



ARTICLE

Regulatory Diffusion

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Abstract. Regulatory diffusion occurs when an agency adopts a substantially similar rule to that of another agency. Indeed, regulatory texts proliferate just like other forms of law do. While this insight has been explored across countries, this dynamic also occurs closer to home: American administrative agencies regularly borrow language from one another. Our research shows that, in recent years, agencies reused one out of every ten paragraphs of the *Code of Federal Regulations*. These findings are timely given the Supreme Court's call for judges to be less deferential to agency regulatory interpretation. There is thus newfound significance to understanding how legislative rules are written and why.

This Article explores the descriptive and normative implications of regulatory diffusion. The empirical analysis reveals a fairly steady rate of text reuse, with a notable increase during the Trump Administration—perhaps the result of well-documented staffing problems and vacancies. More generally, the number of both borrowing and lending agencies has increased, with a relatively small number of agencies borrowing text from an increasingly larger group. In other words, regulatory text has diffused from more agencies. This behavior appears to vary by whether the agency is executive or independent in nature.

These findings raise important questions about whether such diffusion is desirable, as well as how to interpret the regulations that result. To assess the relevant tradeoffs, we propose that agencies should be required to explain why they are emulating other regulatory texts to allow executive-branch oversight over the practice. We also argue in favor of the *in pari materia* canon—the idea that similar regulations should be interpreted similarly by judges—and propose ways for judges to determine when and how to apply it.

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Introduction

Regulatory texts, like other forms of law, diffuse. They migrate across administrative agencies in substantially the same form. Agencies, in other words, borrow rules from one another. The broader phenomenon of legal diffusion is usually studied as a comparative, international matter.¹ Laws are frequently “transplant[ed]” to foreign arenas.² Developing countries, this literature suggests, borrow laws from more developed countries to signal legitimacy, garner prestige, or preserve resources.³ Sometimes regulations are mimicked to promote harmonization between member states, such as within the European Union.⁴ Other times, regulatory standards in one country are adopted abroad because they are perceived as more normatively desirable.⁵

Regulatory diffusion, it turns out, also occurs closer to home. American administrative agencies borrow the texts of rules from one another. Such behavior is not merely a cost-saving resort to templates, which are commonly used when agencies draft responses to executive orders.⁶ Rather, agencies issuing separate regulations reuse substantive and procedural regulatory provisions. One provision is promulgated by an agency, only to be later

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1. See, e.g., Benedikt Goderis & Mila Versteeg, *The Diffusion of Constitutional Rights*, 39 INT’L REV. L. & ECON. 1, 1 (2014); Witold J. Henisz, Bennet A. Zelner & Mauro F. Guillén, *The Worldwide Diffusion of Market-Oriented Infrastructure Reform, 1977-1999*, 70 AM. SOCIO. REV. 871, 871-72 (2005); Holger Spamann, *Contemporary Legal Transplants: Legal Families and the Diffusion of (Corporate) Law*, 2009 BYU L. REV. 1813, 1816; Jonathan B. Wiener, *The Diffusion of Regulatory Oversight*, in THE GLOBALIZATION OF COST-BENEFIT ANALYSIS IN ENVIRONMENTAL POLICY 123, 126-31 (Michael A. Livermore & Richard L. Revesz eds., 2013).
 2. ALAN WATSON, LEGAL TRANSPLANTS: AN APPROACH TO COMPARATIVE LAW 95 (1974).
 3. See, e.g., Jonathan M. Miller, *A Typology of Legal Transplants: Using Sociology, Legal History and Argentine Examples to Explain the Transplant Process*, 51 AM. J. COMPAR. L. 839, 846 (2003) (“[I]t is common for developing countries and smaller industrialized countries to borrow the environmental, health and safety legislation and regulatory standards of large developed countries. It is simply too expensive and a waste of resources for those countries to develop their own standards, so they turn to a country with prestige in the legislative field . . .”).
 4. See, e.g., SIMON PETTMAN, STANDARDS HARMONISATION IN ASEAN: PROGRESS, CHALLENGES AND MOVING BEYOND 2015, at 9-10, 15 (Econ. Rsch. Inst. for ASEAN & E. Asia, ERIA Discussion Paper Ser. No. ERIA-DP-2013-30, 2013), <https://perma.cc/BJ6Y-NSRB>.
 5. See Eri Saikawa, *Policy Diffusion of Emission Standards: Is There a Race to the Top?*, 65 WORLD POL. 1, 13 (2013) (“As more countries adopt emission standards, the notion that it is right to adopt such standards spreads and countries make a decision to follow the path of others.”).
 6. See Cynthia R. Farina, Mary J. Newhart & Cheryl Blake, *The Problem with Words: Plain Language and Public Participation in Rulemaking*, 83 GEO. WASH. L. REV. 1358, 1378-80, 1390-92 (2015).

adopted in substantially the same form by another.⁷ The same provision can be mimicked over decades by dozens of disparate agencies.⁸

Sometimes this practice is required by Congress or the President.⁹ Many times, however, it is not: Agencies, in their discretion, choose to import regulatory language from another agency's rulemaking. Consider some examples:

- In 1980, the Department of Education (ED) promulgated Title IX regulations regarding nondiscrimination on the basis of sex.¹⁰ Two decades later, twenty-one agencies decided to substantially copy most of ED's final regulations on Title IX.¹¹ In their "common rule," they cited several reasons for doing so, including "the history of public participation in the development and congressional approval of ED's regulations"; ED's "leadership role" in regulatory enforcement; the public's preexisting familiarity with the regulations; and an interest in maintaining regulatory consistency.¹²
- In 2001, President George W. Bush issued Executive Order 13,199 calling for greater inclusion of faith-based organizations in federal grants.¹³ The

7. See *infra* Part I.B.

8. See *infra* Part I.B.

9. See Keith Bradley, *The Design of Agency Interactions*, 111 COLUM. L. REV. 745, 751 (2011). Bradley notes that the Securities Exchange Act directs "agencies to make regulations that are 'substantially similar' to those of the [Securities and Exchange Commission (SEC)]." *Id.* As a result, "all of these agencies have copied the SEC's regulations, and when the SEC amends its regulations, the banking regulators usually follow." *Id.* (footnote omitted). For discussion of presidential coordination, see the text accompanying notes 162-63 below.

10. ED was the successor agency to the Department of Health, Education, and Welfare, which had originally promulgated the same regulations in 1975. Those regulations were later adopted by ED when it splintered off in 1980. See *Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance*, 65 Fed. Reg. 52,858, 52,859 (Aug. 30, 2000) (codified in scattered sections of the C.F.R.). Title IX provides that "[n]o person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance," with certain exceptions. 20 U.S.C. § 1681(a).

11. *Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance*, 65 Fed. Reg. at 52,858-59.

12. See *id.* at 52,859. At the same time, the agencies took care to note that their regulations were "not *identical* to" ED's regulations in every respect. *Id.* (emphasis added). For example, they noted that "the common rule includes modifications to be consistent with Supreme Court precedent and statutory changes that are not yet reflected in ED's regulations. In addition . . . the participating agencies have made a few additional revisions to the common rule in response to public comments." *Id.*

13. Exec. Order No. 13,199, 3 C.F.R. 752 (2002), *repealed by* Exec. Order No. 13,831, 3 C.F.R. 806 (2019).

challenge was how to do so in light of competing Establishment Clause concerns. Over the following years, a number of agencies promulgated rules allowing federal grant funding, but not for “[i]nherently religious activities such as, religious worship, instruction, or proselytization.”¹⁴

- In 2010, however, President Barack Obama’s Advisory Council on Faith-Based and Neighborhood Partnerships recommended that agencies replace the term “inherently religious” because the term was confusing and did not sufficiently indicate the boundaries of government subsidies.¹⁵ That same year, President Obama issued Executive Order 13,559, which used the phrase “explicitly religious activities” though it did not specifically require any changes to agency rules.¹⁶ Six years later, nine large federal agencies jointly changed their funding restrictions to cover “explicitly religious activities,” which included “proselytization” and “religious instruction.”¹⁷ Other agencies followed the next year, even after President Obama left office.¹⁸
- In 2015, the Department of Commerce proposed revisions to its Export Administration Regulations (EAR) to “enhance clarity and consistency” with the terms of the International Traffic in Arms Regulation (ITAR), which is administered by the Department of State.¹⁹ The proposed rule

14. *See, e.g.*, VA Homeless Providers Grant and Per Diem Program; Religious Organizations, 69 Fed. Reg. 31,883, 31,883, 31,888 (June 8, 2004) (codified as amended at 38 C.F.R. pt. 61); *see also* Solicitation for Grant Applications; National Farmworker Jobs Program for Program Year 2009, 74 Fed. Reg. 36,519, 36,523 (July 23, 2009) (noting that government funding for this program shall not be used for “inherently religious activities such as religious instruction, worship, or proselytization”); Family Violence Prevention and Services/Grants for Domestic Violence Shelters/Grants to Native American Tribes (Including Alaska Native Villages) and Tribal Organizations, 75 Fed. Reg. 14,596, 14,601 (Mar. 26, 2010) (same).

15. PRESIDENT’S ADVISORY COUNCIL ON FAITH-BASED & NEIGHBORHOOD P’SHPIS, A NEW ERA OF PARTNERSHIPS: REPORT OF RECOMMENDATIONS TO THE PRESIDENT 129 (2010), <https://perma.cc/FYU7-EW8L>.

16. Exec. Order. No. 13,559, 3 C.F.R. 273 (2011).

17. *See* Federal Agency Final Regulations Implementing Executive Order 13559: Fundamental Principles and Policymaking Criteria for Partnerships with Faith-Based and Other Neighborhood Organizations, 81 Fed. Reg. 19,355, 19,358 (Apr. 4, 2016) (codified in scattered sections of the C.F.R.).

18. *See, e.g.*, Revolving Loan Fund Program Changes and General Updates to PWEDA Regulations, 82 Fed. Reg. 57,034, 57,051 (Dec. 1, 2017) (codified in scattered sections of 13 C.F.R.) (noting the change was made “to be consistent with recent rulemakings by nine other Federal agencies”).

19. Revisions to Definitions in the Export Administration Regulations, 80 Fed. Reg. 31,505, 31,505 (June 3, 2015) (to be codified in scattered sections of 15 C.F.R.).

imported the definitions of a number of terms from ITAR.²⁰ Because the two sets of regulations were issued pursuant to different statutes and administered by different agencies, the proposed rule noted that “each set of regulations” had “evolved separately over decades without much coordination between the two agencies regarding their structure and content.”²¹ As a result, they often used “different words, or the same words differently, to accomplish similar regulatory objectives.”²² So to “facilitate enhanced compliance while reducing unnecessary regulatory burdens,” the proposed EAR copied the ITAR definitions rather than rework definitions in concert with the other agency.²³

In this manner, regulations diffuse across different agencies, at different times, and through different channels. While one might expect this dynamic to occur only between agencies sharing statutory authorities, it occurs between agencies authorized under different statutes as well.

This phenomenon raises a host of questions, both descriptive and normative: What motivates the borrowing of regulatory texts? Do drafters simply seek to save time and resources? Or are these efforts to standardize regulatory language and reduce compliance costs? Through what mechanisms does diffusion occur—interagency working groups, staff migration, centralized coordination? Are some agencies more influential leaders in drafting regulatory texts than others? More broadly, what networks exist across agencies when writing rules? And what are the implications, if any, for regulatory process and interpretation?

These inquiries lie at the intersection of a number of rich literatures. Comparative scholars, as mentioned, have long examined how and why laws are “transplant[ed]” across different jurisdictions.²⁴ Some of this work studies the migration of legal rules without regard to their form, whether case law, statutes, or otherwise.²⁵ Social scientists have also long studied the broader

20. *Id.* The rule imported definitions for terms including: “technology,” “required,” “peculiarly responsible,” “proscribed person,” “published,” results of “fundamental research,” “export,” “reexport,” “release,” “transfer,” and “transfer (in-country).” *See id.*

21. *Id.* at 31,505-06.

22. *Id.* at 31,506.

23. *See id.* at 31,505; *see also* Revisions to Definitions in the Export Administration Regulations, 81 Fed. Reg. 35,586, 35,587 (June 3, 2016) (codified as amended in scattered sections of 15 C.F.R.).

24. *See, e.g.,* WATSON, *supra* note 2, at 95; Spamann, *supra* note 1, at 1816. One vein of such work, for example, compares civil and common law systems, with some scholars finding that corporate laws disperse from “core” to “periphery” countries within those systems. Spamann, *supra* note 1, at 1816 (documenting via an empirical study a “diffusion of law along legal family lines”).

