-level view. The figure shows a Kaplan-Meier ("KM") survival estimate of the time (in days) from proposal to final rule. The KM estimator shows the percent of total units of observation (here, NPRMs) "surviving" up to a particular point in time. KM analysis is used routinely in epidemiological research, where one group of patients may be given treatment "X" while another is given treatment "Y," and the rates of survival of the members of each group are compared.²⁰⁹ In that example, "survival" is, quite literally, a matter of life and death. For our purposes, "survival" means that an NPRM has been issued but has not yet resulted in a final rule.²¹⁰ A rule "dies" when it is published in final rule form. Our two groups of "patients" are NPRMs issued in 1975 and before, and those issued in 1976 and after. Our "treatment," then, is the period in which an NPRM is issued.

One advantage of the KM methodology is that it is able to incorporate data from "censored" observations.²¹¹ A censored observation is, for instance, a patient who enters a medical study after the study has been started (left-censoring) or a patient who drops out of a study (other than by dying) prior to the study's completion (right-censoring).²¹² It may be possible to conceptualize withdrawn rules as right-censored data. In that case, we would include withdrawn rules as surviving until the point at which they are withdrawn, but without the withdrawal counting as a death. Because agencies, however, do not reliably report NPRM withdrawals or specific dates of withdrawal where, for instance, the withdrawal is mentioned in a subsequent

²⁰⁸ Statistical programs such as Stata, which we used for most of our data analysis, allow the researcher to calculate easily the elapsed days between two calendar dates.

²⁰⁹ Kitty J. Jager et al., *The Analysis of Survival Data: The Kaplan-Meier Method*, KIDNEY INT'L, July 2, 2008, http://www.nature.com/ki/journal/v74/n5/full/ki2008217a.html.

We follow the ossification literature and focus on the time between the NPRM issuance and final rule promulgation. It also is important, however, to acknowledge that agencies invest time, effort, and resources during the preproposal stage of regulatory development. We discuss this fact as a weakness of our Study in Part X. On pre-NPRM rule development, see generally Cornelius M. Kerwin & Scott R. Furlong, *Time and Rulemaking: An Empirical Test of Theory*, 2 J. Pub. Admin. Res. & Theory 113 (1992); Keith Naughton et al., *Understanding Commenter Influence During Agency Rule Development*, 28 J. Pol'y Analysis & Mgmt. 258 (2009).

²¹¹ Jager et al., supra note 209.

²¹² Id.

NPRM, we elected to exclude withdrawn rules from our analysis. This means that our KM data contain no censored observations.

For ease of presentation, we have included in Figure 9 two vertical reference lines corresponding to 365 days (one year) and 730 days (two years). The black curved line corresponds to preossification NPRMs, while the curved dashed line corresponds to NPRMs from the ossified era. The figure indicates that NPRMs in the later period take noticeably longer to be promulgated. For example, in the preossified era, agencies promulgated approximately eighty percent of NPRMs within roughly 200 days. This is indicated by the fact that the black curved line crosses the 0.20 mark on the y-axis at around 200 days, indicating that twenty percent of the NPRMs in the grouping are still "surviving" in the sense that they have not yet been promulgated. By the one year mark, approximately ninety percent of NPRMs have been promulgated.

By contrast, in the post-1975 period, agencies only promulgate approximately forty percent of rules within 200 days, and only sixty-five percent within one year. It takes roughly two years for ninety percent of NPRMs to be finalized in the later period. A log-rank test (a standard statistical test used to compare the survival distributions of two samples) indicates that the difference in survival rates across the two periods is statistically significant.²¹³

B. Delay in Regulation: An Agency-Level View

Figure 10 shows KM estimates for our four main agencies. Overall, the same trend is evident in the Department-level data. In the modern era, it takes longer for proposals to become final rules, although there are important differences across agencies. For example, even in the ossified era, BIA finalized about eighty percent of its proposals within one year, while the other three agencies finalized about sixty to sixty-five percent within the same time span. By contrast, in the pre-ossified era, the agencies all saw finalization rates of approximately ninety percent or more at the one-year mark. In the modern era, agencies don't reach the ninety-percent mark until roughly two years after the agency publishes the NPRM.

As might be expected, the increase in time to promulgation of FWS NPRMs is driven in large part by FWS's ESA-related rulemaking. Figure 11 compares survival estimates for ESA and non-ESA

²¹³ See Survival Analysis and Epidemiological Tables Reference Manual 445–59 (2011) (user manual for version 12 of Stata).

FWS NPRMs from 1974 to 1990. It shows that even in the ossified era, FWS promulgated virtually all non-ESA NPRMs within one year. On the other hand, it promulgated a bit less than sixty percent of ESA NPRMs within one year, and about eighty-five percent by the two-year mark. This may be because some ESA regulations are highly politically charged or because FWS determinations of protected status depend on the collection and analysis of potentially complex scientific evidence.²¹⁴ Although FWS undoubtedly undertakes significant data collection and analysis prior to issuing an NPRM (and thus prior to the start of our duration analysis), data collection and analytic demands may remain high even after the agency issues an NPRM if, for example, FWS has to respond to sophisticated public comments as a part of the promulgation process.²¹⁵

C. Delay and the Problem of Baseline Expectations

Does our Department- and agency-level evidence of increased delay in regulation provide evidence of ossification? If the ossification thesis is primarily a descriptive claim that rulemaking in the modern era takes longer than in the past, then the answer must be "yes." Agencies promulgated a lower percentage of rules in the later period within 200 days (or 365 days, or 500 days) of proposal. On the other hand, if the ossification thesis is primarily a normative claim that rulemaking in the modern era takes "too long," then these results may not justify serious concern. In large part, the issue is one of proper baseline expectations. By what normative metric can we determine if rulemaking is taking too long?

Fortunately, the ossification literature itself provides a sense of proper baseline expectations. For instance, Professor McGarity notes that when the Federal Trade Commission ("FTC") first began issuing universal rules in 1962, "it generally took one to two years from the

²¹⁴ See Amy Whritenour Ando, Waiting to be Protected Under the Endangered Species Act: The Political Economy of Regulatory Delay, 42 J.L. & Econ. 29, 33 (1999) (discussing the FWS priority system for protection, which involves ranking animals by degree of threat and taxonomic distinctness). In a study of delay in ESA rulemaking, Professor Ando notes that many ESA actions are subject to statutory deadlines. See id. Unless it receives an extension, FWS must either withdraw or promulgate certain listing rules within one year of NPRM issuance. See id. Our dataset does not differentiate between those ESA rules that are subject to this kind of deadline and those that are not. However, the fact that fewer ESA-related regulations are promulgated within one year (compared with non-ESA regulations issued either by FWS or by other DOI agencies) suggests that it may be relatively costless for FWS to miss the one-year deadline (or too difficult for FWS to meet it).

²¹⁵ See id. at 39-40.

Promulgation of a notice of proposed rulemaking to a final rule."²¹⁶ He notes by contrast that in the ossified period it might take five years for an average rule to reach completion, a timeline that he finds troubling.²¹⁷ We can use these two observations to construct a rough rule of thumb: we might reasonably consider rulemaking to be ossified if most rules take longer than two years to complete, and we would certainly consider rulemaking to be ossified if a significant number of rules took five years to complete.²¹⁸ The fact that agencies promulgated the majority of rules in our dataset within one year and the *vast* majority within two years suggests that there is little evidence that ossification is widespread. Indeed, in our dataset, very few rules take longer than five years to reach promulgation.²¹⁹ Even if a more relaxed definition of presumptively ossified rules is used—e.g., rules that take 1000 days or more to be promulgated—few rules in our dataset meet this criteria.²²⁰

An alternate way to approach the issue of rule promulgation time is to concentrate on balancing the costs and benefits of "rule delay." As Professor Thomas Morgan argued in one of the first law review articles to address the problem of regulatory delay in depth, the regulatory process is characterized by an inherent and perhaps insoluble tension between the "desire for speed and the equally important interests in procedural due process and substantively sound results." Perhaps rulemaking in the pre-ossified period struck a balance tilted undesirably toward the former. In other words, perhaps early

²¹⁶ McGarity, supra note 14, at 1388.

²¹⁷ See id. at 1389-90.

²¹⁸ In his treatise, Professor Pierce asserts that because of increased court oversight, "[i]t is not uncommon for a single rulemaking to require a decade and commitment of 10 percent of an agency's total staff resources." Pierce, supra note 23, § 7.11. Thus, ten years might serve as a rough indication of an ossified rulemaking, though none of the NPRMs in our dataset take ten years or more to advance through the notice and comment process.

²¹⁹ In our dataset we identified only seventeen NPRMs that took at least five years to be finalized ("five-year rules"). This is less than one percent of the total final rules in our dataset. BIA promulgated the largest number of five-year rules (five cases). FWS promulgated the second largest number (four cases). BLM promulgated three five-year rules. The subject matters of the five-year rules do not stand out as being particularly atypical. The BIA rules concerned employment assistance and vocational training for adult Indians, the BLM rules concerned leasing and permitting on federal lands, and all four FWS rules were ESA related. Two of the FWS regulations dealt with critical habitat designations, one concerned a "threatened" classification, and one concerned an "endangered" classification.

²²⁰ We identified seventy-seven rules that took 1000 days (2.8 years) to be promulgated—just three percent of all final rules.

²²¹ Thomas D. Morgan, Toward a Revised Strategy for Ratemaking, 1978 U. Ill. L.F. 21, 22.

rulemaking moved too fast, and the more leisurely experience of rulemaking in the late 1970s and 1980s was actually quite welcome.