25. *See, e.g.,* Spamann, *supra* note 1, at 1818 (“This paper systematically traces visible foreign influence—citations, the involvement of foreign-trained lawyers, and evidence
footnote continued on next page”)

notion of “policy diffusion,” the “spread of [policy] innovations from one government to another.”²⁶ Work in this area has mainly focused on policy choices adopted by legislative bodies and how they spread, “while ignoring the equally important decisions made by executive agencies.”²⁷ Relatedly, some analyses have focused more specifically on the extent to which state statutory texts are “reuse[d]” or copied verbatim by other state legislatures.²⁸ Contract law scholars, for their part, have long studied the use of boilerplate and drafting templates, asking how copied contractual terms proliferate and through what channels.²⁹

These themes have yet to be explored in the context of U.S. administrative agencies. One reason may be the previous regime of strong judicial deference to agency regulatory interpretation.³⁰ As a result, there was little need to consider how and why agencies draft regulations. But that is no longer the case.³¹ We suspect that another reason is the until-recent lack of access to machine-

of outright copying of statutes—in the major corporate law treatises and the drafting histories of securities and corporate law statutes of thirty-two peripheral and semi-peripheral countries . . .”).

26. See, e.g., Charles R. Shipan & Craig Volden, *The Mechanisms of Policy Diffusion*, 52 AM. J. POL. SCI. 840, 841 (2008); see also Steven J. Balla, *Interstate Professional Associations and the Diffusion of Policy Innovations*, 29 AM. POL. RSCH. 221, 229-33, 235-42 (2001); Robert L. Crain, *Fluoridation: The Diffusion of an Innovation Among Cities*, 44 SOC. FORCES 467, 467-69 (1966); Lawrence J. Grossback, Sean Nicholson-Crotty & David A.M. Peterson, *Ideology and Learning in Policy Diffusion*, 32 AM. POL. RSCH. 521, 521-23 (2004).
27. See Charles R. Shipan & Craig Volden, *Policy Diffusion: Seven Lessons for Scholars and Practitioners*, 72 PUB. ADMIN. REV. 788, 793 (2012) (observing that “nearly all policy diffusion studies explore legislative adoption by state or national governments”).
28. See, e.g., Matthew Burgess, Eugenia Giraudy, Julian Katz-Samuels, Joe Walsh, Derek Willis, Lauren Haynes & Rayid Ghani, *The Legislative Influence Detector: Finding Text Reuse in State Legislation*, 22 PROC. ACM SIGKDD INT’L CONF. ON KNOWLEDGE DISCOVERY & DATA MINING 57, 57 (2016); see also John Wilkerson, David Smith & Nicholas Stramp, *Tracing the Flow of Policy Ideas in Legislatures: A Text Reuse Approach*, 59 AM. J. POL. SCI. 943, 943 (2015) (analyzing how a single law reused provisions from various federal bills).
29. The literature provides competing accounts, ranging from those that allege widespread reuse without reflection to those that suggest edits to past contracts in order to increase the attorneys’ profits. For an overview, see, for example, Julian Nyarko, *Stickiness and Incomplete Contracts*, 88 U. CHI. L. REV. 1, 6-7 (2021); Robert Anderson & Jeffrey Manns, *The Inefficient Evolution of Merger Agreements*, 85 GEO. WASH. L. REV. 57, 61-62 (2017); MITU GULATI & ROBERT E. SCOTT, *THE THREE AND A HALF MINUTE TRANSACTION: BOILERPLATE AND THE LIMITS OF CONTRACT DESIGN* 2-5 (2013); and Stephen J. Choi, Mitu Gulati & Robert E. Scott, *The Black Hole Problem in Commercial Boilerplate*, 67 DUKE L.J. 1, 7-8 (2017).
30. See *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 414 (1945) (calling for judges to give “controlling weight” to an agency’s interpretation so long as it is not “plainly erroneous or inconsistent with the regulation”); *Auer v. Robbins*, 519 U.S. 452, 461 (1997) (applying the same standard).
31. See *infra* Part III.B.

readable versions of the *Federal Register*.³² Earlier work on agency behavior used data drawn almost exclusively from the Unified Agenda³³—a semiannual publication of agencies’ planned activities.³⁴ The Unified Agenda essentially consists of self-reported data on planned regulatory activities, which some research now suggests is incomplete.³⁵ Agencies, however, are legally required to publish their final rules in the *Federal Register*.³⁶ Data drawn from the *Federal Register* thus provides the most comprehensive portrait of agency rulemaking available.

At the same time, administrative law scholars have increasingly studied the ways in which agencies relate to each other. Their work has documented that these interactions can be demanded and designed by the President or Congress.³⁷ Other times, these interactions are “interagency,”³⁸ that is,

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32. See Ed O’Keefe, *Federal Register Makes Itself More Web-Friendly*, WASH. POST (Oct. 5, 2009), <https://perma.cc/VZ3N-FKA6> (announcing in October 2009 that the *Federal Register* “will be available at Data.gov in a form known in the Web world as XML, which allows users to transport data from a Web site and store it, reorganize it or customize it elsewhere”).
33. See, e.g., Alex Acs & Charles M. Cameron, *Does White House Regulatory Review Produce a Chilling Effect and “OIRA Avoidance” in the Agencies?*, 43 PRESIDENTIAL STUD. Q. 443, 450 (2013); Steven J. Balla, *Political Control, Bureaucratic Discretion, and Public Commenting on Agency Regulations*, 93 PUB. ADMIN. 524, 536 n.12 (2015); Jack M. Beermann, *Midnight Rules: A Reform Agenda*, 2 MICH. J. ENV’T & ADMIN. L. 285, 319 n.108 (2013).
34. *Unified Agenda of Federal Regulatory and Deregulatory Actions*, U.S. GEN. SERVS. ADMIN., <https://perma.cc/HGT8-F9G8> (archived Apr. 4, 2022).
35. Jennifer Nou & Edward H. Stiglitz, *Strategic Rulemaking Disclosure*, 89 S. CAL. L. REV. 733, 755-56 (2016); see also Jerry L. Mashaw, *Improving the Environment of Agency Rulemaking: An Essay on Management, Games, and Accountability*, 57 LAW & CONTEMP. PROBS., Spring 1994, at 185, 198 n.41 (noting that the author’s investigation into the quality of the Unified Agenda data was “sufficiently disappointing that [he did] not pursue[] the analysis on a more ‘scientific’ basis”); Anne Joseph O’Connell, *Political Cycles of Rulemaking: An Empirical Portrait of the Modern Administrative State*, 94 VA. L. REV. 889, 927 n.108 (2008) (“[T]he Unified Agenda data are not perfect; they need confirmatory research.”).
36. See 5 U.S.C. § 553(d) (“The required publication or service of a substantive rule shall be made not less than 30 days before its effective date . . .”).
37. See, e.g., Bradley, *supra* note 9, at 746-47 (examining how the “political branches take advantage of and shape . . . agency–agency relationships”); Jody Freeman & Jim Rossi, *Agency Coordination in Shared Regulatory Space*, 125 HARV. L. REV. 1131, 1138-45, 1173 (2012); Daniel A. Farber & Anne Joseph O’Connell, *Agencies as Adversaries*, 105 CALIF. L. REV. 1375, 1386 (2017) (examining interagency conflict created by Congress “through delegation and appointment restrictions”; by the White House through “directives”; and occasionally “[by] . . . agencies and courts”); Daphna Renan, *Pooling Powers*, 115 COLUM. L. REV. 211, 218-43 (2015).
38. See Jason Marisam, *Interagency Administration*, 45 ARIZ. ST. L.J. 183, 184-85 (2013) (“Today, agencies routinely solicit input from other agencies, and agencies routinely offer their recommendations unsolicited when doing so is in their interests.”).

decisions by agencies themselves to coordinate or clash with other agencies.³⁹ Much of this nuanced scholarship explores case studies and examples. In addition, it often focuses on formal legal mechanisms, such as statutes or executive orders, interagency memoranda, and jointly issued policy statements and guidelines.⁴⁰

While these approaches have yielded rich insights, they have granted less attention to patterns of agency interaction, informal relationships, and the ways in which interagency connections are structured. They underappreciate, in other words, the importance of agency networks.⁴¹ Without an understanding of these connections, it may be more difficult to see how agencies exercise power by virtue of their positions within networks and how cohesive those networks are. For example, some agencies are highly influential rule drafters: When they write a regulation, other agencies follow.⁴² Similarly, some agencies are central network players and interact with a great number of other agencies.⁴³ Our analysis begins to shed light on some of these associations and related dynamics.

More broadly, this Article considers the phenomenon of regulatory diffusion as both a positive and normative matter. One of its primary aims is to help establish a research agenda on regulatory diffusion informed by our descriptive work. To that end, Part I uses text and network analysis to evaluate twenty years of data drawn from the *Federal Register*. These tools have long been staples of social-science and public-administration research,⁴⁴ but they

39. See, e.g., Bijal Shah, *Uncovering Coordinated Interagency Adjudication*, 128 HARV. L. REV. 805, 807 (2015) (interagency coordination); Farber & O'Connell, *supra* note 37, at 1390-92 (interagency conflict).

40. See, e.g., Freeman & Rossi, *supra* note 37, at 1161 (discussing interagency memoranda of understanding); Jason Marisam, *Duplicative Delegations*, 63 ADMIN. L. REV. 181, 184-85 (2011).

41. See John W. Patty & Elizabeth Maggie Penn, *Network Theory and Political Science*, in THE OXFORD HANDBOOK OF POLITICAL NETWORKS 147, 147 (Jennifer Nicoll Victor, Alexander H. Montgomery & Mark Lubell eds., 2017) ("The fundamental allure of network theory is its ability to describe and analyze the structure of connections between units . . . in a rigorous but flexible way.").

42. See *infra* Part I.B.2.

43. See *infra* Part I.B.2.

44. See, e.g., Sharon S. Dawes, Anthony M. Cresswell & Theresa A. Pardo, *From "Need to Know" to "Need to Share": Tangled Problems, Information Boundaries, and the Building of Public Sector Knowledge Networks*, 69 PUB. ADMIN. REV. 391, 392-93 (2009); Benny Hjern & David O. Porter, *Implementation Structures: A New Unit of Administrative Analysis*, 2 ORG. STUD. 211, 211, 220, 223 (1981). For a survey of network analysis in social science and public administration, see generally Jesse D. Lecy, Ines A. Mergel & Hans Peter Schmitz, *Networks in Public Administration: Current Scholarship in Review*, 16 PUB. MGMT. REV. 643 (2014); Michael D. Ward, Katherine Stovel & Audrey Sacks, *Network Analysis and Political Science*, 14 ANN. REV. POL. SCI. 245 (2011); and Patty & Penn, *supra* note 41.

have yet to be deployed robustly in the administrative law literature.⁴⁵ Our findings suggest that the share of reused texts has increased over time, from less than 3% in 2000 to more than 10% by 2020—more than a threefold increase. Strikingly, as of 2020, one out of every ten new regulatory paragraphs was borrowed from a previously published regulation.

In addition, while the number of both borrowing and lending agencies has increased, the rise in lending agencies is much steeper. This finding suggests that the network of diffusion has dispersed through the years, with a relatively small number of agencies borrowing text from an increasingly large group of agencies. In other words, regulatory text has diffused from more agencies over time. Some leaders—agencies whose texts are often copied by others—include the Department of the Treasury and Office of Management and Budget (OMB). The agencies that follow, or borrow, the most include the Department of Homeland Security (DHS) and the Department of Agriculture.

Moreover, this Article reveals that independent agencies borrow disproportionately from other independent agencies. Perhaps independent agencies trust texts from their counterparts as somehow more worthy of diffusion, more expert, and less subject to political change compared to executive agencies. After all, independent agencies are structured to be more isolated from presidential whim. Alternatively, independent agencies as a group may share more common regulatory problems or challenges relative to more disparate executive agencies.

Part II turns to potential explanations for some of these trends and findings. It considers possible reasons why drafting agencies would want to borrow texts from another agency—springboards for various hypotheses we hope to test in future work. For example, diffusion may occur because agencies have learned from other agencies about successful policies or drafting choices. Alternatively, perhaps regulatory drafters are driven by resource constraints, in which case one would expect to see variation with changes in budgets and staffing. Another possibility is that interest groups may play a central role in drafting and disseminating regulatory text—much as they do in the legislative arena. Drawing on interviews with government officials, we also consider some of the channels through which regulations diffuse. We identify informal methods of interaction between agencies and consider the behavior and incentives of regulatory drafters.

Finally, Part III considers some of the normative implications of diffusion on regulatory process and interpretation. In particular, it argues that agencies

45. See Verity Winship, *Enforcement Networks*, 37 YALE J. ON REGUL. 274, 276 (2020). While network analysis is just beginning to make its way into administrative law scholarship, there has recently been some excellent text analysis of the *Federal Register*. See, e.g., Cary Coglianese, Gabe Scheffler & Daniel E. Walters, *Unrules*, 73 STAN. L. REV. 885, 893 (2021).

have a duty to explain why they borrowed a text from another agency's rulemaking. This explanation should then be subject to review by the Office of Information and Regulatory Affairs (OIRA) to ensure that the text reuse occurred for desirable rather than undesirable reasons. Moreover, the question of how agencies draft regulations has newfound significance given a recent Supreme Court decision, *Kisor v. Wilkie*, which effectively calls for judges to interpret regulatory texts with less deference to the agency.⁴⁶ As a result, judges will increasingly face the question of whether to interpret similar regulations issued by different agencies *in pari materia*—that is, by reference to one another. This Part argues that this canon is appropriate in the regulatory context and proposes ways for judges to decide when and how to apply it. In addition, the analysis considers the tradeoffs between different mechanisms that agencies could use to update policies created under borrowed texts.

I. Diffusion Trends

Regulatory diffusion, as understood here, refers to the use of substantially similar codified texts across agencies.⁴⁷ With this focus, we are interested in two related phenomena: (1) the interagency spread of *policy choices*; and (2) the reuse of *regulatory language*. Policy diffusion, of course, can occur even when agencies write their regulations differently. When agencies reuse regulatory texts from other agencies, however, they are often adopting the same policies reflected in them. In other words, regulatory texts serve as an “aggregate representation” of various dimensions including the “domain of the policy, the ideological position enacted by the policy, the level of specificity in the policy enactment, and several other salient features of policy that are communicated through the text.”⁴⁸ To be sure, when the regulatory text is ambiguous, some of the policy choices contained therein are as well. But what is important to appreciate is that the phenomenon we study here implicates both agency policy choices as well as their drafting decisions.

Regulatory diffusion, in turn, can occur in different forms: through joint, common, or what we will call “successive” rulemaking. Sometimes, agencies issue “joint” regulations, resulting in a single rule signed by the relevant agencies and codified in the same place in the *Code of Federal Regulations*

46. See 139 S. Ct. 2400, 2416 (2019).

47. At issue is the operative text as codified in the *Code of Federal Regulations*, not the preambles and analyses accompanying it.

48. See Fridolin Linder, Bruce Desmarais, Matthew Burgess & Eugenia Giraudy, *Text as Policy: Measuring Policy Similarity Through Bill Text Reuse*, 48 POL'Y STUD. J. 546, 549 (2020).

(CFR).⁴⁹ In these instances, the regulatory text diffuses during the drafting process, culminating in a single rule. Agencies also issue highly similar, sometimes almost identical, rules that are concurrently published in their respective sections of the CFR—often referred to as “common” rules.⁵⁰ Like joint rules, the diffusion of drafting choices can occur prior to the issuance of the common rule.

Of most interest here, agencies can also reuse the texts of *published* rules from other agencies. In this “successive” context, agencies mirror the texts of other agencies months or years after they were first promulgated. In the Title IX rulemaking discussed above, for instance, recall that a group of agencies copied ED’s rules more than twenty years after they were first promulgated.⁵¹ This form of diffusion is perhaps the most striking, since it suggests channels of interagency interaction beyond the more familiar mechanisms of interagency working groups or centralized coordination through OIRA.

In this Part, we consider how to observe and measure similarity between regulatory texts. Using those methods, we then present an initial portrait of regulatory diffusion across agencies and over time. Our analysis suggests that the reuse of regulatory text is a phenomenon that has drastically increased in significance over time. Not only has the share of all reused text increased over time, but so has the number of agencies that participate in text reuse.

49. Freeman & Rossi, *supra* note 37, at 1165-66 (describing “joint rulemaking” as “typically involv[ing] two or more agencies agreeing to adopt a single regulatory preamble and text”). Freeman and Rossi define a “joint” rule as “a single rule with a series of signature pages from the participating agencies, which is codified in one place in the Code of Federal Regulations.” *Id.* at 1166 n.162. Consider a 1995 rule issued by the Federal Reserve and the Department of the Treasury that required enhanced recordkeeping related to certain wire transfers. Amendment to the Bank Secrecy Act Regulations Relating to Recordkeeping for Funds Transfers and Transmittals of Funds by Financial Institutions, 60 Fed. Reg. 220, 220 (Jan. 3, 1995) (codified as amended at 31 C.F.R. pt. 103). While, both agencies “jointly . . . adopted a final rule,” the text was recorded only in Treasury’s portion of the CFR. *See id.*

50. Freeman & Rossi, *supra* note 37, at 1166 n.162 (defining a “common” rule as “virtually identical rules issued by each participating agency in its own portion of the CFR”). An illustration is the previously described Title IX common rule issued by twenty-one agencies and codified in their respective sections of the CFR. *See supra* notes 11-12 and accompanying text. Like much else in rulemaking, these terms—“joint” and “common” rules—are not standardized. Some agencies use them interchangeably. Consider a 1994 rule issued by the Department of Housing and Urban Development and the Department of Agriculture. *See* Congregate Housing Services Program; Final Common Rule, 59 Fed. Reg. 22,220, 22,220 (Apr. 29, 1994). Under the “Action” header in the *Federal Register* entry, the agencies identify this rule as a “[f]inal common rule.” *See id.* The very next line, in the “Summary” section, then states that “[t]his document is the joint final rule.” *See id.*

51. *See supra* notes 10-12 and accompanying text.

A. Measuring Diffusion

Until recently, empirical research on legal diffusion has relied on manually coded datasets of limited scope.⁵² Specifically, a jurisdiction's adoption of another's policy was coded as evidence of diffusion. This approach is necessarily limited in scope, however, given inevitable limits on human capital and resources. By contrast, we took an automated, "text-as-data" approach to the analysis of regulatory text. This approach vastly increases the volume of data available, as well as the level of sophistication with which it can be analyzed. The first Subpart describes our dataset and methods for identifying diffusion between agencies. The next Subpart then provides some broad trends in the data, while shedding light on the agencies that are the most influential in providing regulatory text.

1. Dataset

Regulations must be published in the *Federal Register* to have legal effect.⁵³ The *Federal Register* is the government's official daily publication for, among other things, proposed and final rules.⁵⁴ Those final rules are then codified into the CFR on an annual basis.⁵⁵ Both the *Federal Register* and CFR are electronically available in the format of extensible markup language (XML).⁵⁶

Given its more organized structure, the CFR may initially seem like the best source for tracking regulatory diffusion. The CFR contains fifty titles according to broad subject-matter categories, divided into chapters, parts, and sections.⁵⁷ As relevant here, each section typically contains "[o]ne provision of

52. See, e.g., Christopher Z. Mooney & Mei-Hsien Lee, *Legislative Morality in the American States: The Case of Pre-Roe Abortion Regulation Reform*, 39 AM. J. POL. SCI. 599, 612-14 (1995); Craig Volden, *States as Policy Laboratories: Emulating Success in the Children's Health Insurance Program*, 50 AM. J. POL. SCI. 294, 299-301, 306-07, app. at 311 nn.a-f (2006).

53. See 5 U.S.C. § 553(d); *Safari Club Int'l v. Zinke*, 878 F.3d 316, 331 (D.C. Cir. 2017) ("A final rule must contain a statement of its basis and purposes and be published in the Federal Register 'not less than 30 days before its effective date.'" (citations omitted) (quoting 5 U.S.C. § 553(d))).

54. U.S. GPO, *Federal Register, 1936 to Present*, GOVINFO, <https://perma.cc/E5AU-RAUX> (last updated Dec. 24, 2021).

55. Specifically, the CFR is updated on a staggered basis, four times a year, by CFR title. U.S. GPO, *Code of Federal Regulations (Annual Edition)*, GOVINFO, <https://perma.cc/C4BX-939M> (archived Apr. 6, 2022).

56. See *XML Now Available for Ecf.gov*, FED. REG.: OFF. FED. REG. BLOG, <https://perma.cc/BU68-GVF9> (archived Apr. 6, 2022).

57. See U.S. GPO, *supra* note 55; 1 C.F.R. § 21.11 (2021); see also Richard J. McKinney, *A Research Guide to the Federal Register and the Code of Federal Regulations*, LAW LIBRS.' SOC'Y WASH., D.C., <https://perma.cc/DG7W-32KN> (last updated Sept. 16, 2019) (describing how the CFR titles are organized). Each chapter includes a set of rules by an individual agency. See *Federal Register Tutorial: The CFR—Organization & Contents*, NAT'L

footnote continued on next page

program/function rules.”⁵⁸ These sections, in turn, can be broken into paragraphs separated by paragraph breaks.⁵⁹ Thus, one could just compare changes to the CFR over time.

The *Federal Register*, however, has many advantages for understanding regulatory diffusion. These advantages outweigh the drawbacks.⁶⁰ First, unlike the CFR, the *Federal Register* provides the precise date on which a rule was published. We are thus able to determine the date on which text borrowing occurs and explore temporal variation and trends over time. Second, the CFR does not clearly designate which agencies are associated with particular rules, whereas the *Federal Register* does.⁶¹ Finally, the electronic version of the *Federal Register* includes rich metadata in a structured format: for example, associated

ARCHIVES, <https://perma.cc/X4FX-RQQE> (last updated Jan. 4, 2018). Each part, in turn, includes rules related to a single program or function. *Id.*

58. *Federal Register Tutorial: The CFR—Organization & Contents*, *supra* note 57.

59. See NAT’L ARCHIVES & RECS. ADMIN., DOCUMENT DRAFTING HANDBOOK 2-25 to 2-26 (rev. 2022), <https://perma.cc/VB9H-BXZH>.

60. One drawback is that agencies have more discretion in the way they publish regulatory amendments in the *Federal Register*. Specifically, agencies that amend the CFR typically reproduce the amended text of the regulation in the *Federal Register*. The text that is reproduced in the *Federal Register* is commonly limited to the individual paragraph that has been amended. But if an agency intends to make revisions to multiple paragraphs within a section, it has the discretion to instead revise the entire section and reproduce it in the *Federal Register*. See *id.* at 2-31 (“For extensive changes, revise the text in full rather than prepare fragmentary amendments. The reader will then have the complete text of the amended unit.”). Although the drafting handbook directs agencies to revise sections in full, determining the unit of revision lies in the agencies’ discretion since they can determine whether the changes are “extensive” enough to warrant a full revision. See *id.*

This process implies that not every paragraph appearing in the *Federal Register* was necessarily subject to a textual amendment. We note, however, that this fact does not affect our analysis of regulatory diffusion beyond the limitations discussed in the remainder of this Subpart. In addition, we note that, in exceptional circumstances, amendments to the CFR are not accompanied by a reproduction of the regulatory text in the *Federal Register* at all. In particular, if the amendment is minimal, agencies can explain the change using amendatory instructions rather than reprint the text in full. For example, in 2002, the Department of Health and Human Services amended 42 C.F.R. § 419.66 and used the following language to describe the amendment: “In § 419.66, paragraph (c)(1) is amended by adding the phrase ‘or by any category previously in effect’ after ‘categories’ and before ‘and.’” Medicare Program; Changes to the Hospital Outpatient Prospective Payment System and Calendar Year 2003 Payment Rates; and Changes to Payment Suspension for Unfiled Cost Reports, 67 Fed. Reg. 66,718, 66,813 (Nov. 1, 2002) (codified as amended at 42 C.F.R. pt. 419). But these instances are exceedingly rare. Indeed, we confirmed that the *Federal Register* reproduces at least the amended paragraph in 97.1% of amendments.

61. U.S. GPO, *supra* note 54 (describing how the “Table of Contents and Preliminary Pages” of the *Federal Register* “contain[] a comprehensive alphabetical listing by agency name of all documents in the issue”).

agencies and subagencies, statutory authorities, rule summaries, and much more.⁶² For all these reasons, our dataset was created from the electronic version of the *Federal Register*, rather than the CFR.

Specifically, we scraped the regulatory text and associated metadata for every entry published in the *Federal Register* over a twenty-year period, between January 1, 2000, and December 31, 2020.⁶³ We isolated final rules that amend regulatory text in the CFR, yielding a total of 36,042 final rules.⁶⁴ But the appropriate unit of analysis is not necessarily the entire rule itself, which can vary greatly in length and scope.⁶⁵ When one rule reuses text from another, only certain portions are usually copied. By splitting the rule into paragraphs, a practice consistent with previous work in the literature,⁶⁶ we were able to identify text reuse at a finer level of granularity. Using larger units of analysis such as the section or part, by contrast, would risk missing meaningful examples of diffusion.