That possibility is one that our data cannot fully test, but we can begin to assess whether agencies in the later period expended greater effort explaining and justifying their actions. To do so, we compared the number of words contained in a typical NPRM in the pre-ossified period with a typical NPRM in the post-1975 years. We counted words in NPRMs for all of the NPS proposals in our dataset.²²² The mean for the early period is 1161 words, while the mean for the later period is 3206 words, an increase of 176%. A reasonable interpretation of the increase is that NPS, like other agencies, is now better at explaining its intentions, a fact that probably helps the public provide useful comments to the agency regarding the wisdom or foolishness of its plans. There is a similar increase in the amount of words in NPS final rules, from a mean of just 849 to a mean of 4014.

Some of this increase is due to the fact that agencies in the ossified period must respond in the final rule preamble to public comments submitted in response to the NPRM.²²³ Early final rules provided almost comically brief responses to public comments. For example, a typical final rule (here, from 1959) might recite that "[c]onsideration having been given to all relevant matters presented, it has been determined that the following proposed amendment shall become effective upon publication in the FEDERAL REGISTER."²²⁴ Note that in this example (of an actual final rule preamble), we do not know if any relevant *or* nonrelevant matters were even presented, or, if they were, what the matters entailed or how the matters presented might have been incorporated into the final rule. Compare that 1959 rule to a 1986 NPS rule concerning structure and sign limitations in

²²² We counted words in NPRMs and final rules by cutting and pasting each rule into Microsoft Word and running the word-count function. Because this exercise was extremely time consuming, we focused our word-counting efforts exclusively on NPS. We did, however, sample word counts of NPRMs issued by other DOI agencies, and we are quite confident that the other agencies would also show a marked increase in NPRM and final rule word count across the two periods.

It is sometimes suggested that agencies are required to respond to every comment submitted to them. In fact, as Judge Wald notes, courts only have required agencies to respond to all "material" comments, and agencies retain some discretion to respond cursorily to or to ignore immaterial comments altogether. See Patricia M. Wald, Judicial Review in the Time of Cholera, 49 Admin. L. Rev. 659, 666 (1997). Furthermore, agencies routinely group together similar comments, providing a single, common response rather than an individual one.

²²⁴ National Park Service, Final Regulation Concerning Zion and Bryce Canyon National Parks, 24 Fed. Reg. 6977 (Aug. 28, 1959).

Washington, D.C.'s Lafayette Park.²²⁵ There, NPS included in the final rule preamble a nearly 6000-word summary and response to the various comments received, in addition to another 6000-word summary of the regulation's history and a justification of the final rule adopted.²²⁶

Put somewhat differently, even if the increased delay in rulemaking illustrated in Figures 9 to 11 is partially due to the fact that agencies feel compelled to describe their proposals in detail and respond to public comments at length, it is also important to consider that the quality of the rulemaking process, the transparency of agency policymaking, and the ability of third parties to hold agency officials accountable for their decisions, might have improved as well.

VIII. Use of Non-Rule Rules

The ossification literature suggests that agencies turn to non-rule rules as substitutes for § 553 rulemaking. In fact, observers of DOI practice have long suggested that the Department occasionally resorts to press releases and other "informal" policy pronouncements to accomplish regulatory goals that might be more properly accomplished through notice and comment.²²⁷

Unfortunately, systematically tracking changes in the use of these non-rule rules poses significant challenges, especially (but certainly not exclusively) for historical studies such as this one. Agencies have at their disposal a variety of different instruments through which they may seek to influence the behavior of both agency personnel and regulated persons and entities in law-like ways—including policy statements, amendments to agency and departmental manuals, interpretative rules, and even news releases and speeches.²²⁸ No single source tracks agency use of such policy instruments. Accordingly, our test of this aspect of the ossification thesis necessarily is prelimi-

²²⁵ National Park Service, Final Rule Concerning National Capital Parks Regulations, 51 Fed. Reg. 7566 (Mar. 5, 1986).

²²⁶ See id.

²²⁷ See John A. Carver, Jr. & Karl S. Landstrom, Rule-Making as a Means of Exercising Secretarial Discretion in Public Land Actions, 8 Ariz. L. Rev. 46, 56-57 (1966) (noting the DOI's "[u]ncounted numbers of interpretative and procedural rules, established in case decisions and inter-office correspondence, [that] exist without having been incorporated into the regulations," and observing that "[r]esort has sometimes been had to informal 'policy' pronouncements having the effect of formally exercised legislative discretion," citing a press release as an example). Both Carver and Landstrom were high-level employees at the DOI. See id. at 46.

²²⁸ See id. at 58.

nary and by no means captures the entire universe of potential nonrule rules.

As a first cut, we used Westlaw to compile an annual agency-level count of all regulations listed in the "Rules and Regulations" section of the *Federal Register* that did not result from a notice and comment process. We call these statements of agency policy "no-comment regulations." The footnotes provide sample search language. As with \$553 rules, anytime it wishes to influence behavior, an agency must communicate the content of non-rule rules to the intended subjects of regulation. The *Federal Register* provides an efficient and effective mechanism for agencies to communicate their regulatory expectations, and agencies may have used it to retreat from notice and comment regulation openly through the publication of self-styled "Rules and Regulations" that were not subject to required notice and comment procedures.

Figure 12 presents an annual count of no-comment regulations for the BIA, BLM, and NPS, as well as data for the Bureau of Reclamation ("BOR") to help provide the graph with visual symmetry. Figure 13 presents the same data for FWS. FWS is presented separately because differences in scale make it difficult to combine a visual representation of the FWS data with data from the other three major agencies. Figures 12 and 13 show no obvious upward trend in the use of no-comment regulations. Indeed, if there is an overall trend, it is one of relative stasis or even decline. Agencies do not seem to issue noticeably more no-comment regulations than they have in the past. In the cases of NPS and FWS, they issue dramatically fewer.

The FWS data show the results for two versions of the basic search. The first, labeled "Search 1," is the equivalent of the searches whose results for the other agencies are displayed in Figure 12. The dramatic upswing in FWS's use of no-comment regulations in 1960 results from its implementation of CFR Title 50, through which FWS

²²⁹ To identify no-comment regulations, we ran variations on the following search of Westlaw's FR-ALL database: DA(1950) & PR("PARK SERVICE" & "RULES AND REGULATIONS" % CORRECTION) % (COMMENT! "INTERESTED PERSONS" "INTERESTED PARTIES" "PUBLIC LAND ORDER"). Our main coding exercise showed that virtually all final rules resulting from § 553 NPRMs referenced either some variation of the word "comment" or "interested persons" or "parties," as in the phrase "interested parties were invited to participate," but non-§ 553 documents in the "Rules and Regulations" section did not. We excluded "corrections" from our count of no-comment regulations because corrections typically appear to involve only minor, technical changes to existing rules. We excluded "public land orders," which are issued exclusively by BLM, as they are a unique type of regulatory instrument that probably is not a good example of the kinds of non-rule rules with which the ossification literature is concerned.

mandated itself to promulgate specific National Wildlife Refuge ("NWR") regulations on seasonal hunting and fishing on an annual basis.²³⁰ FWS referred to these regulations as "special regulations," though in practice they represented a routine and recurring occurrence, with each NWR receiving its own annual set of regulations.²³¹ FWS did not regularly solicit public input on NWR special regulations until 1977, when it began inviting comments.²³² FWS special regulation practice remained unstable until the early 1980s, when the Service decided that the annual publication of refuge-specific regulations had become too administratively costly. In 1982, FWS issued an interim special regulation, subject to public comment, ending the practice of issuing annual refuge-specific regulations and setting out a stable set of guidelines linked to state hunting seasons.²³³ A permanent scheme replaced the interim scheme in 1984 (for hunting) and 1985 (for fishing).²³⁴ The dotted line in Figure 13, labeled "Search 2," tracks nocomment regulations excluding special regulations. In either case, the level of FWS no-comment regulations has remained quite low since the mid-1970s. FWS does not appear to be using no-comment regulations to replace § 553 rulemaking. Indeed, a desire to increase agency capacity to implement the Service's newly expanded notice and comment portfolio under the ESA may have driven it to abandon the administratively burdensome special regulation regime.

Figure 14 illustrates the number of news releases issued by FWS over time. The data are taken from the FWS website.²³⁵ Again, no wholesale flight to non-rule rules is shown. Although FWS's use of news releases did spike in the second half of the 1970s, it also declined to historic lows in the 1980s. In any case, the volume of news releases in the ossified period is substantially below levels observed in the 1950s. Therefore, Figure 14 does not provide a strong case for ossification.

²³⁰ See, e.g., Horicon National Wildlife Refuge, Wisconsin, 25 Fed. Reg. 9900 (Oct. 15, 1960) (codified at 50 C.F.R. pt. 32).

²³¹ See id.

²³² See, e.g., Opening of Long Lake National Wildlife Refuge, North Dakota, to Deer Hunting, 42 Fed. Reg. 47,846 (Sept. 22, 1977).

²³³ National Wildlife Refuges; Hunting, 47 Fed. Reg. 40,298 (Sept. 13, 1982) (codified at 50 C.F.R. pt. 32).

Refuge Specific Hunting Regulations, 49 Fed. Reg. 36,736 (Sept. 19, 1984) (codified at 50 C.F.R. pt. 32) (hunting final rule); 50 Fed. Reg. 29,972 (July 23, 1985) (codified at 50 C.F.R. pt. 33) (fishing final rule); 50 Fed. Reg. 7079 (proposed Feb. 20, 1985) (fishing proposed rule).

²³⁵ Historic News Releases, U.S. FISH AND WILDLIFE SERV., http://www.fws.gov/news/historic/browse.cfm (last visited May 31, 2012).

Figure 15 compiles annual counts of DOI adjudicative decisions and solicitor's memorandum opinions published in Interior Decisions ("ID"). ID is an annual publication containing the year's substantively important DOI decisions and opinions, as identified by the Department.236 Because ID is widely available to legal practitioners and industry, it serves as one of the most important ways in which the DOI might communicate to regulated parties changes in the DOI's views of its governing statutes or existing regulations. It is conceivable that as rulemaking grows more difficult, the DOI might increasingly turn to administrative adjudications (decisions) to announce important policy changes, or increasingly rely on solicitor's opinions (which are legally binding on Department employees) to expand or contract regulatory programs.²³⁷ Figure 15, however, does not provide much support for this proposition. Although it shows noticeable peaks in important decisions in the 1970s, as well as a peak in solicitor's opinions in 1980, since that time the number of important opinions and decisions has declined significantly. The DOI does not seem to be using publication in the ID as a substitute for other forms of regulation.

For our final test of the no-rule rules hypothesis, we compiled an annual count of all "orders" issued by the Secretary of the Interior in a given year. Secretarial orders typically announce temporary or interim policies, changes to the DOI's internal organization, or delegations of the Secretary's statutory authority to subordinates.²³⁸ For example, secretarial order accomplished the recent "decision"—in response to the Deepwater Horizon oil spill—to transform the Minerals Management Service into the Bureau of Ocean Energy Management.²³⁹ As rulemaking becomes more difficult, the Department in-

²³⁶ Professor Parriott indicates that the "general criteria for publication of an opinion or decision [in ID] is whether or not it is thought to establish new and important points of law, or to overrule or modify previous decisions or rulings." Parriott, *supra* note 177, at 437.

²³⁷ See Magill, supra note 51, at 1446 (explaining that agencies may act strategically in choosing policymaking form, and that this may be troubling); see also Elizabeth Magill & Adrian Vermeule, Allocating Power Within Agencies, 120 YALE L.J. 1032 (2011). The solicitor writes opinions in response to legal questions submitted by the Secretary or other Department staff. We attempted to compile an annual count of all solicitor's opinions, and not just those published in ID. Neither the National Archives nor the Department library, however, maintains complete collections of opinions.

²³⁸ We did not conduct any formal content analysis of secretarial orders, but we did read or skim a great deal of them in the course of our counting. Our impression is that most, if not virtually all, concerned internally oriented subjects (delegations of authority, internal reorganizations, and the like) that one would normally not expect an agency to promulgate through notice and comment. We did not see any orders that appeared to blatantly violate notice and comment norms.

²³⁹ Secretary's Order. No. 3299A1, Dep't of the Interior, June 18, 2010.

creasingly may be tempted to substitute orders for notice and comment regulations.

Figure 16, however, does not contain much evidence to support this proposition. The graph shows the annual number of orders (the solid line), amendments to existing orders (the dashed line), and a combined total of the two (the dotted line). The DOI sometimes amends an existing order rather than revoking an earlier order and replacing it with a new order. It does not appear that the content of amendments generally differs significantly from the content of orders, but we nonetheless report the two series separately. A relatively consistent order practice exists; since the late 1950s, the Department has tended to issue twenty or fewer orders and amendments per year, a marked decline from order practice in the early 1950s. There is no obvious increase in resort to orders in the post-ossification period. Indeed, in the last few years of our dataset, the Department issued only about ten orders and amendments per year.

In conclusion, our data provide no obvious evidence that the DOI has turned to non-rule rules as a substitute for notice and comment rulemaking. Rates of no-comment regulations are declining, as is FWS issuance of news releases. The DOI does not publish and publicize as many important decisions and solicitor's opinions as it used to, and the Secretary's order practice shows long-term stability at a relatively low level of activity.

IX. IMPLICATIONS

Ossification-like concerns about the administrative process are not new. Since the early days of the APA, scholars have worried that agencies face disincentives to follow normatively desirable notice and comment procedures.²⁴⁰ Complaints about undue delay in agency action are also longstanding,²⁴¹ as are complaints about the use of non-

²⁴⁰ See David L. Shapiro, The Choice of Rulemaking or Adjudication in the Development of Administrative Policy, 78 HARV. L. REV. 921, 921 (1965) (discussing the "failure" of federal agencies "to make full use of available [notice and comment] rulemaking procedures"). Professor Shapiro suggests that one reason for this is that agencies fear that notice and comment rules are more likely to be overturned by reviewing courts than are policies announced through other mechanisms. See id. at 942–46. Shapiro also accuses agencies of resorting to non-rule rules. See id. at 922–24 (noting that "[s]peeches and press releases are frequently resorted to for the announcement of important policies or views"). On the other hand, Professor Fisher, also writing in 1965, asserted that "there is little evidence of widespread failure by agencies to take advantage of their rule making powers." Fisher, supra note 51, at 252. "On the contrary, most agencies make good use of rule making. Failure to more generally embrace rule making is usually readily explained, though perhaps not wholly justified." Id.

²⁴¹ In a 1960 speech to the Columbia Law Review, Judge Friendly wondered

rule rules.²⁴² Such complaints have been made specifically as to the DOI.²⁴³ Such complaints have even been made *by* the DOI, as evidenced by Under Secretary Charles Luce's 1967 congressional testimony that the DOI should be largely exempted from § 553's requirements because the notice and comment process was so burdensome:

Is the public really better served through the medium of notice of rulemaking and publication in the Federal Register in every instance of the formulation of a statement of policy? What effect would such a requirement have on the operations of a program agency? Do we want to take the chance of subjecting much of the informal policy making that we do today on a daily basis to the potential of interminable de-

whether law students still are taught, as we were, to contrast the celerity of those Mercury-like and wing-footed messengers, the administrative agencies, with the creeping and cumbersome processes of the courts. If they are, they have a rude awakening ahead, on both counts. To borrow Mr. Churchill's phrase, the regulatory agencies often tolerate delays up with which the judiciary would not put.

Henry J. Friendly, A Look at the Federal Administrative Agencies, 60 Colum. L. Rev. 429, 432 (1960). Judge Friendly blamed such delay, in part, on his perception that "agencies have gone overboard in their zeal for a record that will drain the last dregs from the cask—and sometimes a good many staves as well." Id. at 435. For another early and prominent complaint that procedural constraints impeded agency ability to regulate, see Louis J. Hector, Problems of the CAB and the Independent Regulatory Commissions, 69 Yale L.J. 931, 935 (1960) ("Because the procedures for making policies and plans in an independent commission are so inefficient, [policies and plans] are often not formulated in time and in some cases not at all.").

Judge Friendly and Professor Hector complained about the slow pace of rulemaking via adjudication, and they both viewed greater use of notice and comment rulemaking as a potential solution. See id. at 960-64; see also Schiller, supra note 56, at 1150. But despite this early optimism about the ability of notice and comment to promote the more efficient production of regulations (not to be confused with the production of more efficient regulations), perceptions of unacceptable regulatory delay in the notice and comment system remained widespread throughout the 1970s. Morgan, supra note 221, at 21-22 ("A remarkably diverse group of citizens and political leaders, business executives and consumer advocates, economists and lawyers seems to agree on a fundamental point—something is wrong with much of the substance and procedure of regulation. . . . [H]igh on many lists is the complexity of administrative procedure and the sheer time consumed in obtaining action or authorization from an agency." (footnotes omitted)).

²⁴² See Carver & Landstrom, supra note 227, at 57-58 (discussing in a 1966 article the DOI's use of non-rule rules).

243 See, e.g., Strauss, supra note 178, at 1237 (criticizing the DOI for its "insufficient" use of its "rulemaking powers"). Professor Strauss faults the Department for regulating via employee manuals, "temporary directives," and "Solicitor's opinions," practices which he believes hamper the ability of Congress to exercise its oversight responsibilities or for private individuals to figure out the content of agency "law." Id. at 1238. Strauss characterizes the speed of DOI rulemaking as "truly glacial" absent the "impetus" of crisis, id. at 1254, while Department adjudications suffered from "oppressive delay," id. at 1257; see also McCarty, supra note 162, at 170 (noting the "frequent conclusion of commentators on the administrative process... that agencies fail to use rulemaking to the extent that is believed desirable").

lays? Can our programs afford these delays? Even more importantly, will Congress and the public tolerate these delays? We firmly believe that the answer to all of these questions, when carefully analyzed, must be "no"!244

This view of the supposedly burdensome nature of notice and comment regulation was shared by other agencies, such as the General Services Administration, which argued that "public advance notice in the Federal Register and public participation in the formulation of . . . rules is too much, costs too much, takes too much time, for many rules that would not warrant that type of effort."²⁴⁵

Regardless of whether these assertions were fair or accurate at the time (or whether they might be fair or accurate in later years), it seems clear that the life of a bureaucrat is a difficult one. Politicians, the public, and law professors have long been quick to criticize the regulator for failing to correctly and promptly finish the legislative responsibilities that Congress routinely delegates (or abdicates), just as regulators have long been quick to criticize the regulatory process for unwisely restricting their discretion and autonomy and causing unnecessary delay.²⁴⁶ But there is an inherent tension between getting things done right, and getting things done quickly. In recent years, things seem to take longer.²⁴⁷ But things also may be more "right" than they were before.