Note that this measure does not capture all instances of regulatory borrowing, since an agency could simply cross-reference another agency's regulation rather than incorporate the text into its own.⁶⁷ This practice of

62. In addition to the text of the paragraph, we collected additional information. This data includes: (1) the part, title, and section number of the amended text; (2) the number of words in the regulatory text; (3) the names of all the participating agencies and subagencies; (4) the statutory authority; (5) the subject; (6) the amendatory instructions (i.e., a brief description summarizing amendments); (7) the summary description; (8) the publication date; and (9) the heading where available. Based on the number of participating agencies, we further determined (10) whether the amendment occurred as part of a joint rulemaking. Based on the summary text, we determined (11) whether the amendment to the CFR was a republication of a previously existing rule under a new section, which sometimes occurs following the incorporation into a new agency. We did this simply by looking for the string “republish” in the lowercased summary text.

63. Every entry in the *Federal Register* API includes a URL referring to the associated XML file. We wrote a scraper to automatically extract the text and other information from these XML files. We obtained the metadata through the *Federal Register* API, available at *FR API Documentation*, FED. REG.: API DOCUMENTATION, <https://perma.cc/R8HZ-F94S> (archived Apr. 6, 2022).

64. We first started with all of the entries under the “Rule” designation. In total, this process yielded 77,944 entries. But not every entry designated as a “Rule” adds or amends regulatory text in the CFR; interpretive rules are one example. In addition, many amendments to the CFR are limited to a change in the statutory authority and not the actual regulatory text.

65. See Jennifer Nou & Edward H. Stiglitz, *Regulatory Bundling*, 128 YALE L.J. 1174, 1190-91 (2019).

66. See, e.g., Gloria T. Lau, Haoyi Wang & Kincho H. Law, *Locating Related Regulations Using a Comparative Analysis Approach*, 7 PROC. ANN. INT'L CONF. ON DIGIT. GOV'T RSCH. 229, 231 (2006) (“[A] section from one set of regulation is compared with another section from another set . . .”).

67. Interagency cross-referencing is distinct from the phenomenon known as “incorporation by reference.” See Emily S. Bremer, *Incorporation by Reference in an Open-footnote continued on next page*

cross-referencing is explicitly prohibited by regulation, however, with a few narrow exceptions.⁶⁸ As the Administrative Committee of the Federal Register explained when promulgating this prohibition, cross-references make the *Federal Register* “difficult to use” since readers would have to constantly refer to different sources.⁶⁹ They also frustrate the purpose of the Federal Register Act⁷⁰ which is to furnish “the orderly giving of notice” regarding regulatory requirements.⁷¹ Moreover, cross-references also create “procedural problems for an agency” since they would require the referencing agency to “surrender[.]” control over future regulatory amendments to the referenced agency.⁷² As a result, an agency could unintentionally cross-reference regulations that later became irrelevant or obsolete.⁷³

With this limitation in mind, we collected the text of every CFR amendment contained in the *Federal Register* at the paragraph level. This

Government Age, 36 HARV. J.L. & PUB. POL’Y 131, 133 (2013) (defining “incorporation by reference” as “the practice of codifying material published elsewhere by simply referring to it in the text of a regulation”); Sidney A. Shapiro, *Outsourcing Government Regulation*, 53 DUKE L.J. 389, 401-02 (2003) (providing examples of agencies incorporating by reference codes and standards created by private organizations). “Incorporation by reference” often refers to a practice in which agencies adopt standards written by private standard-development organizations (SDOs). See Bremer, *supra*, at 150. These SDOs are often made up of industry participants: The SDOs with the most standards incorporated by reference include the American Society for Testing and Materials, the American National Standards Institute, and the American Society of Mechanical Engineers. *Id.* This practice has come under fire because agencies do not publish the actual texts of these standards in the CFR due to copyright concerns. See, e.g., Peter L. Strauss, *Private Standards Organizations and Public Law*, 22 WM. & MARY BILL RTS. J. 497, 506-07 (2013). Rather, they codify only references to material published elsewhere. *Id.* at 507. As a result, this form of regulatory diffusion does not appear in our dataset, which picks up only text that is actually in the *Federal Register*. Such limits on studies and analysis are all the more reason to support reforms designed to increase the transparency of rules incorporated by reference.

68. See 1 C.F.R. § 21.21(c) (2021) (stating that “[e]ach agency shall publish its own regulations in full text” and that “[c]ross-references to the regulations of another agency may not be used as a substitute for publication in full text” unless a regulation falls into a number of narrow exceptions). These exceptions apply when the reference is: (1) “required by court order, statute, Executive order or reorganization plan”; (2) “to regulations promulgated by an agency with the exclusive legal authority” to regulate a subject matter; (3) “informational” rather than regulatory; (4) “to test methods or consensus standards”; or (5) “to the Department level from a subagency.” *Id.*

69. See Updating of Publication Procedures, 50 Fed. Reg. 12,462, 12,462 (Mar. 28, 1985) (codified as amended in scattered sections of 1 C.F.R.).

70. 44 U.S.C. § 1501-1511.

71. Updating of Publication Procedures, 50 Fed. Reg. at 12,462.

72. *Id.* at 12,463.

73. *Id.*

resulted in 1,578,332 paragraphs.⁷⁴ Some paragraphs, however, do not contain content relevant to our study. For example, the text may consist of framing or otherwise boilerplate language—that is, language we cannot be confident reflects a conscious decision to specify the nature of legal obligations.⁷⁵ More generally, we assumed that a regulatory paragraph is “significant” only if it contains a substantive or procedural policy choice.⁷⁶ So we sought to exclude paragraphs like the following: “[f]or purposes of this section, the following definitions apply”⁷⁷ or “[t]he following terms used in this part are defined as follows.”⁷⁸ Our efforts on this front are consistent with the broader diffusion literature.⁷⁹

74. Overall, our initial dataset contained 1,753,458 paragraphs. Not all paragraphs, however, represent meaningful text. For instance, in order to indicate that a paragraph in a series of paragraphs has *not* been revised, agencies at times simply use the symbols “* * *” instead of reproducing the full text. Other revised paragraphs may consist simply of tables. We isolated paragraphs containing regulatory text by removing from the dataset all observations for which the text contained fewer than 20 characters (including spaces) and the proportion of special characters to letters was less than or equal to 30%. After this process, we were left with 1,578,332 paragraphs.

75. WILLIAM P. STASKY, *WEST’S LEGAL THESAURUS/Dictionary: A Resource for the Writer and the Computer Researcher* 98 (1985), defines boilerplate as “[s]tandard language in legal documents that is identical in documents of a like nature.” See also Jeremy McClane, *Boilerplate and the Impact of Disclosure in Securities Dealmaking*, 72 *VAND. L. REV.* 191, 208-09 (2019).

76. Our motivation for distinguishing texts stemmed from our study’s objective, which was to better understand the dynamics underlying the diffusion of regulatory text. It is difficult to assume intentionality or coordination when a great number of agencies adopt the same boilerplate text. It is more likely that the text reflects a standardization of necessary, structural information. Even more importantly, we were normatively interested in the spread of policy choices across agencies. We thus had to exclude observations that arguably do not express a policy choice, whether a substantive or procedural legal obligation.

77. See, e.g., 49 C.F.R. § 701.9 (2020).

78. See, e.g., 10 C.F.R. § 733.3 (2021).

79. We are not the first to attempt to distinguish between different variations of relevant and irrelevant text (where “relevance” is defined relative to the purpose of the study). For instance, in a study of policy diffusion, researchers examined text reuse in bills introduced by U.S. state legislatures. Linder et al., *supra* note 48, at 574. In order to isolate and omit “boilerplate” language, they created a formula that depended on the frequency of text strings across documents. Intuitively, the authors assumed that text appearing in a great number of bills was indicative of boilerplate language, whereas text that appeared in relatively few bills suggested policy relevance. *Id.* at 556. They then “down-weight[ed]” text that was used too frequently. *Id.* In our view, however, this approach is not suited to our specific application for two primary reasons. First, while the text frequency likely characterizes many of our nonsubstantive terms, it does not fully map onto our definition of “significant” paragraphs. Second, the performance of the approach proposed by Linder, Desmarais, Burgess, and Giraudy has not been validated. Although there are theoretical reasons to assume that the approach can identify some types of nonsubstantive text, we simply do not know whether this is the

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To be sure, the lines between those paragraphs we considered significant and those we did not will not always be clear; there will be borderline cases. A human cannot feasibly read and code the more than one million paragraphs in our dataset in a reasonable period of time. We thus employed a supervised machine-learning classification approach,⁸⁰ which automates and disciplines the identification of significant paragraphs. We began with a sample of 400 paragraphs, manually labeling whether each paragraph met our definition of significance. After balancing the labeled data,⁸¹ we divided it into a training set and a test set.⁸² We used the training set to train and compare four popular machine-learning classifiers, the details of which are included in Appendix C below.⁸³

With the trained classifiers, we predicted whether paragraphs contained in the test set are significant. As a last step, we then compared the labels created by the classifiers to the labels created by the human annotator. We repeated the entire process five times and compared the performance of the classifiers

case without manually coding a large, random sample of paragraphs and then comparing the automated approach against the manually coded labels. At the same time, if one is willing to manually code their dataset, these hand-coded labels can be used more efficiently to train a machine-learning classifier. And indeed, this is the approach we took.

80. This decision is consistent with a growing number of studies utilizing a computational analysis of legal texts. *See, e.g.*, Gabriel Rauterberg & Eric Talley, *Contracting Out of the Fiduciary Duty of Loyalty: An Empirical Analysis of Corporate Opportunity Waivers*, 117 COLUM. L. REV. 1075, 1078, 1121-23 (2017); David E. Pozen, Eric L. Talley & Julian Nyarko, *A Computational Analysis of Constitutional Polarization*, 105 CORNELL L. REV. 1, 16-20 (2019); Jonathan H. Choi, *An Empirical Study of Statutory Interpretation in Tax Law*, 95 N.Y.U. L. REV. 363, 382-88 (2020); Nyarko, *supra* note 29, at 30-32.
81. Since we had significantly fewer substantive than nonsubstantive labels, the training data can be considered “imbalanced.” Imbalanced datasets can lower the classifier’s performance for the minority class (here, substantive labels). We thus used the popular Synthetic Minority Oversampling Technique (SMOTE) to create a dataset with balanced labels. *See* Nitesh V. Chawla, Kevin W. Bowyer, Lawrence O. Hall & W. Philip Kegelmeyer, *SMOTE: Synthetic Minority Over-Sampling Technique*, 16 J. A.I. RSCH. 321, 326-31, 352 (2002).
82. The training set consisted of 80% of the labeled paragraphs, while the test set consisted of 20% of the labeled paragraphs.
83. Intuitively, each classifier can be viewed as an algorithm that automatically “reads” the text of a document and assesses how predictive certain words (or patterns of words or phrases) are for the label applied by the annotator. We trained a naïve Bayes classifier using a multivariate Bernoulli distribution (Bernoulli NB); a naïve Bayes classifier using a multinomial distribution (Multinomial NB); an Adaptive Boosting algorithm (ADA Boosting); and a Gradient Boosting algorithm (Gradient Boosting). The details of the individual classifiers are complex and do not need to be laid out in detail. Given that we can verify the performance of the classifiers without probing their mechanics, however, readers should not be deterred if the algorithms appear to be a black box to them.

across iterations.⁸⁴ Importantly, because the classifiers had never encountered the paragraphs in the test set during training, the process yielded an unbiased assessment of the classifiers' performance.⁸⁵ Our best-performing classifier correctly predicted 83% of all texts,⁸⁶ and we then used this classifier to identify all significant texts in the *Federal Register*.

To further distinguish between regulatory paragraphs imposing a procedural versus substantive policy choice, we repeated the above process with a separate dataset of 699 paragraphs manually labeled for the existence of procedural policy choices. The classifiers trained on this latter set were even more accurate, correctly predicting 93% of all texts. This process left us with 651,164 paragraphs, of which 63,540 (or about 10%) were procedural. More than 90% of our dataset, in other words, consisted of texts regarding substantive policy choices.

84. More precisely, we implemented a five-fold cross-validation procedure. This means that we split the labeled data into five subsets: {subset₁, subset₂, subset₃, subset₄, subset₅}. We then used four of these subsets to train the classifier and one to test its performance. We repeated this step five times, each time holding back a different subset. For instance, in the first iteration, we would use {subset₁, subset₂, subset₃, subset₄} to train and {subset₅} to test. Then, in the second, we would use {subset₁, subset₂, subset₃, subset₅} to train and {subset₄} to test, and so on. The overall performance of a classifier is the performance averaged across all five iterations. We employed five-fold cross-validation to minimize the risk that the assessed performance is the consequence of a particularly unusual split of our data into a training and a test set.