²⁴⁴ Administrative Procedure Act: Hearings on S. 518 Before the Subcomm. on Admin. Practice & Procedure of the Comm. on the Judiciary, 90th Cong. 42 (1967) (statement of Charles F. Luce, Under Secretary of the Interior). The Department was responding to calls to revise § 553's exemption for regulations relating to "public property," which the Department had long interpreted as applying to its regulations dealing with the public "lands." See Arthur Earl Bonfield, Public Participation in Federal Rulemaking Relating to Public Property, Loans, Grants, Benefits, or Contracts, 118 U. Pa. L. Rev. 540, 560 (1970).

²⁴⁵ Bonfield, supra note 244, at 576 n.114.

²⁴⁶ See, e.g., Wycliffe Allen, *I Am a Bureaucrat*, 11 Pub. Admin. Rev. 116, 116 (1951). Allen describes the bureaucrat as follows:

According to both the press and the *Congressional Record*, I am one who gormandizes at the public trough. I am the incarnation of all the sloths through all the ages. I live off the hardearned salaries of neighbors and the profits of tax-paying industries. For this parasitical existence, I give, apparently, little value. I am supposed to put in, each day, eight hours of cat naps intermingled with pen-pushing; I am believed to manufacture red tape in amazing quantities and to protect myself from reformers by means of the greatest lobby in Washington. The movie industry, like the cartoonists, finds me a fit subject for ridicule.

Id. More recently, Professor Reiss has suggested that "[a]gencies . . . have been everyone's favorite whipping boys for at least twenty years, subject to extensive criticism from politicians and citizens." Reiss, *supra* note 50, at 373.

²⁴⁷ See, e.g., McGarity, supra note 14, at 1388–90 (noting that now it might take five years to promulgate a rule where before it took about one to two years).

That last point suggests that the question of whether rulemaking has become ossified is a multidimensional one. It requires us to address not just whether rulemaking takes longer, but whether the detriments of delay or inaction outweigh improvements to the substance of the rules themselves. Our data do not permit this type of sophisticated weighing. We are modestly confident, however, that it shows that agencies—and in particular, DOI agencies—do not appear to have abandoned notice and comment wholesale, either by failing to regulate entirely, or by embracing surreptitious forms of regulation. NPRMs succeed at roughly the same rate that they did prior to the era of ossification, and the majority of rules pass through the NPRM process in about a year during the allegedly ossified period of 1976 to 1990. If the hard look doctrine and other constraints on agency autonomy impose costs, those costs do not seem prohibitively high for the vast majority of rules. Furthermore, it seems that there are certain benefits to the current regime. Rules may take longer, but the public also is probably better informed about the substance of and justifications for agency proposals and final rules. The system currently appears to be far more open and transparent than the system that existed in the 1950s, a fact that most observers probably would view as a normatively positive development.

If this is correct, it may be the case that the hard look doctrine was never really as "hard" as commonly believed, or that the doctrine atrophied with time, with courts quickly growing weary of second guessing agency decisions. There is at least some objective evidence that courts have not, in fact, sanctioned agency decisions as frequently or as severely as the ossification literature might lead us to expect.²⁴⁸ Judge Wald of the D.C. Circuit has suggested that her court was sending back just twenty-two percent of challenged agency decisions for "retooling."²⁴⁹ Wald's twenty-two percent remand rate should be interpreted in light of the fact that many agency actions are never challenged in court at all, but in any event, her calculation is significantly lower than the sixty-percent remand rate for the D.C. Circuit suggested by Professor Pierce.²⁵⁰ Furthermore, Judge Wald suggests that "retooling" might entail little more than "fix[ing] up the rationale" of the rule,"251 an assertion which, if accurate, supports Professor Jordan's claim that judicial remand often will not meaningfully inhibit the

²⁴⁸ See Wald, supra note 63, at 232.

²⁴⁹ See id.

²⁵⁰ See Pierce, supra note 60, at 302.

²⁵¹ Wald, supra note 63, at 232, 234.

agency's ability to implement its desired policy.²⁵² Wald further suggests that one of the main problems courts have with agency rules is the failure of agency rule writers to master "basic communication skills, using simple English whenever possible to explain" their actions.²⁵³ This problem hardly seems insurmountable.

Professor Richard Pierce has also suggested that the hard look doctrine may have softened over time. In a 1989 article, he argued that the Supreme Court "increasingly has lost trust in . . . the lower federal courts, to stay within their proper bounds in reviewing agency actions" and that "the Court has responded by adopting [an] approach that insulates areas of agency action from judicial review."254 In a later article, Pierce identified "seven doctrinal changes that have the potential to reduce the problem of rulemaking ossification," including the Supreme Court's famous decision in Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc., 255 and the D.C. Circuit's practice of remand without vacatur.²⁵⁶ Professor David Zaring recently has argued that hard look and other standards of judicial review have evolved into a unitary "reasonableness" standard, under which courts generally affirm challenged agency decisions more than two thirds of the time, and tend to sanction agencies only for regulatory "negligence."257 The question of why the hard look doctrine may have withered on the judicial vine is beyond the scope of this Article, but one major reason may be that the doctrine proved too difficult for

²⁵² See Jordan, supra note 22, at 440.

²⁵³ Wald, supra note 63, at 235. Judge Wald's observations appear to be reflected in the DOI's experience implementing the Surface Mining Control and Reclamation Act (SMCRA) of 1977, Pub L. No. 95-87, 91 Stat. 445 (codified as amended at 30 U.S.C. § 1201 (2006)). Implementing the Act's complex scheme of cooperative federalism proved enormously controversial, and OSM suffered through numerous lawsuits by states, environmental groups, and mining companies. Although these various lawsuits created significant regulatory uncertainty, and delayed final implementation of certain aspects of the Act for some time, in fact, these "numerous court challenges were essentially all generally unsuccessful." Edward M. Green, State and Federal Roles Under the Surface Mining Control and Reclamation Act of 1977, 21 S. ILL. U. L.J. 531, 540 (1997). And, despite the large amount of litigation over the SMCRA regulations, a KM analysis of OSM NPRMs and final rules (graph not shown) indicates that OSM was actually quite good at moving NPRMs to the final rule stage, with sixty percent of NPRMs taking just one year, and more than ninety percent of NPRMs reaching final rules within two years. On the other hand, these figures do not take into account any post-final-rule delay associated with court-ordered stays that might delay implementation of final rules.

²⁵⁴ Richard J. Pierce, Jr., The Role of the Judiciary in Implementing an Agency Theory of Government, 64 N.Y.U. L. Rev. 1239, 1239 (1989).

²⁵⁵ Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984).

²⁵⁶ See Pierce, supra note 20, at 65-66.

²⁵⁷ David Zaring, Reasonable Agencies, 96 VA. L. REV. 135, 137, 190 (2010).

courts to apply, as some observers, and even courts themselves, have complained since at least the mid-1970s.²⁵⁸

If the rigors of the hard look doctrine may have been exaggerated, so too, perhaps, has the extent to which OMB review necessarily impedes the rulemaking process. For example, in a 1986 article, Professors DeMuth and Ginsburg claim that the "overall average time for regulatory review [by OMB] is just sixteen days" and that "the vast majority of proposals and regulations submitted to OMB are cleared almost immediately."259 They conclude that the "minor costs resulting from briefly delaying the implementation of regulations that OMB ultimately approves as cost-effective . . . are a small price to pay for avoiding the huge costs of issuing ill-considered regulations."260 Our own calculations of the amount of time consumed by OMB review are greater than DeMuth and Ginsburg's, but they still suggest that OMB review is a relatively minor speed bump in the regulatory process.²⁶¹ In an earlier paper, we showed that the average OMB review of an NPRM took just forty-four days to complete under President Ronald Reagan, and forty-eight days under President George H.W. Bush.262

OMB may be both uninterested in and unable to review complex regulations in ways that are sufficient to "catch the technical errors or errors of detail on which the legality and . . . the wisdom of the regulations may depend."²⁶³ This lack of capacity to conduct meaningful reviews may lead OMB officials to conduct reviews that are largely cursory in nature.²⁶⁴ Furthermore, agencies may be able to preempt

²⁵⁸ See Breyer, supra note 151, at 58-59 (suggesting that courts recognize the potential for judicial review to undesirably delay rulemaking, and that they "therefore hesitate to call agency decisions irrational and set them aside," a hesitation also informed by the courts' "crowded . . . judicial dockets" that prevent them from engaging in thorough review of extensive rulemaking records); William F. Pedersen, Jr., Formal Records and Informal Rulemaking, 85 Yale L.J. 38, 70 (1975) (suggesting that the "unwieldy and disorganized [agency] records created through [the notice and comment rulemaking process] must be a plague to the [reviewing] courts" and noting that "[s]everal courts have commented adversely on the sheer burden of extra work created" by hard look review).

²⁵⁹ DeMuth & Ginsburg, supra note 116, at 1088.

²⁶⁰ *Id*

²⁶¹ See Jason Webb Yackee & Susan Webb Yackee, Is the Bush Bureaucracy Any Different? A Macro-Empirical Examination of Notice and Comment Rulemaking Under "43," in President George W. Bush's Influence over Bureaucracy and Policy: Extraordinary Times, Extraordinary Powers 41, 52 (Colin Provost & Paul Teske, eds., 2009).

²⁶² See id. at 52.

²⁶³ Pedersen, supra note 258, at 59.

²⁶⁴ See id. Professors DeMuth and Ginsburg argue, however, that OMB's lack of technical expertise does not prevent it from playing a valuable role in the regulatory process. See DeMuth

meaningful OMB review by delaying submission of a rule for review until just prior to a statutory or court-imposed deadline for promulgation.²⁶⁵ E. Donald Elliott describes this tactic as one of "jamming" the review process, with the agency submitting the rule while saying something like: "Gee, we would like to change [the rule in response to White House or OMB concerns], but we can't; we are under a court ordered deadline."266 Or agencies may be able to ignore procedural constraints, or to comply with less than due diligence. For example, Jennifer McCoid has argued that "satisfaction of the [RFA's] requirements [that agencies analyze the effects of proposed rules on small businesses] largely depends on the good faith and voluntary compliance of each executive agency."267 However, "[c]ompliance has been sporadic at best, and even the most faithful agencies can avoid the RFA's requirements when it is convenient for them to do so."268 Neither Congress nor the courts appear willing to sanction noncompliance-indeed, the RFA and the PRA expressly forbid judicial review for agency compliance.269

The courts, the President, and Congress may also seek to counteract potential ossification through rule-facilitating procedures. For example, Congress may require agencies to promulgate rules through notice and comment, and they may impose regulatory deadlines and "hammers" that spur agencies to act more quickly.²⁷⁰ Courts may also

[&]amp; Ginsburg, supra note 116, at 1083 ("The OMB staff is rarely able to bring new knowledge of a field to the attention of the agency. Yet the OMB staff is routinely able to ask hard questions, both substantive and methodological, to which an agency should be expected to have good answers before it proceeds to regulate.").

²⁶⁵ See Elliott, supra note 40, at 10,592.

²⁶⁶ Id. at 10,594.

²⁶⁷ Jennifer McCoid, Comment, EPA Rulemaking Under the Regulatory Flexibility Act: The Need for Reform, 23 B.C. Envtl. Aff. L. Rev. 203, 204 (1995).

²⁶⁸ Id

²⁶⁹ See Howard M. Friedman, The Oversupply of Regulatory Reform: From Law to Politics in Administrative Rulemaking, 71 Neb. L. Rev. 1169, 1190 (1992).

²⁷⁰ See M. Elizabeth Magill, Congressional Control over Agency Rulemaking: The Nutrition Labeling and Education Act's Hammer Provisions, 50 FOOD & DRUG L.J. 149, 153–54 (1995). In an interview with a current (2010) DOI employee who focused on Endangered Species Act regulations, we were told that FWS gives ESA rules subject to court deadlines absolute priority, making every effort to comply. Interview with Fish & Wildlife Service Employee, Dept. of Interior, in D.C. (June 29, 2010). The employee said that rules with congressional deadlines were also given high priority, but that in reality FWS had some latitude to exceed congressional deadlines without much risk of suffering adverse consequences. Id. This regulatory wiggle room as to congressional deadlines may explain why our KM analysis of ESA rules (Figure 9) shows that they take a relatively long time to complete despite congressionally imposed deadlines on many ESA-related actions. Congress likely has limited ability to monitor or to sanction agencies for moderate noncompliance with deadlines.

impose deadlines during the course of litigation, and increased OMB involvement in rulemaking may provide the White House with more opportunities to communicate to agencies those rules that the White House wishes to see quickly developed and promulgated.²⁷¹ Similarly, as Elliott suggests, statutory deadlines encourage agencies to focus their efforts on regulatory initiatives that Congress and the President consider important.²⁷² On the other hand, he says that deadlines for some may also cause those without deadlines to slip through the regulatory cracks.²⁷³ In other words, deadlines may alleviate ossification as to some rules, but cause other rules to be delayed or abandoned. That possibility may help explain the results reported in our earlier article, where we found that the imposition of procedural constraints by Congress and the President on agency autonomy actually tended to speed up the regulatory process for rules subject to the constraints.²⁷⁴ In that view, procedural constraints may serve to focus agency energies on rules that the political branches, but not necessarily the agency itself, consider to be most important.²⁷⁵

Finally, there may be important impediments to an agency's ability to regulate to its satisfaction through means other than notice and comment, no matter how difficult notice and comment may have become.²⁷⁶ As Professor Elizabeth Magill has argued, agencies formally enjoy wide latitude to choose between regulatory instruments.²⁷⁷ The classic choice is between notice and comment regulations and rules that emerge from agency-level adjudicatory processes, but as discussed above, the ossification literature assumes that delay will cause

In some cases, congressional deadlines may be quite difficult or even impossible for agencies to meet given the complexities of their regulatory mandates. This seems to have been the case with OSM, which was ordered by Congress to complete a highly complex "cooperative federalism" regulatory scheme in exceedingly short order. See Mark Squillace, Cooperative Federalism Under the Surface Mining Control and Reclamation Act: Is This Any Way to Run a Government?, 87 W. VA. L. Rev. 687, 696–97 (1985). OSM failed to meet its deadlines, which, in any case, were exceedingly unrealistic. See Green, supra note 253, at 538–39; see also Squillace, supra, at 697–98. More generally, Professor John Graham has cautioned Congress against imposing unrealistic deadlines. See John D. Graham, The Failure of Agency-Forcing: The Regulation of Airborne Carcinogens Under Section 112 of the Clean Air Act, 1985 DUKE L.J. 100, 124, 147. In any event, the point is that Congress has tools to spur agencies to act, just as it has tools that may serve to slow or prevent agency action.

²⁷¹ See Yackee & Yackee, supra note 25, at 264.

²⁷² See Elliott, supra note 40, at 10,594.

²⁷³ See id. at 10,596.

²⁷⁴ See Yackee & Yackee, supra note 25, at 264.

²⁷⁵ See id. at 279.

²⁷⁶ See Magill, supra note 51, at 1387-88.

²⁷⁷ See id. at 1386.

agencies to consider the availability of more surreptitious (and probably illegal) options. These alternatives, however, may actually be less attractive to the agencies than even an ossified informal rulemaking process, either because the costs of the alternatives are particularly high, or because they fail to provide certain benefits that flow from following notice and comment requirements.²⁷⁸

For example, formal (adjudicatory) rulemaking may be even more tedious and inefficient than ossified notice and comment rulemaking because of the need to hold hearings, take testimony, allow crossexamination, and the like.²⁷⁹ Indeed, Professor Pedersen has cogently argued that rulemaking via adjudicatory hearings is "self-defeating in complicated regulatory programs" and is generally inappropriate for implementing the expanded regulatory duties of modern federal agencies.²⁸⁰ The infamous peanut butter rulemaking provides the classic example.²⁸¹ Through a formal rulemaking process, the Food and Drug Administration ("FDA") managed to spend more than ten years (and to compile a hearing transcript of nearly 8000 pages) settling the not-so-pressing question of the minimum peanut content of "peanut butter."²⁸² The peanut butter rulemaking commenced in 1959, and did not conclude until 1970, when the Third Circuit affirmed the rule.²⁸³

Furthermore, agencies generally have much less control over either the initiation of the adjudicatory processes that can lead to the opportunity to announce a new formal rule, or the content of any such announcement. This is because agency adjudicative dockets typically

²⁷⁸ See id. at 1396-97.

²⁷⁹ See Pedersen, supra note 258, at 44.

⁸⁰ Id.

²⁸¹ The peanut butter rulemaking is summarized in Robert W. Hamilton, Rulemaking on a Record by the Food and Drug Administration, 50 Tex. L. Rev. 1132, 1142-45 (1972).

²⁸² As Professor Hamilton notes, the major brands of peanut butter at the time contained peanut content in excess of seventy-five percent, with the two leading brands containing a peanut content of eighty-seven percent. See id. at 1143. The FDA first proposed requiring the substance to contain at least ninety-five percent peanuts, and then proposed a ninety percent requirement. See id.

²⁸³ See id. at 1145. Although the peanut butter rulemaking would appear on its face to be an example of the "ossification" of the formal rulemaking process, Hamilton attributes a good portion of the delay to the fact that FDA regulators viewed the peanut butter proposal as relatively unimportant, and failed to prioritize the rulemaking. Id. at 1143—44. The observation is an important reminder that the courts, the President, and Congress are not responsible for all instances of undue delay. Agency officials themselves may be responsible, sometimes even consciously, for extreme delays in rulemaking. The fact that an agency has proposed a particular regulatory change does not necessarily mean that the agency enthusiastically supports its own proposal. See id.

are not driven by the agency itself but by challenges to agency actions initiated by regulated persons and entities, and because administrative law judges tasked with pronouncing agency law through adjudications enjoy some measure of decisional independence from other agency staff, including from senior policymakers.²⁸⁴ By contrast, the § 553 process is agency initiated and largely agency controlled.²⁸⁵ For these reasons, notice and comment rulemaking is highly likely to remain the preferred method of regulation for most agencies.²⁸⁶

Rulemaking via adjudication may be procedurally more inefficient than even an ossified notice and comment process, and the outcomes of adjudicatory rulemakings may be more difficult for agencies to control, but the same cannot be said for non-rule rules. In theory, non-rule rules are relatively costless policy instruments.²⁸⁷ Agencies decide whether to issue them, and they decide their content, with few, if any, externally imposed procedural constraints on the decisionmaking process.²⁸⁸ On the other hand, non-rule rules suffer from a number of disadvantages. The most important is that non-rule rules are highly unlikely to be granted much, if any, deference by a reviewing court.²⁸⁹ As part of our larger project, we conducted a series of inter-

total picture [of DOI adjudication] remains quite different from one's ordinary expectations about the choice between rulemaking and adjudication. Instead of a single decider, rationally or irrationally allocating choices between the two procedures and itself making the fundamental policy decisions whichever mode is chosen, one finds a frequently unconscious process of allocation and, more important, a process which leads ultimately to different authorities.

Id. at 1258.