85. Without a test set, machine-learning classifiers often overfit. "Overfitting" means that the classifier's predictions are influenced by random noise. For instance, if the word "labor" appears only once in a significant paragraph and never appears in an insignificant paragraph, the classifier may incorrectly assume that the word "labor" is predictive of significance, when in fact the observed pattern was merely the result of chance.

86. We note that this performance is close to the theoretical limit, given that even two humans reading the same texts often differ on the correct label. This metric is also called the "Accuracy" or "Correct Classification Rate." Other performance metrics popular in the literature on information sciences are the AUC (0.86) and the F₁ score (0.83). For an explanation of these scores, see Pozen et al., *supra* note 80, at 33. Our best performing classifier was the Gradient Boosting classifier.

Table 1
Frequencies in the *Federal Register* Dataset

Unit	Frequency
Rules	27,714
Sections	108,365
Paragraphs	651,164
Agencies	134
Subagencies	179

Table 1 above contains more information on the final dataset. Appendix C below further breaks down the amount of regulatory activity by agency. This analysis reveals significant heterogeneity in activity levels, with the Environmental Protection Agency (EPA) and the Department of the Treasury drafting the most regulatory paragraphs by a significant margin.⁸⁷

2. Identifying text reuse

Next, we measured regulatory paragraph reuse between different agencies. This required defining a “similarity measure”—a way of assessing how alike two texts are. Among those that exist in the literature, we chose the “Jaccard similarity” measure, which is an established measure that is computationally feasible given our large dataset as well as amenable to a number of other techniques designed to locate matching pairs efficiently.⁸⁸ We began by splitting each paragraph into sequences of five consecutive words (or 5-gram shingles).

87. The EPA promulgated 84,284 paragraphs and the Department of the Treasury 84,172 paragraphs. The Department of Agriculture was the next most active agency, promulgating 55,934 paragraphs. *See infra* Table A.2.

88. See Appendix A below for more details. Although the Smith–Waterman local-alignment algorithm is particularly popular in the literature on text reuse, *see, e.g.,* Wilkerson et al., *supra* note 28, at 947; Linder et al., *supra* note 48, at 550-51, it is not conceptually compatible with very large datasets and thus should not be used in our context.

To illustrate, consider the sentence:

The quick brown fox jumps over the lazy dog.

This sentence can be split into the following five-word sequences:

1. the quick brown fox jumps
2. quick brown fox jumps over
3. brown fox jumps over the
4. fox jumps over the lazy
5. jumps over the lazy dog

Our similarity measure computed how many of these five-word sequences appeared in two paragraphs and divided that by the number of unique five-word sequences in these paragraphs. For instance, if eight out of ten sequences are identical, then their Jaccard similarity is 0.8. In effect, our approach assigns two paragraphs a high similarity score if they use the same words in the same word order. In contrast, the similarity score is lower if the consecutive number of similar words is smaller.⁸⁹

Having scored pairs of regulatory paragraphs in this way, we then needed to ask what level of similarity between the paragraphs should count as an instance of diffusion. On one end of the spectrum is a similarity score of 1.0, representing exact copying and pasting between two agencies. At this level, the two paragraphs between agencies are indistinguishable. This result indicates that an agency used a previous rule as an exact “template”—a term we borrow from one of our interview subjects. In these cases, a rule drafter took a preexisting rule and simply copied it verbatim into a new rulemaking.⁹⁰

Below this threshold, however, are a number of instances where it is almost certain that the drafter used a previous rule, if not as a template, then certainly as a “model.”⁹¹ While the paragraph may not be an exact copy, in other words, it is sufficiently similar to indicate that one agency clearly based its rule on another agency’s rule. There may be very slight word variations, but the relationship between the two pairs is virtually unmistakable. There is still a substantial amount of text reuse and thus “copying” in a broader sense. Because our normative concerns are matters of degree—that is, they become stronger the more text diffuses—we aimed to include both instances where an

89. Because computing the Jaccard similarity explicitly for every pair of two paragraphs would require making 212 billion comparisons, which is computationally infeasible, we further employed techniques from big data analysis to compute the Jaccard similarity for only those pairs of paragraphs that are likely similar. Details on this process are included in Appendix A below.

90. Telephone Interview with Daniel Cohen, Assistant Gen. Couns. for Regul., U.S. Dep’t of Transp. (Feb. 3, 2021).

91. *Id.*

agency looked to a previous rule as a model and those where an agency used a previous rule as a template.

Upon manual inspection of paragraphs across the range of similarity scores, we determined that a similarity score of 0.5 and greater makes it almost impossible to assume that the agency did *not* model its paragraph after an existing text. In contrast, for similarity scores below 0.5, although some portions of text may overlap, it was increasingly difficult to assume that one paragraph served as a model for the other. Consequently, we defined as our threshold for text reuse a similarity score of 0.5. To illustrate the textual difference at this threshold, consider the example below in which we underline all discrepancies between the paragraphs:

Sample Paragraph 1:

The disclosure must contribute to the understanding of a reasonably broad audience of persons interested in the subject, as opposed to the individual understanding of the requester. A requester's expertise in the subject area as well as his or her ability and intention to effectively convey information to the public will be considered. It will ordinarily be presumed that a representative of the news media satisfies this consideration.⁹²

Sample Paragraph 2:

The disclosure must contribute to the understanding of a reasonably broad audience of persons interested in the subject, as opposed to the individual understanding of the requester. A requester's expertise in the subject area as well as the requester's ability and intention to effectively convey information to the public must be considered. Components shall presume that a representative of the news media will satisfy this consideration.⁹³

It is fairly clear that the agency drafting Sample Paragraph 2 looked to Sample Paragraph 1 as a model. There is a substantial amount of copied text along with only minor and nonsubstantive word discrepancies.

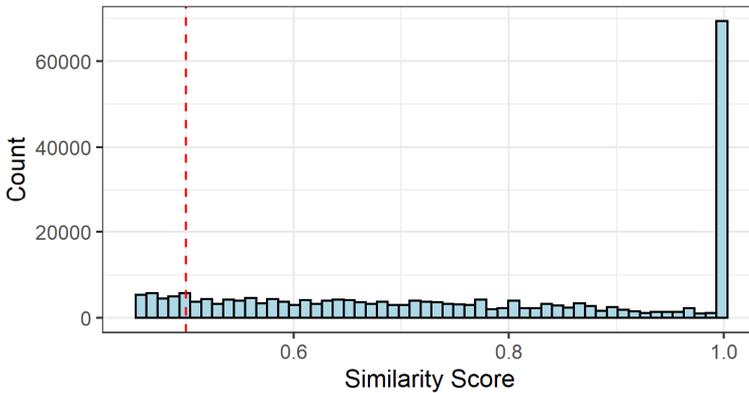
Although some may be skeptical about the subjectivity of our decision, the choice of the exact threshold has little consequence in practice. Consider Figure 1 below, which plots the distribution of similarity scores across all pairs that we analyze.⁹⁴

92. Public Access to NEH Records Under the Freedom of Information Act, 79 Fed. Reg. 9413, 9420 (Feb. 19, 2014) (codified at 45 C.F.R. pt. 1171).

93. Record Disclosure and Privacy, 82 Fed. Reg. 46,369, 46,378 (Oct. 5, 2017) (codified at 13 C.F.R. pt. 102).

94. Figure 1 plots the range of similarity scores from 0.45 to 1.0. To understand why, note that we employed a probabilistic process that captures pairs with a similarity of 0.5 with a probability of 1, but pairs with a smaller similarity at lower probability. *See infra* Appendix A. Hence, it would be misleading to plot the entire range of similarity scores from 0 to 1.0, because low frequencies at small similarity scores could simply be the
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Figure 1
Distribution of Similarity Scores



Observe that the plurality of paragraph pairs in our dataset have a similarity of exactly 1.0.⁹⁵ In addition, there are no remarkable features of the distribution around our threshold of 0.5. Hence, whether we set the specific threshold a bit above or below 0.5 should not significantly affect our results. That said, we have also tested the robustness of our main findings to alternative thresholds.⁹⁶

Finally, to isolate the phenomenon of interest (interagency text reuse), we considered a few other features of our dataset. First, we assumed that each paragraph can be borrowed only once per agency pair. If an agency borrows from another agency twice, we assumed that the second time is a case of reusing its own language rather than that of another.⁹⁷ Next, as previously mentioned, agencies can issue “joint” or “common” regulations resulting in a single rule signed by the relevant agencies. The nature of these rulemakings

result of our probabilistic procedure and not the fact that they are indeed uncommon. At 0.45, the probability for a pair to make it into our dataset is 0.98.

95. More precisely, 46% of pairs have a similarity of 1.0.

96. The general patterns we detail in Figure 3 and the surrounding text are substantively similar for all thresholds between 0.5 and 1.0.

97. For instance, it might happen that agency A_2 publishes regulatory language in the *Federal Register* that resembles that of A_1 twice, once in 2010 and again in 2015. In this case, we would only include the pair $\{A_1, A_2\}^{2010}$, not $\{A_1, A_2\}^{2015}$. Again, our rationale is that once A_2 has reused the regulatory text of A_1 in 2010, it is sensible to assume that any future reuse is A_2 borrowing from what is now its own regulatory language, rather than using the regulation of A_1 as a model for a second time.

makes it unclear how much text reuse there is between agencies as opposed to consensus drafting or top-down direction by a coordinating official. Relatedly, because the rule results in a single, unified text, it is difficult to ascertain which agencies are leaders or followers. For these reasons, if the pair of paragraphs includes at least one text published by a number of agencies at the same time, we included one observation for each agency that participated in the rulemaking process.⁹⁸

Regulatory diffusion also occurs between bureaus and offices *within* agencies over time. For instance, Immigration and Customs Enforcement could reuse regulatory text from the Transportation Security Administration—both are subagencies within DHS. While this dynamic is interesting, it is arguably much easier to explain than *interagency* diffusion, which is the focus here: Some agencies, for example, have central, coordinating offices that diffuse regulatory text across subagencies or otherwise keep templates on file.⁹⁹ In addition, our dataset is missing the subagency identity for many entries. For all of these reasons, we excluded all instances of intra-agency borrowing, focusing instead on interagency diffusion.¹⁰⁰

98. For instance, if an agency A_1 borrows text from a joint rule enacted by agencies A_2 , A_3 , and A_4 collectively, then our dataset would include three observations: $\{A_1, A_2\}$, $\{A_1, A_3\}$, and $\{A_1, A_4\}$. At the same time, we would not count pairs of text reuse that occur between two agencies that both were part of the same joint rulemaking process. For instance, in our example above, we would *not* include $\{A_2, A_3\}$, $\{A_2, A_4\}$, and $\{A_3, A_4\}$ in our dataset. From an empirical perspective, we note that pairs in which both agencies are part of the same rule outnumber pairs where each agency is part of a different rule by a factor of eight. Thus, if we were to add these pairs to our dataset, our analysis would also largely reduce to a study of joint and common rulemakings, which are not the only dynamics we are interested in. *See also* Freeman & Rossi, *supra* note 37, at 1166-73 (describing the dynamics of joint rulemaking).

99. *See* Jennifer Nou, *Intra-agency Coordination*, 129 HARV. L. REV. 421, 452-59 (2015) (discussing the creation of a centralized economics office at the EPA as one example).

100. Some instances of text reuse between agencies occur because Congress has created a new agency that assumes the functions of preexisting agencies. DHS, for example, incorporated many of the tasks of the U.S. Coast Guard (previously within the Department of Transportation), U.S. Customs and the U.S. Secret Service (both previously within the Department of the Treasury), and Immigration and Naturalization Service (previously within the Department of Justice), among others. *See Who Joined DHS*, HOMELAND SEC., <https://perma.cc/65WB-5ULU> (last updated Feb. 4, 2022); *The Coast Guard: America's Oldest Maritime Defenders*, GOCOASTGUARD, <https://perma.cc/2CPJ-ACRZ> (archived May 15, 2022) (discussing how the Coast Guard was part of the Department of Transportation); *Timeline of Our History*, U.S. SECRET SERV., <https://perma.cc/A2G8-QDJL> (archived May 15, 2022) (showing that the Secret Service was formerly part of the Department of the Treasury); *see also infra* text accompanying notes 139-41. When DHS started operations in 2003, it simply republished many of the rules of these predecessor agencies. *Creation of the Department of Homeland Security*, HOMELAND SEC., <https://perma.cc/6WAE-DZ32> (last updated Jan. 30, 2022) (“With the passage of the Homeland Security Act by Congress in November 2002, DHS formally came into being as a stand-alone, Cabinet-level
footnote continued on next page”).