²⁸⁴ See Russell L. Weaver, Appellate Review in Executive Departments and Agencies, 48 Admin. L. Rev. 251, 273-74 (1996) (discussing decisional independence in DOI adjudications). Although federal agency heads typically enjoy formally substantial power to overturn the decisions of administrative law judges, in practice they are often far too busy with other responsibilities to exercise an active review function. See id. at 291. The requirement of decisional independence can be viewed as one rooted in constitutional principles of due process. In the 1970s, the DOI revamped its adjudicatory processes to better guarantee decisional independence. See generally Newton Frishberg et al., The Effect of the Federal Land Policy and Management Act on Adjudication Procedures in the Department of the Interior and Judicial Review of Adjudication Decisions, 21 Ariz. L. Rev. 541 (1979). In a detailed critique of DOI adjudication, Professor Strauss also observed that Department leadership did not "contribute significantly" to the formulation of policy through adjudication in mining matters; the Board of Land Appeals effectively exercised decisional authority, and the Secretary would, in Strauss's estimation, be able to intervene in only the most "urgent" cases. See Strauss, supra note 178, at 1257-58. He concludes that the

²⁸⁵ See 5 U.S.C. § 553(c) (2006).

²⁸⁶ See supra note 51 and accompanying text.

²⁸⁷ See supra Part I.D.

²⁸⁸ See Koch, supra note 99, at 1053.

²⁸⁹ See id. at 1050-51.

views with current (2010) DOI regulators.²⁹⁰ We asked those regulators whether they viewed non-rule rules as a useful substitute for notice and comment regulations.²⁹¹ None of the eleven interviewees viewed the two policy instruments as substitutable, largely (if not exclusively) because, from their point of view, § 553 rulemakings were likely to be reviewed highly deferentially by the courts, while non-rule rules were not.²⁹² This significantly higher deference flows doctrinally, of course, from *Chevron*,²⁹³ and the later decision in *United States v. Mead Corp.*,²⁹⁴ and the regulators with whom we spoke viewed *Chevron*'s protections as very much worth obtaining.²⁹⁵

The use of non-rule rules to announce important regulatory changes may suffer from a number of other disadvantages compared to notice and comment regulation. For example, it may be more difficult for agencies to ensure that all relevant targets of a regulatory change actually are aware of the change when it is not publicized through normal channels, such as through publication in the *Federal Register*.²⁹⁶ Not all regulatees may be aware of a particular speech or news release announcing a major change in policy, and these communication difficulties may render certain types of non-rule rules fairly inefficient when it comes to actually changing the behavior of regulatees.

Similarly, because surreptitious regulation via non-rule rules likely violates the APA,²⁹⁷ and thus places the regulatory change at risk of being struck down by a court if challenged, agencies may feel the need to obscure the mandatory nature of their non-rule rules.²⁹⁸

²⁹⁰ Interviews with employees, Dep't of Interior, in D.C. (June 29-30, 2010) [hereinafter Interviews].

²⁹¹ Id.

²⁹² Id.

²⁹³ Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837, 842-44 (1984).

United States v. Mead Corp., 533 U.S. 218, 234-35 (2001). *Mead* obviously was decided well after the timeframe of our current Study, but the principle that it enunciates—that agency actions that have gone through the full panoply of APA procedural requirements will receive a higher degree of deference than those that have not—is not necessarily surprising or new, and is probably reflected in earlier cases in which the courts have proven willing to strike down non-rule rules as violating APA requirements.

²⁹⁵ Interviews, supra note 290.

²⁹⁶ See Koch, supra note 99, at 1075.

²⁹⁷ In some cases, the use of non-rule rules may also violate substantive (e.g. non-APA) statutes. For example, some statutes specifically order—rather than just authorize—an agency to regulate an issue through notice and comment. See Magill, supra note 51, at 1389.

²⁹⁸ See Koch, supra note 99, at 1071-75.

This leads to excessive slippage between the behavior of regulatees and the agency's own regulatory goals.²⁹⁹

Additionally, one should not discount the possibility—naïve as it may seem—that regulators might view notice and comment as tending to produce substantively better rules than more informal processes, in part because public comments occasionally contain ideas that are actually useful.³⁰⁰ In our interviews, a number of current DOI regulators suggested that this indeed was the case, even if many public comments are not particularly helpful.³⁰¹

Finally, even if the notice and comment process is not likely to lead to substantively better regulations in fact, regulators may none-theless have internalized a normative preference for the notice and comment process as the "right thing to do."³⁰² Put somewhat differently, regulators may accept as a professional norm the notion that "good regulators" should proceed via notice and comment rather than through press releases and the like. None of this is to deny that regulators sometimes do seek to regulate through non-rule rules. We are simply suggesting the possibility that, in many cases, regulators may have good reason to prefer the notice and comment process.

In summary, the major implication of this Article is to suggest a need to reevaluate administrative law scholarship's focus on ossification as one of the major evils of the modern regulatory environment. Our empirical examination of DOI rulemaking from 1950 to 1990 does not support the claim that the notice and comment system is fundamentally broken. Agencies appear able and willing to issue substantial numbers of regulations even in the allegedly ossified period, and to do so relatively quickly.³⁰³ Rather than using the specter of ossification to justify radical changes to the existing administrative

²⁹⁹ See id.

³⁰⁰ Cf. Jerry L. Mashaw, Foreword: The American Model of Federal Administrative Law: Remembering the First One Hundred Years, 78 Geo. Wash. L. Rev. 975, 988-91 (2010) (describing the historical tendency of agencies to impose "structure and process" on their regulatory activities even when not required to do so by law).

³⁰¹ Interviews, supra note 290.

³⁰² Indeed, Professor Wendy Espeland traces just such a process in BOR. See Wendy Nelson Espeland, Bureaucratizing Democracy, Democratizing Bureaucracy, 25 Law & Soc. INQUIRY 1077 (2000). She finds that BOR employees are "committed to the idea that citizens who are directly affected by their decisions should play a meaningful part in the planning process," and that this view is "well institutionalized" and is now a "routine feature of project planning." Id. at 1079; see also Reiss, supra note 50, at 374 (asserting that it is in an agency's self-interest to appear accountable, and that as a result agencies "already regularly go beyond the requirements of § 553 of the APA" in order to "increase their legitimacy and reduce criticism").

³⁰³ See supra Parts V, VII.

framework—such as the elimination of judicial review,304 the widespread adoption of a negotiated rulemaking model,³⁰⁵ or the development of a complicated menu of procedures from which agencies would be free to choose³⁰⁶—it may be more worthwhile to devote reformist energies to helping to alleviate intraagency inefficiencies of the "red tape" variety. The public management literature typically defines organizational red tape as "rules, regulations, and procedures that remain in force and entail a compliance burden but do not advance the legitimate purposes the rules were intended to serve."307 Our interviewees identified a number of areas in which relatively small red tape reforms might nonetheless lead to measurable improvements in the administrative process without lessening transparency and opportunities for public participation.³⁰⁸ Such reforms could be as minor as allowing regulators to make Congressional Review Act ("CRA") submissions via courier or email, 309 reconsidering the utility of the PRA,310 or providing agencies with funding to purchase or develop software solutions to the form comment problem.311

Agencies also might be encouraged to reexamine their own internally imposed inefficiencies.³¹² For example, several of our interview-

³⁰⁴ See generally Cross, supra note 26.

³⁰⁵ See generally Freeman, supra note 15.

³⁰⁶ See Carnegie Comm'n on Sci., Tech., & Gov't, supra note 26, at 109-10.

³⁰⁷ BARRY BOZEMAN, BUREAUCRACY AND RED TAPE 12 (2000).

³⁰⁸ Interviews, supra note 290.

³⁰⁹ A number of our interviewees complained about the inconvenience caused by Congress's insistence that CRA submissions be hand delivered to Capitol Hill by an agency employee. *Id.*

³¹⁰ The PRA requires agencies to, among other things, obtain OMB approval of any agency forms that will impose an information collection burden on the public. See 44 U.S.C. § 3507(a)(2) (2006). Multiple interviewees complained intensely about the PRA, which, in their view (and somewhat ironically), has itself turned into a major source of red tape. Interviews, supra note 290. Representatives of one agency said that they had hired an employee whose full-time job consisted of managing the agency's PRA submissions. Id. Despite the effort that PRA compliance requires, interviewees said that OMB virtually never denies PRA approval. Id.

³¹¹ Several interviewees mentioned that the advent of electronically submitted form comments posed managerial challenges, as form comments had to be separated from nonform comments in order to ensure that the agency read and considered each unique comment. Interviews, supra note 290. The volume of form and other kinds of nonsubstantive comments for certain rulemakings could be extremely high. *Id.* For example, an interviewee recalled that FWS received more than 600,000 comments in response to its proposed polar bear listing, of which only a small percentage were substantive nonform comments. *Id.*

³¹² Professor Jerry Mashaw similarly has suggested that
[t]o the extent that we are interested in the reform of administrative law in the
United States, we might do better to operate on the internal law of administration
than by ceaselessly tweaking the external law. . . . [M]y hope is that administrative
lawyers can be convinced to look beyond judicial doctrine and the transsubstantive

ees indicated that one of the most important sources of delay in DOI rulemaking was the Department's Solicitor's Office, which is responsible for reviewing Department regulations at various stages in the rule development process.³¹³ We were told that some Department rule writers view the Office as a "black hole" into which proposals might inexplicably disappear for months or even years.³¹⁴ The problem apparently stems in part from the Office's litigation workload; lawyers naturally prioritized their litigation responsibilities over their review duties.³¹⁵ A solution might be to promote greater specialization in the Office by assigning rule-review duties to some lawyers and litigation duties to others. Alternatively, the Department might impose and enforce internal rule-review deadlines, or put more energy into lobbying Congress for funding to hire additional lawyers.

Of course, these relatively small-bore reform efforts would not return notice and comment rulemaking to the halcyon days of yore—where one might imagine a regulator waking up one morning with a bright idea, spending a few minutes jotting it down on paper (along with a cryptically short explanation of the idea's justification and import), publishing the jottings in the next week's *Federal Register*, glancing over the one or two comments received before throwing them in the trash, and publishing a judicially impervious final rule ninety days later that lays out what the public henceforth can or cannot do. If that is what rulemaking used to be, though, it does not seem likely that most people would want to return to it.³¹⁶

X. CONCLUDING THOUGHTS: THE NEED FOR FUTURE RESEARCH

To conclude, we would like to emphasize a point that may already be obvious: this Study can hardly be considered the final empirical word on the reality or magnitude of regulatory ossification. Our analysis is, like virtually any empirical study, subject to a number of important critiques, and we do not claim to have constructed a test of the ossification thesis that is devoid of any weaknesses. In particular, we remain sensitive to the observation that our Study does not fully overcome the knotty problem of determining proper baseline expectations

requirements of the external administrative law to see how administrative law really functions at the agency level and how it might be improved.

Mashaw, supra note 300, at 992.

³¹³ Interviews, supra note 290.

³¹⁴ Id.

³¹⁵ Id.

³¹⁶ Cf. Reiss, supra note 50, at 373 (noting that the American system of government is "based on limiting government efficiency and tying government hands to prevent abuse").

for regulatory volume and speed. Most obviously, for example, perhaps the proper empirical comparison was not between observed regulatory volume from 1950 to 1975 and observed regulatory volume from 1976 to 1990, but between the observed volume of regulations in the later period and a counterfactual volume of regulations that would have been promulgated in the later period absent ossification. Put a bit differently, perhaps there were significant changes in the societal need or demand for regulations across our two historical periods (with need or demand much higher from 1976 to 1990 than earlier), so that, absent ossification, we would have expected to see far higher volumes in the later period than we actually observe.³¹⁷

Empirically testing counterfactuals poses obvious epistemological problems. We have attempted to address this concern by constructing a rough measure of congressional demand for regulations using annual mentions of agencies in the *Congressional Record*. Figure 17, our last figure, presents an alternative test. In it, we simply plotted political scientist James Stimson's measure of "public policy mood" against an annual count of DOI NPRMs.³¹⁸ Stimson's measure of mood uses sophisticated statistical techniques to combine responses to questions from numerous public opinion surveys into a one-dimensional measure of the public's preferences as to the role that government should play in society.³¹⁹ The measure ranges from "liberal" to "conservative," where "liberal" indicates a preference for more government involvement in society and "conservative" indicates a desire for less government involvement.³²⁰ Stimson's work on public policy mood has been highly influential within his discipline.³²¹

Figure 17 shows that public policy mood was becoming markedly more conservative throughout the 1970s (indicated by a declining

³¹⁷ Professor McGarity suggested to us over a very enjoyable dinner in Austin that this is, indeed, the proper understanding of his ossification argument—that the rulemaking process in the ossified era is comparatively worse than it should be, not worse than it was. In his view, we are not actually testing his ossification thesis (which perhaps may not even be testable). In our view, however, the ossification literature can very fairly be read to suggest that a "before-and-after" test is both appropriate and valuable.

³¹⁸ Stimson's data are available on his website. See James A. Stimson, Data Files, www.unc.edu, http://www.unc.edu/~jstimson/Data.html (last visited June 2, 2012). For a description of Stimson's methodology, see James A. Stimson, Public Opinion in America: Moods, Cycles, and Swings 37–92 (1999).

³¹⁹ STIMSON, supra note 318, at 37-62.

³²⁰ Id.

³²¹ See generally, e.g., Peter K. Enns & Paul M. Kellstedt, Policy Mood and Political Sophistication: Why Everybody Moves Mood, 38 BRIT. J. Pol. Sci. 433 (2008) (discussing the influence of Stimson and others).

"percent liberal"). Although the public policy mood reversed course after 1980, by the end of our period of study (1990), mood was still less liberal than it had been in the 1960s. For our purposes, the main point is that Stimson's measure does not support the notion that public demand for regulation was markedly higher in the ossified era than in the preossification era. Although this empirical observation does not entirely obviate the problem of selecting proper baseline comparators, it does strengthen our confidence in the assertion that the DOI remained capable of proposing and promulgating numerically significant numbers of regulations during the ossification era. Stimson's data do not suggest that the public was clamoring for dramatically more regulations than the DOI was either ready or able to provide.

That said, future researchers still would do well to present, and to test, a more fully specified theory of the origins of regulatory demand or need. They should also use more sophisticated research strategies to examine the causal links between demand or need and regulatory output.

A second potential weakness of our test of the ossification thesis is the possibility that we are turning over the wrong agency's rocks. Perhaps ossification has only stricken certain agencies in any meaningful way, such as those engaged in the most technically or scientifically complex regulations, or those engaged in formulating regulations of far greater societal importance than those typically produced by the DOI. In other words, perhaps ossification impacts agencies differentially, so that it may be a serious problem at OSHA or at EPA, but not at the agencies upon which we have focused. We do not believe this to be the case, because we read the ossification literature as portraying a generalized problem afflicting most (if not all) federal agencies. Furthermore, this Article offers a number of strong justifications for the selection of the DOI as our focus of study. Future researchers, however, justifiably may wish to focus their empirical efforts on attempting to systematically measure regulatory failure and delay in those agencies that are most often presented as plagued by the ossification phenomenon.322

Alternatively, researchers may wish to try and distinguish between rulemakings that are theoretically likely to suffer ossification and those that are not. This kind of rule-level comparative analysis might show, for example, that ossification is a reality for certain kinds of rules (perhaps rules of high salience, or rules that are economically

³²² Of course, it would be impossible to conduct a "before-and-after" study of the type that we present in this Article for agencies that were created in the 1970s.

significant) but less likely to be a reality for other kinds of rules (low salience or economically insignificant rules). Our own analysis has not attempted to differentiate rules by rule-level characteristics, in large part because of the size of our database. Such constructs as "salience" or "importance" are not obviously measurable from the texts published in the *Federal Register*.³²³ Nonetheless, one potentially fruitful avenue may be to randomly sample from our database of DOI NPRMs and final rules and to subject selected rulemakings to systematic content analysis designed to code rulemakings along theoretically relevant dimensions.

Third, and finally, a potentially significant problem with our analysis of delay in rulemaking is that we were unable to track the full regulatory process. In practice, a regulatory effort does not begin with an NPRM, but necessarily includes some measure of pre-NPRM activity. A regulator develops the initial idea to explore the possibility of producing an NPRM, and he or she then starts collecting input from interested parties, both inside and outside the agency, and begins assembling supporting data. Many regulatory ideas never advance to the NPRM stage, but many of those that do must now also pass through OMB review prior to publication of the NPRM in the Federal Register. Our analysis is only able to track the regulatory process from the NPRM stage, which we treat, by necessity, as the beginning of the process whose duration we are measuring. We have no way of measuring the amount of time and effort that agencies invest in the pre-NPRM portion of the rulemaking process; nor are we able to compare pre-NPRM efforts in more recent years with pre-NPRM efforts in years long passed.

It is obvious that our estimates of how long it takes to regulate would be longer if it was possible to begin measuring the rulemaking process prior to the issuance of the NPRM. Another, less obvious implication is that ossification may be worse than we have suggested if

³²³ For example, without intimate knowledge of a particular policy area, it will often be difficult to tell from an NPRM text whether a proposal to change a word or sentence in an existing regulation is an "important" change or not. Although we can imagine certain facially plausible proxies for NPRM or rule importance (perhaps NPRM or rule length in words or characters), those proxies suffer from their own important problems. For example, word length is no guarantee of rule importance; furthermore, trends in agency practice may mean that agencies today feel the need to write more wordy regulations than they have in the past, independently of the regulation's inherent importance. Since 1995, agencies have been required to self-report in the *Unified Agenda* whether the agency considers a regulatory proposal to be "economically significant." Our earlier article examined whether these "significant" regulatory actions were statistically more likely to suffer delay and found that they were not. *See* Yackee & Yackee, *supra* note 25, at 273.

agencies in more recent years are, because of the threat of hard look and OMB review, spending significantly more time in pre-NPRM rule development than they have in the past. It does not appear that there are many—or perhaps any—feasible methods of systematically identifying what might be called the "bright idea" moment and then measuring an idea's progress through the pre-NPRM rule development process.³²⁴ Doing so would certainly be impossible for a large dataset, such as ours, that spans several decades.

One potential solution may be to turn to qualitative case studies. Of course, one of our critiques of the ossification literature in this Article has concerned the literature's tendency to make generalized claims about ossification on the basis of relatively limited anecdotal examples. But this is not to say that qualitative case studies, when done properly, cannot provide high quality (and indeed, "scientific") evidence confirming or disconfirming a particular ossification-related hypothesis.³²⁵ It would be helpful for qualitatively minded researchers interested in the question of ossification to be methodologically self conscious in selecting their cases, perhaps making more use of focused comparisons between alleged cases of ossification and cases in which rulemakings have not been ossified. Additionally, it would be beneficial if case-study evidence was developed in a more disciplined and systematic manner, perhaps by making greater use of social scientific survey and interview techniques.