After omitting the above categories, we ended up with 36,146 observations, where each observation is a pair of two texts that have been published in the *Federal Register* by different agencies. These observations form our core dataset.

B. Analysis

To generate systematic insights into patterns of text reuse, it is helpful to conceive of drafting agencies as existing in a network. In that network, agencies can be thought of as nodes (or vertices), and instances of text reuse can be thought of as edges (or links) that connect these nodes.¹⁰¹ These links represent relationships between agencies that arise because of their shared regulatory paragraphs.¹⁰² This lens allows for observations about the structure of connections between agencies. These sustained interactions, in turn, suggest synergies between agencies that may otherwise be unexpected. This perspective also allows for more in-depth analyses between clusters of agencies or between those at the center and the periphery.¹⁰³ To help visualize this, Figure 2 below plots two such networks. The left panel depicts text reuse between all agencies in the year 2005. The right panel depicts text reuse in the year 2020.

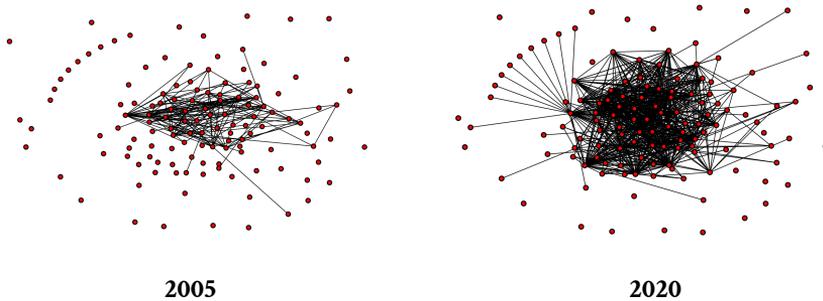
department to further coordinate and unify national homeland security efforts, opening its doors on March 1, 2003.”); *see, e.g.*, Authority of the Secretary of Homeland Security; Delegations of Authority; Immigration Laws, 62 Fed. Reg. 10,922 (Mar. 6, 2003) (codified in scattered sections of 8 C.F.R.). We exclude these instances for reasons similar to excluding intra-agency diffusion: They can, in some sense, be viewed as instances of agencies copying from themselves. When republication occurs, the new agency’s subunits are copying texts from previous subunits that had been housed in a different agency. For this reason, we excluded republished paragraphs from the dataset by dropping rules with summaries indicating that the rule has been republished. Of course, if an agency has not specified that the rule has been republished (even though it has), we were unable to drop it.

101. *See* Ryan Whalen, *Legal Networks: The Promises and Challenges of Legal Network Analysis*, 2016 MICH. ST. L. REV. 539, 540-42.

102. A useful analogy may be the network analysis of legal citations to understand what sources judges draw from when making decisions. *Id.* at 548-51.

103. *See id.* at 543 (describing how a network-analytic approach facilitates a “system-level” analysis).

Figure 2
Network Plots of Regulatory Diffusion, 2005 and 2020



First, observe that the diffusion network in the right panel contains many more edges than the network on the left. Specifically, the number of edges increased from 145 to 734. Second, there are many more agencies that are connected to other agencies by at least one edge. Together, these findings suggest that the prevalence of text reuse, as well as the number of agencies and agency relationships affected by text reuse, has increased markedly over the past fifteen years.

While network plots help in uncovering these overall, systematic trends, they also raise many additional questions: How significant is the phenomenon of text reuse to the entire system of rulemaking? How did patterns change year to year in our dataset? And who are the most influential agencies in the network? The following Subparts attempt to shed light on these and other questions.

1. Scope

To examine how significant the phenomenon of regulatory text reuse is and how its significance has changed over time, we began by considering how much of the language in the CFR is original to the agency and how much of it is simply a version of preexisting regulatory text. We thus computed the number of paragraphs in the CFR that have been reused as a fraction of all paragraphs appearing in the CFR over time.¹⁰⁴

¹⁰⁴ Technically, only paragraphs that appear in full text in the *Federal Register* are included in our analysis.

Figure 3
Reused Text as a Fraction of All Paragraphs, 2000 to 2020

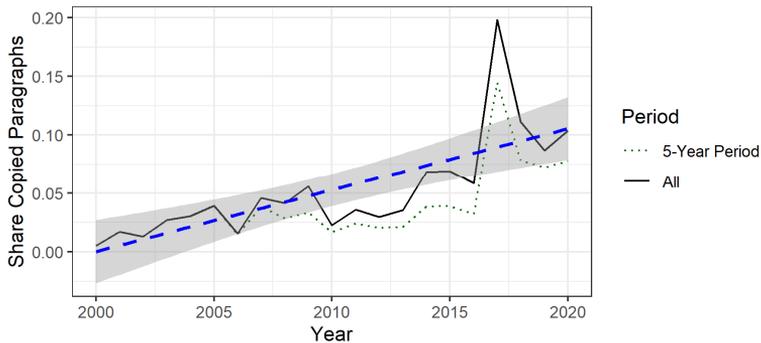


Figure 3 plots the yearly number of shared paragraphs over time. A dashed regression line indicates linear time trends, with the gray-shaded area surrounding it representing 95% confidence intervals of the linear trend. Note that the share of reused paragraphs increases over time, from less than 3% in the year 2000 to more than 10% by 2020: a relative increase of more than 300%. Put differently, as of 2020, one out of every ten new paragraphs in the CFR was borrowed from preexisting text.

As Figure 3 suggests, the rate of text reuse was particularly high in 2017—the first year of the Trump Administration. Manual inspection reveals that this spike reflects a particularly high count of reused paragraphs¹⁰⁵ combined with a decrease in overall drafting activity.¹⁰⁶ In other words, the rate was higher in that year because agencies were both borrowing more texts while promulgating a smaller number of new regulatory paragraphs. This finding is consistent with two documented observations about the start of the Trump Administration: first, the slowdown in regulatory activity, and second, the short staffing in agencies.¹⁰⁷ The slowdown likely explains the decrease in new

105. The absolute number of copied significant paragraphs increased from 2,800 in 2016 to 4,000 in 2017.

106. The absolute number of new significant paragraphs decreased from almost 47,000 in 2016 to 20,000 in 2017.

107. See Patrick A. McLaughlin, *Regulatory Data—Trump’s First Year*, QUANTGOV, <https://perma.cc/L7TB-CG5J> (archived Apr. 7, 2022) (“During President Trump’s first year, federal regulations grew by about 0.65 percent, less than the growth rate of any other president’s first year in office since our data begin in 1970. This rate of growth is also less than one-third of the long-term annual growth rate for federal regulations, which, from 1970 to 2016, was about 2.1 percent.”); see also Lisa Rein, *How Trump’s First* footnote continued on next page

regulatory paragraphs, while the decrease in administrative capacity may have precipitated more borrowing from preexisting rules.

The general upward trend in Figure 3, in turn, may have a number of different explanations, which are difficult to disentangle. First, it could reflect the choices of the Trump Administration, as just discussed. The magnitude of the increases in borrowing rates during those years could increase the average rates over time. Alternatively, the trend could also reflect a genuine overall change in agency behavior over time—that is, a decision to borrow regulatory texts at a higher rate. With the historical decrease in agency budgets,¹⁰⁸ agencies may increasingly turn to the strategy of text reuse as a way to maintain regulatory activity.

Another set of potential explanations arises from the necessarily increasing stock of regulatory paragraphs over time. As the years pass, the amount of regulatory language in the CFR inevitably increases. Thus, the trend could merely be a function of the increasing stock of text available for agencies to borrow.

Moreover, because our dataset begins in 2000, this limitation could also mechanically create the perception of an increase.¹⁰⁹ To address these concerns, we then assessed reuse patterns while omitting any pair in which more than five years lie between the publication dates of the two paragraphs. The idea behind this approach is that it discounts reuse if the text that is borrowed from is “old” in some sense. For years after and including 2005, this approach thus mitigates the concern that observed diffusion practices are merely dictated by an ever-growing body of regulatory text to borrow from. The result is depicted as a dotted line in Figure 3. Although the five-year restriction naturally lowers the amount of text reuse each year, it remains relatively high, with 8% of all paragraphs copied by the year 2020.

Year Has Decimated Federal Bureaucracy, INDEPENDENT (Dec. 31, 2017, 9:42 PM), <https://perma.cc/BS44-MD4R> (“By the end of September, all Cabinet agencies except Homeland Security, Veterans Affairs and Interior had fewer permanent staff than when Trump took office in January—with most shedding many hundreds of employees.”).

108. See Jonathan Remy Nash, J.B. Ruhl & James Salzman, *The Production Function of the Regulatory State: How Much Do Agency Budgets Matter?*, 102 MINN. L. REV. 695, 697 (2017) (“[B]udget-cutting initiatives, whether aimed at specific agencies or the regulatory state in general, have gone far beyond rhetoric to impose real impacts on agency resources.”).

109. Specifically, if a regulation was borrowed from the pre-2000 CFR for the first time, we treated it as an instance of original rulemaking. Only when it was borrowed subsequent times did we capture it as an instance of text borrowing. This means that we undercounted instances of text reuse in early years. Because we did track text reuse of pre-2000 rules after the first instance of borrowing, however, and because agency proclivity to borrow from old rules decreases over time, the potential bias induced should be most pronounced in early years and then quickly decrease.

Under this more conservative measure, the rate of borrowing now appears steadier over time between 2000 and 2016, with a marked increase in 2017. That is, the observed increase in text reuse is now driven almost entirely by an increase in text reuse under the Trump Administration. On the one hand, this five-year constraint suggests that the previously observed trend, at least before 2017, may have been a function of the increasing stock of regulatory texts, rather than any changes in agency behavior. On the other hand, the five-year constraint also dispenses with actual cases of copying by the agency, which may not be ascribable to the stock alone. As a result, it is unclear which approach best describes the underlying reality: Each presents methodological tradeoffs. What we can say is that both of these measures do suggest a change in agency behavior, especially under the Trump Administration, rather than a mechanical result of the dataset.¹¹⁰

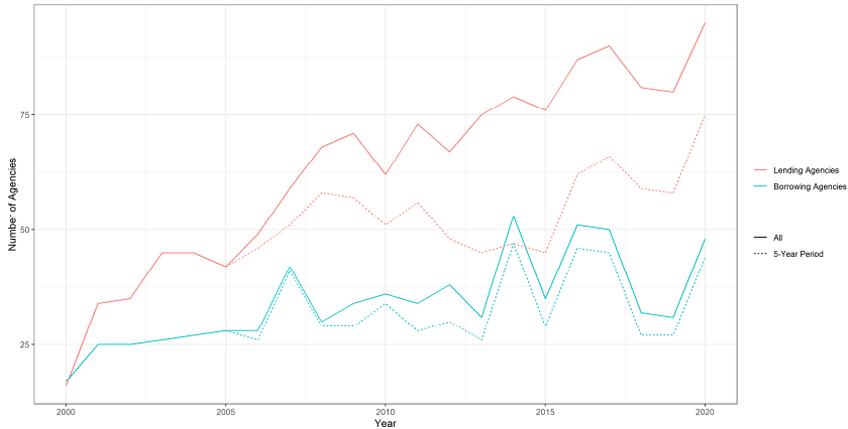
* * *

To add additional context, we then examined the number of agencies over time that participated in text reuse. We denoted as “borrowing” agencies those agencies that reuse regulatory paragraphs and as “lending” agencies those from whom regulatory paragraphs are reused.¹¹¹ As Figure 4 below indicates, both the number of borrowing and the number of lending agencies increased over time. But the increase in the number of lending agencies is much steeper than the increase in the number of borrowing agencies. This result suggests that the network of paragraph reuse disperses more over time, with a relatively small number of agencies borrowing text from an increasingly large group. In other words, regulatory paragraphs diffuse from more agencies over time. The trend persists if we constrain instances of text reuse to a five-year window, although as before, much of the observed increase is recent.

110. This observation would be consistent with a vein of recent literature on the distinctiveness of the Trump Administration’s approach to agency action. *See, e.g.,* Robert L. Glicksman & Emily Hammond, *The Administrative Law of Regulatory Slop and Strategy*, 68 DUKE L.J. 1651, 1669 (2019) (noting “a pattern” where agency action in the Trump Administration is “inconsistent with basic administrative law doctrines”); Jody Freeman & Sharon Jacobs, *Structural Deregulation*, 135 HARV. L. REV. 585, 588 & n.8 (2021) (“The Trump Administration presents perhaps the most extreme example of structural deregulation in recent history . . .”).