In conclusion, despite the various limitations discussed above, we view our empirical analysis as suggesting that the federal rulemaking process has not been fundamentally hobbled by constraints on bureaucratic autonomy and discretion imposed by the courts, the White House, or Congress. We have not attempted the daunting task of demonstrating that these constraints provide society with any particular benefits. But, assuming that they do provide some measure of benefit, we would suggest that the corresponding costs do not appear to be so outsized that they necessarily imply the current system needs to be radically reformed.

However, much more work remains to be done. Professor Mc-Garity's original article, though now nearly twenty years old, remains

³²⁴ One possibility, however, might be to first identify a sample of rules that result from specific statutory commands to regulate, and to use the statute's date of effectiveness as the "bright idea" moment.

³²⁵ On the social scientific utility of case study methods, see generally Timothy J. McKeown, Case Studies and the Statistical Worldview: Review of King, Keohane and Verba's Designing Social Inquiry: Scientific Inference in Qualitative Research, 53 INT'L ORG. 161 (1999).

an exceptionally stimulating and provocative contribution to administrative law scholarship that has achieved the deserved honor of admittance into the pantheon of conventional wisdom. But now is the time to put that conventional wisdom to a truly empirical test. Our Article is an early and modest entry in what we hope will prove to be a rich empirical literature that seeks to advance our understanding of whether, how, and why federal agencies are (or are not) able to satisfactorily achieve their regulatory responsibilities.

APPENDIX

Figure 1. Annual Number of § 553 NPRMs Issued by the DOI

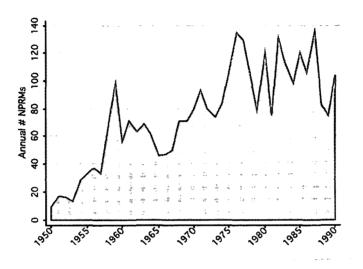


Figure 2. Annual Number of Final \S 553 Rules Issued by the DOI

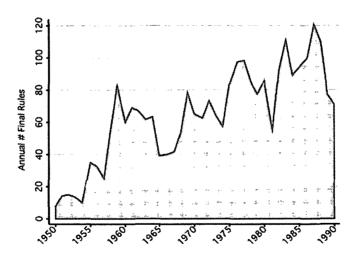


Figure 3. Annual Production of § 553 NPRMs, by Major Agency

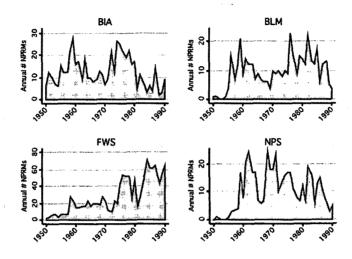


Figure 4. Annual Production of § 553 Final Rules, by Major Agency

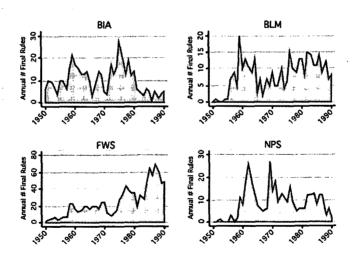


FIGURE 5. ENDANGERED SPECIES ACT RULEMAKING IN FWS

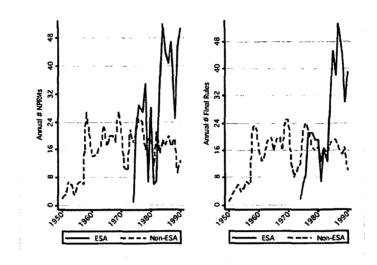


FIGURE 6. CONGRESSIONAL ATTENTION TO MAJOR AGENCIES

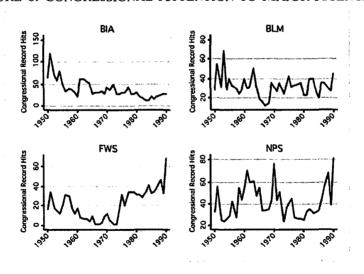


FIGURE 7. AGENCY BUDGETS, CONSTANT THOUSANDS OF DOLLARS

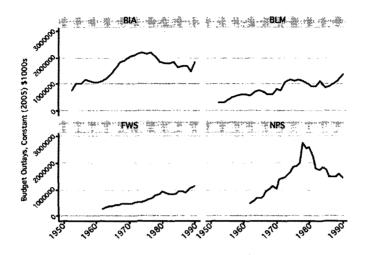


Figure 8. Success Rate of NPRMs, Pre-1976 and Post-1975

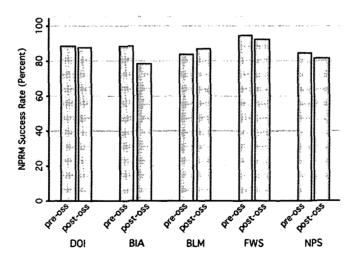


FIGURE 9. KAPLAN-MEIER SURVIVAL ESTIMATES, DOI

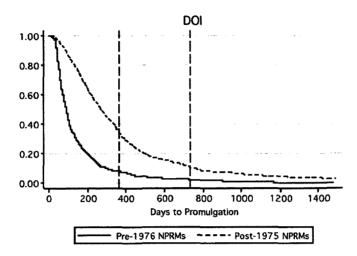


FIGURE 10. KAPLAN-MEIER SURVIVAL ESTIMATES, BY MAJOR AGENCY

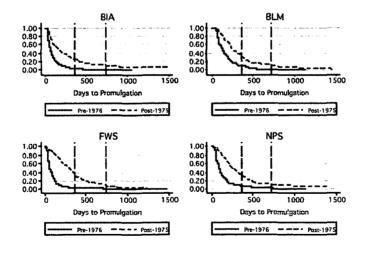


Figure 11. Kaplan-Meier Survival Estimates, ESA Regulation in FWS, 1974–1990

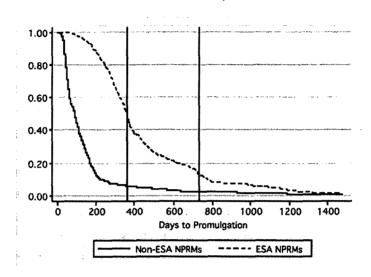


Figure 12. Annual Number of No-Comment Regulations, BY AGENCY

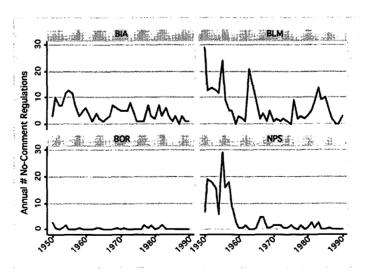


Figure 13. Annual Number of No-Comment Regulations, FWS

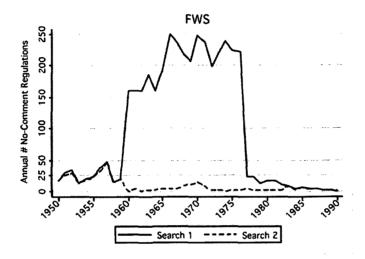


FIGURE 14. ANNUAL NUMBER OF NEWS RELEASES, FWS

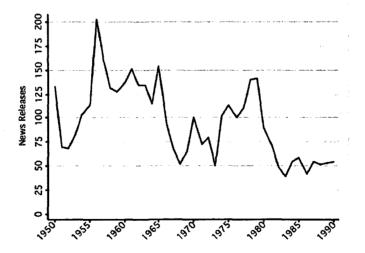


Figure 15. Decisions and Opinions Published in Interior Decisions



FIGURE 16. SECRETARY'S ORDERS

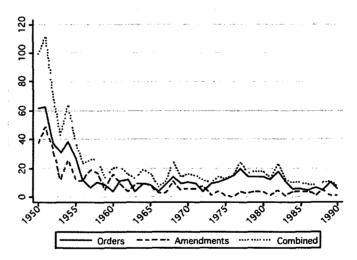


Figure 17. Public Mood and DOI NPRM Production

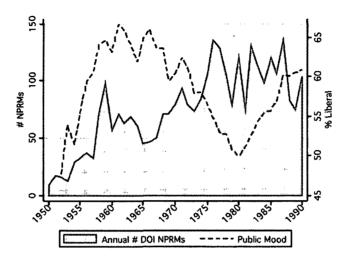


Table. § 553 Rulemaking Activity in the DOI

	Years in Sample	Avg. Annual NPRMs			Avg. Annual Final Rules		
		1955- 1975	1976- 1990	Percent Change	1955- 1975	1976- 1990	Percent Change
DOI	1955- 1990	72.39	111.28	+54%	61.81	93.79	+52%
BIA	1955- 1990	14.76	10.67	-28%	12.71	8.13	-36%
BLM	1955- 1990	9.57	12.87	+34%	7.67	11.27	+47%
вом	1955- 1990	4.00	0.20	-95%	4.43	0.20	-95%
BOR	1955- 1990	0.38	1.00	+162%	0.38	0.80	+110%
FWS	1955- 1990	18.14	49.8	+174%	16.24	44.00	+171%
GES	1955- 1990	0.90	3.47	+283%	0.67	2.93	+340%
HCR	1978- 1981		2.50			1.00	•
MES	1973- 1978	3.00	4.67	+56%	2.00	3.67	+83%
MMS	1982- 1990		7.22		•	4.67	•
NPS	1955- 1 99 0	12.95	10.33	-20%	10.57	8.53	-19%
OIA	1959- 1971	2.62	•	•	2.08	•	
OME	1958- 1965	0.38	•		0.38	•	•
oog	1955- 1974	0.75		•	0.60	•	•
oos	1955- 1990	2.33	2.80	+20%	1.95	2.20	+13%
OSM	1977- 1990		10.86			9.64	
osw	1955- 1974	0.1			0.10		
WPC	1966- 1970	1.4	•		1.20		•