111. As before, we considered two paragraphs to be “reused” if their similarity was at or above our threshold of 0.5. *See supra* notes 90-94 and accompanying text.

Figure 4
Lending and Borrowing Agencies



Overall, our analysis suggests that the reuse of regulatory paragraphs is a phenomenon that has potentially increased in significance. Not only has the share of all reused text increased over time—recall that a more conservative analysis suggests that most of the increase is concentrated in recent years—but so has the number of agencies that participate in the practice.

2. Leaders and followers

These aggregate observations, however, do not tell us much about relationships between particular agencies or the extent to which those agencies dominate the trends, whether as leaders or followers. A natural follow-up question, therefore, is which specific agencies are influencing the regulatory process through their outsized roles. To gain insights, we computed “leadership” and “follower” scores for each agency. By way of motivation, note that agencies can either lend or borrow regulatory language. An agency that frequently lends its regulatory language to other agencies likely has a significant influence on regulatory drafting. An agency that primarily borrows regulatory language without lending it is likely to have little relevance beyond the confines of its own jurisdiction.

There are at least two different ways in which an agency could be considered a “leader” in regulatory drafting: The first focuses on an agency’s overall influence on the CFR, while the second is the number of other agencies that copy from it. In other words, an agency could be considered a leader for (1) its depth of influence on published regulatory text as a whole; or (2) its

breadth of influence on a number of different agencies. These two measures highlight different aspects of drafting leadership.

To measure the first type of leadership (depth of influence), we used a weighted count of the number of times an agency's original regulatory paragraph has appeared in the CFR. The weights are necessary to account for situations where an agency's text has been reused by multiple agencies over time. In these situations, the leadership attribution must be split among agencies that reused the text earlier since a later borrowing agency could have looked to any of these agencies for leadership. (Appendix B below explains this approach in more depth.) Table 2 below ranks the top five agency leaders in terms of their absolute impact on the CFR. Again, the leadership score in the righthand column reflects the weighted number of drafted paragraphs that have been copied by others.

Table 2
Top Five Agencies by Leadership Score

Agency	Leadership Score (Weighted)
Department of the Treasury	1,332
Office of Management and Budget	842
Federal Deposit Insurance Corporation	763
Department of Homeland Security	733
Department of Transportation	715

One might argue here that these results should be normalized in some sense by the agency's drafting activity level. The idea would be that a leadership score could potentially be indicative of the quality of the regulations written by an agency; thus, that score should be adjusted by the number of regulations drafted.¹¹² Such a normalized measure, however, is likely to be misleading for a number of reasons. First, highly specialized agencies are more likely to regulate in narrow issue areas, producing text that may not be reused by other agencies because they lack relevance. So a lower fraction of copied paragraphs may reflect congressional choices about an agency's jurisdiction rather than the agency's drafting prowess.

112. The argument would be that some agencies have their regulations copied more only because they promulgate more regulations in the first place; as a result, it would be important to adjust the number of regulatory paragraphs copied by the number promulgated. Perhaps doing so would result in some measure of drafting quality, a sense of what fraction of an agency's drafted rules are copied. The higher this fraction, the better the agency's drafting prowess, as evidenced by emulation by others.

Second, agencies that engage in very little rulemaking may score artificially high when they draft regulations under cross-cutting statutes like the Freedom of Information Act (FOIA). Because their denominators are already low, agencies with even a few copied paragraphs (which they may not have even originated) could have scores that inflate their perceived influence. For all these reasons, we continue our analysis with a score that is not adjusted for the amount of drafting activity. That said, for the sake of completeness, we provide a table listing adjusted leadership scores in Appendix C below.¹¹³ As expected, the results are largely driven by the aforementioned exogenous factors and are therefore difficult to interpret.¹¹⁴

Returning to our absolute measure of CFR influence: Table 2 shows that the Department of the Treasury has the most copied paragraphs, followed by the Office of Management and Budget. Perhaps not coincidentally, both of these agencies have leadership roles when it comes to the rulemaking process. The Treasury Secretary chairs the Financial Stability and Oversight Council (FSOC), which Congress established in 2010 to address sources of systemic financial risk.¹¹⁵ More broadly, FSOC's mandate is to identify potential bank failures, respond to emerging financial threats, and coordinate among the member agencies.¹¹⁶ Under the Treasury Secretary's leadership, the group consists of the heads of several prominent banking-related agencies.¹¹⁷ As the chair, the Treasury Secretary calls meetings, testifies to Congress on behalf of FSOC, and can effectively veto the designation of firms as posing a systemic

113. See *infra* Table A.4. More broadly, there is a correlation of 0.58 between an agency's rank based on our leadership scores and that agency's rank as measured by regulatory activity.

114. The agencies with the highest leadership scores are simply the agencies with very little regulatory activity. For instance, the Defense Nuclear Facilities Safety Board has the highest relative score, but it promulgated only eighty-nine regulatory paragraphs during our period of observation. See *infra* Table A.4. In contrast, the EPA, as the most active agency, promulgated 84,284 paragraphs, see *infra* Table A.2, but it received the third-lowest relative leadership score among all agencies.

115. See JEFFREY M. STUPAK, CONG. RSCH. SERV., R45052, FINANCIAL STABILITY OVERSIGHT COUNCIL (FSOC): STRUCTURE AND ACTIVITIES 1 (2018), <https://perma.cc/YV3E-5P3G>; see also Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, § 111, 124 Stat. 1367, 1392-93 (2010) (codified at 12 U.S.C. § 5321).

116. See STUPAK, *supra* note 115, at 1, 8; Jacob E. Gersen, Recent Development, *Administrative Law Goes to Wall Street: The New Administrative Process*, 65 ADMIN. L. REV. 689, 693-94 (2013); Richard L. Revesz, *Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*, 34 YALE J. ON REGUL. 545, 576-79 (2017).

117. They include the Federal Reserve; Consumer Financial Protection Bureau; Securities and Exchange Commission; Federal Deposit Insurance Corporation; Commodity Futures Trading Commission; Federal Housing Finance Agency; and National Credit Union Administration. See *About FSOC*, U.S. DEPT' TREASURY, <https://perma.cc/5BB3-TUZ4> (archived Apr. 8, 2021).

risk.¹¹⁸ It would thus be natural for member agencies to perceive Treasury as a leader in other rulemaking realms as well.

Indeed, we find that FSOC agencies are the main driver of Treasury's leadership score: 65% of its leadership score is the consequence of borrowing by FSOC agencies. More revealingly, 86% of that borrowing occurred after FSOC's creation in 2010. By contrast, for non-FSOC agencies, the majority of copying (53%) occurred prior to the creation of FSOC. In other words, only FSOC agencies increased the frequency with which they copied from the Department of the Treasury after 2010—and drastically so. Together, these findings lend support to the suggestion that it was the creation of FSOC in 2010, and Treasury's leadership role within it, that significantly increased the Department's influence.

Moreover, Treasury also has a long history and culture of quasi-independence, which likely contributes to a flair of drafting originality.¹¹⁹ Over the years, the agency “has created for itself an ambit of discretion beyond the reach of the judiciary, and only somewhat within the bounds of congressional oversight.”¹²⁰ For example, it often issues rules without notices of proposed rulemaking, especially on tax-related matters.¹²¹ Truncating administrative procedure in this way inevitably allows for more drafting discretion.¹²²

Generally speaking, Treasury also has a more cooperative rather than litigious or antagonistic relationship with its regulated entities.¹²³ As a result, it may develop rules, particularly procedural rules, which benefit from close input from those required to comply with them. This cooperative dynamic could result in more detailed rules worthy of emulation. Indeed, the Office of the Comptroller of the Currency (OCC) is the unit within Treasury that has the most copied regulations. The OCC supervises federally chartered banks, deploying examiners to regulated banks to closely monitor them.¹²⁴

118. STUPAK, *supra* note 115, at 3.

119. See David Zaring, *Administration by Treasury*, 95 MINN. L. REV. 187, 190 (2010) (“Treasury has marched to the beat of its own drum since the founding of the current administrative state in the aftermath of World War II.”).

120. *Id.*

121. *Id.* at 200, 202-03.

122. See Thomas W. Merrill, *The Mead Doctrine: Rules and Standards, Meta-Rules and Meta-Standards*, 54 ADMIN. L. REV. 807, 812-13 (2002) (describing the Administrative Procedure Act as a “statute[] designed to constrain agency discretion”).

123. Zaring, *supra* note 119, at 207-10 (“As a regulator, Treasury embodies a cooperative approach, where its leaders speak on the phone with the institutions they oversee more than do senior officials at other agencies, perhaps more than any other agency in the government.”).

124. *Id.* at 207-08.

Consequently, the OCC may write regulations with a more nuanced appreciation of its regulated entities.

OMB, in turn, includes OIRA, which is charged by executive order with reviewing significant rules from executive agencies.¹²⁵ During this process, OIRA evaluates the rule's adherence to presidential policies and cost-benefit principles and can effectively reverse the rules on these grounds.¹²⁶ OMB's influence is reinforced by its resource-management offices (RMOs), which shape policy choices through various budgetary levers.¹²⁷ RMOs also play a role in OIRA regulatory review itself.¹²⁸ As a result, OMB's institutional impact on the rulemaking process is pervasive. The drafting choices of OMB's components may thus have particular weight with other agencies. For example, OMB contains the Office of Federal Procurement Policy, which is responsible for coordinating and "provid[ing] overall direction" for regulations related to government acquisition.¹²⁹ It often uses this role to promulgate "model rules," which are then emulated by other agencies.¹³⁰

An alternative way to conceptualize leadership within a network is by looking at the number of agencies that have copied from another agency.

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125. See *Information and Regulatory Affairs*, WHITE HOUSE, <https://perma.cc/T7RL-S48S> (archived Apr. 8, 2022); Exec. Order No. 12,866, 3 C.F.R. 638, 646 (1994), *reprinted as amended* in 5 U.S.C. § 601 note ("OIRA may review only actions identified by the agency or by OIRA as significant regulatory actions under subsection (a)(3)(A) of this section.").
126. See Jennifer Nou, *Agency Self-Insulation Under Presidential Review*, 126 HARV. L. REV. 1755, 1769 (2013) (discussing the difference between "political review (those issues raised as part of the President's agenda and priorities) and analytical review (how agencies evaluate the costs and benefits of regulatory options, justify the choices among them, and consider a host of other technical issues)" (emphasis omitted)); *id.* at 1778 ("OIRA can effectively reverse an agency action on behalf of the President . . .").
127. See Eloise Pasachoff, *The President's Budget as a Source of Agency Policy Control*, 125 YALE L.J. 2182, 2207 (2016) (describing "aspects of the budget process [that] provide OMB with seven levers to control agency action").
128. See Curtis W. Copeland, *The Role of the Office of Information and Regulatory Affairs in Federal Rulemaking*, 33 FORDHAM URB. L.J. 1257, 1257 n.1, 1277 (2006) ("According to OIRA, the desk officers always consult with the relevant resource management office on the 'budget side' of OMB as part of their reviews, and reviews of draft rules are not completed until those offices sign off.").
129. See *The Office of Federal Procurement Policy*, WHITE HOUSE, <https://perma.cc/UHG2-KVUF> (archived Apr. 8, 2022) ("The Office of Federal Procurement Policy . . . in the Office of Management and Budget plays a central role in shaping the policies and practices federal agencies use to acquire the goods and services they need to carry out their responsibilities.").
130. Arthur V. Wittich, *Contracting with the Federal Government: The Dispute Resolution Process*, 5 PUB. LAND L. REV. 128, 141-42 (1984) (noting that the Office of Federal Procurement Policy's model rules for the procedure in contract appeals "have since been adopted by most boards, including the Department of Agriculture Board of Contract Appeals" (footnote omitted)); *see, e.g.*, Uniform Rules of Procedure for Boards of Contract Appeals and Related Regulations, 44 Fed. Reg. 12,519 (Mar. 7, 1979).

These nodes have the most edges connected to other agencies. Instead of focusing on an agency’s influence on published regulations as a whole, in other words, this approach instead measures how many other agencies have used its language. That is, how many spokes are in the most active hubs within the network?

Table 3
Top Five Leader Agencies, by Number of Borrowing Agencies
(Minimum of Five Paragraphs Borrowed)

Agency	Number of Borrowing Agencies
Department of Justice	58
National Foundation on the Arts and Humanities	56
Department of Homeland Security	50
Department of Defense	46
Environmental Protection Agency	43

Table 3 above presents the top five leader agencies according to this alternate metric, for agencies with a minimum of five copied paragraphs. (Those instances of fewer than five copied paragraphs are likely outliers.) The numbers in the righthand column represent the number of agencies that have borrowed from the agency listed in the left-hand column. The Department of Justice (DOJ) has the most agencies that borrow from it, likely because it coordinates a number of cross-cutting statutes applicable to a wide variety of agencies, such as Title IX of the 1972 Education Amendments,¹³¹ Section 504 of the Rehabilitation Act of 1973,¹³² and the Age Discrimination Act of 1975.¹³³ By executive order, the Attorney General is charged with reviewing “existing and proposed rules” from “Executive agencies in order to identify those which are inadequate, unclear or *unnecessarily inconsistent*.”¹³⁴ Beyond merely coordinating agency action under these statutes, the Attorney General holds veto power over them, which can be used to require consistent regulatory texts across agencies.¹³⁵

131. 20 U.S.C. §§ 1681-1688.

132. 29 U.S.C. § 794.

133. 42 U.S.C. §§ 6101-6107.

134. Exec. Order No. 12,250, 3 C.F.R. 298 (1981) (emphasis added).

135. Memorandum from Kristen Clarke, Assistant Att’y Gen., to Fed. Agency Civ. Rts. Dirs. & Gen. Couns., U.S. Dep’t of Just. attach. 2, at 2 (Oct. 12, 2021), <https://perma.cc/24N9->
footnote continued on next page

Turning to the next agency on the list: The reasons for the influence of the National Foundation on the Arts and Humanities are not obvious at first glance. A qualitative examination, however, reveals that most of the borrowing from other agencies appears to arise from regulations issued by one of its subcomponents: the Institute of Museum and Library Services (IMLS). The primary mission of the IMLS is to award grants and develop policy regarding American museums, libraries, and similar organizations.¹³⁶ In 2010, Congress granted the IMLS Director new responsibilities to coordinate “museum, library, and information services” with other broader information-dissemination efforts across government.¹³⁷ This leadership role may help to explain why many borrowed regulations deal with FOIA and similar information-related policies.

* * *

Turning now from leader to follower agencies: We also computed a “follower score,” measured by the number of unique paragraphs that an agency borrowed. Table 4 presents the results of that analysis, ranking the top five agencies in terms of the number of paragraphs copied from others. While we explore various theories for regulatory diffusion below,¹³⁸ we explore some possible explanations here in the context of specific agencies. One striking feature of the agency with the highest follower score—DHS is its jurisdictional breadth. When DHS was established in 2002, it combined twenty-two different federal departments and agencies into one Cabinet-level agency.¹³⁹ As such, it “gained regulatory authority over transportation security and matters as disparate as marine ecosystems and refugee admissions.”¹⁴⁰ Indeed, current DHS subcomponents include the U.S. Citizenship and Immigration Services; Coast Guard; Customs and Border Protection; Federal Energy Management Agency; Immigration and Customs Enforcement; Secret Service; and

TJF2 (“The Department of Justice must review and approve regulations implementing Title VI, Title IX, and Section 504.” (emphasis omitted)).

136. *Mission*, INST. MUSEUM & LIBR. SERVS., <https://perma.cc/6SG5-DSZN> (archived Apr. 8, 2022) (describing its “mission” to “advance, support, and empower America’s museums, libraries, and related organizations through grantmaking, research, and policy development”).

137. *See* 20 U.S.C. § 9103(c), (f).

138. *See infra* Part II.A.

139. *History*, HOMELAND SEC., <https://perma.cc/6CEH-P4QE> (last updated Dec. 16, 2021).

140. Dara Kay Cohen, Mariano-Florentino Cuéllar & Barry R. Weingast, *Crisis Bureaucracy: Homeland Security and the Political Design of Legal Mandates*, 59 STAN. L. REV. 673, 676 (2006).

Transportation Security Administration.¹⁴¹ In this manner, the jurisdiction of DHS is as broad as it is disparate.

Table 4
Top Five Agencies by Follower Score

Agency	Follower Score
Department of Homeland Security	1,790
Department of Agriculture	1,449
Department of the Treasury	1,378
Department of Defense	1,332
Department of Health and Human Services	1,216

Because of its history and wide-ranging mission, DHS has functions that are adjacent to many agencies, such as DOJ in the immigration context¹⁴² and the Department of Transportation (DOT) on issues of maritime security.¹⁴³ Given that DHS was created more recently than many agencies, it likely sought regulatory consistency by reusing paragraphs from already existing agencies. Indeed, the Coast Guard was originally housed in DOT before it was transferred to DHS.¹⁴⁴ It would thus be natural for staff at Coast Guard to look to the work of their former colleagues at DOT. Moreover, the sprawling nature of DHS, particularly when resources are spread thin, would also make text reuse more attractive.

A different snapshot of the regulatory-drafting network also supports the theory that policy consistency is a major driver of diffusion, especially within relatively closed networks. Table 5 below identifies the strongest lender-borrower relationships between individual agencies and computes the weighted frequency of each unique agency pair.¹⁴⁵ Most of the pairs reflect a jurisdictional overlap between the agencies. For example, both Treasury and

141. *Operation and Support Components*, HOMELAND SEC., <https://perma.cc/G2AM-F8TV> (last updated Dec. 13, 2021).

142. *See, e.g.*, Shah, *supra* note 39, at 821 (describing coordination between DOJ and DHS on asylum-application adjudications).

143. Marisam, *supra* note 40, at 219 (observing that the Coast Guard was transferred from DOT and thus now coordinates with that agency to maintain the coast during peacetime).

144. *Id.*

145. We once again applied a weighting scheme to take into account uncertainty about whom an agency borrowed from. We took into account the direction of the reuse. Hence, if A_2 borrows text from A_1 , we treated this as a different instance from a text reuse in which A_1 borrows from A_2 .

the Federal Deposit Insurance Corporation (FDIC) deal with the issue of bank stability, and, as discussed, are members of FSOC.¹⁴⁶ As also mentioned, both DHS and DOT deal with transportation-related matters, with DHS containing subcomponents like the Coast Guard that were formerly part of DOT.¹⁴⁷ Both Treasury and the Federal Reserve are also members of FSOC.¹⁴⁸

Table 5
Top Five Agency Pairs by Weighted Frequency

Lending Agency	Borrowing Agency	Frequency (Weighted)
Department of the Treasury	Federal Deposit Insurance Corporation	450
Department of Transportation	Department of Homeland Security	412
Department of the Treasury	Federal Reserve System	336
Department of Homeland Security	Department of Transportation	160
Social Security Administration	Office of Management and Budget	157

We also note that some agencies, such as Treasury and DHS, appear in both lists as top leader and follower agencies. From a network perspective, they are both central hubs of activity. In addition, both are agencies that produce a high number of regulatory paragraphs¹⁴⁹ and have broad jurisdictions: While Treasury’s jurisdiction is not as disparate as that of DHS,¹⁵⁰ Treasury does deal with a number of discrete issues such as government finances, taxation, currency, the supervision of national banks and thrift institutions, and international trade policy.¹⁵¹ As a result, individual offices and bureaus may be drafting leaders, while others are followers based

146. *About, FED. DEPOSIT INS. CORP.*, <https://perma.cc/SZ7F-NN8T> (archived Apr. 8, 2022) (“[T]he FDIC insures deposits; examines and supervises financial institutions for safety, soundness, and consumer protection; makes large and complex financial institutions resolvable; and manages receiverships.”); *see About FSOC, supra* note 117.

147. *See supra* notes 143-44 and accompanying text.

148. *See About FSOC, supra* note 117.

149. *See infra* Table A.2.

150. *See supra* text accompanying notes 139-41.

151. *Role of the Treasury*, U.S. DEP’T TREASURY, <https://perma.cc/U3YB-74ZV> (archived Apr. 8, 2022).

on their respective histories and jurisdictions. In other words, the relative autonomy and activity of these subcomponents may explain the status of both parent agencies as top leaders and followers.

* * *

Finally, one notable feature about the top leader and follower tables above is the relative dearth of independent agencies.¹⁵² Indeed, the FDIC is the only one that appears in them.¹⁵³ Does this imply that executive agencies are more influential as drafters or more prominent as followers considering their share of rulemaking activity? To examine this question, we analyzed whether the text an agency uses to draft its regulation is more likely to originate from an independent or executive agency, depending on whether the borrowing agency is independent or executive.

Table 6
Percentage of Borrowed Text by Executive or Independent Agency

	Executive Agency Lender	Independent Agency Lender
Executive Agency Borrower	90%	10%
Independent Agency Borrower	72%	28%

Table 6 above presents the rates at which executive and independent agencies borrow paragraphs from their counterparts. Initially, one might conclude that both executive and independent agencies borrow more from executive agencies as a group. But this is not necessarily the case. After all, only 10% of all regulatory paragraphs in our dataset were promulgated by

152. See *supra* Tables 3-5. What falls into the category of “independent agencies” is contested. Some distinguish between “executive” and “independent” agencies according to whether their heads are removable at will or for cause. Revesz, *supra* note 116, at 584. But many have shown that other criteria such as multimember boards or fixed terms better track notions of agency independence. See Kirti Datla & Richard L. Revesz, *Deconstructing Independent Agencies (and Executive Agencies)*, 98 CORNELL L. REV. 769, 772 (2013) (calling “incorrect” the assumption that “agencies can be divided into two identifiable, distinct sets: independent and executive”). That said, for our purposes, the statutory definition of “independent regulatory agency” is a workable way to draw the line. See 44 U.S.C. § 3502(5).

153. 44 U.S.C. § 3502(5) (designating the FDIC as an “independent regulatory agency”).

independent agencies.¹⁵⁴ The rate at which executive agencies borrow from independent ones corresponds to the share of regulatory paragraphs promulgated by independent agencies. Hence, there is no evidence to suggest a systematic bias by executive agencies for or against independent agencies.

By contrast, independent agencies borrow regulatory text from other independent agencies at twice the expected rate. One explanation is that independent agencies “trust” texts from their counterparts, who are generally more expert and less subject to political change than executive agencies.¹⁵⁵ After all, independent agencies (as their name suggests) are more sheltered from the whims of changing presidential administrations.¹⁵⁶ By comparison, presidents wield more control over executive agencies to carry out their agendas,¹⁵⁷ which may render regulations issued by independent agencies less appealing as templates.

II. Explaining Diffusion

Against this empirical backdrop, this Part more systematically considers the incentives that agencies have to reuse regulatory texts when drafting their own. Subpart A examines factors informing this choice, while Subpart B considers the mechanisms through which texts diffuse.

A. Why Diffusion

Command and control. One straightforward explanation for text reuse between administrative agencies is direction from a political principal, whether Congress or the President. Sometimes, Congress will require agencies to issue regulations that mimic those of another. The Securities and Exchange Act, for example, calls for the OCC, the Federal Reserve, and the FDIC to issue regulations that are “substantially similar” to those of the Securities and Exchange Commission (SEC) in specific arenas.¹⁵⁸ As a matter of practice, “all

154. Of all significant paragraphs in our *Federal Register* dataset, 76,477 have been promulgated by independent regulatory agencies and 574,687 have been promulgated by executive agencies.

155. See Emily Hammond Meazell, *Presidential Control, Expertise, and the Deference Dilemma*, 61 DUKE L.J. 1763, 1777-78 (2012) (“Thus, independent agencies—which burgeoned during the New Deal—were designed with the purpose of shielding expert decisionmakers from the shifting winds of politics.”).

156. *Id.*

157. See Nina A. Mendelson, *Another Word on the President’s Statutory Authority over Agency Action*, 79 FORDHAM L. REV. 2455, 2459 (2011) (detailing the breadth of presidential control over executive agencies).

158. 15 U.S.C. § 781(i). An exception exists where the agencies “find that implementation of substantially similar regulations with respect to insured banks and insured institutions
footnote continued on next page

of these agencies have copied the SEC's regulations, and when the SEC amends its regulations, the banking regulators usually follow."¹⁵⁹

At other times, Congress exercises a lighter touch. Instead of requiring that regulations diffuse, it might command agencies to "share[] regulatory space" by designing overlapping functions, granting related jurisdictional tasks, and explicitly requiring concurrence among agencies.¹⁶⁰ Congress can also enact statutes like FOIA and the Privacy Act that apply across many agencies.¹⁶¹ Under such statutes, agencies are not required to copy each other's texts but may have greater incentives to do so to ensure consistency between their programs. In this regard, it is worth noting that roughly two-thirds of the observations in our dataset share some statutory authority. This finding may suggest that a good portion of regulatory diffusion occurs because of choices that Congress has made, though some of the decisionmaking still lies in the drafting agency's discretion.

The President also issues executive orders requiring coordination between agencies, often resulting in the same regulations being passed by different agencies. While an order for agencies to coordinate is not an explicit command to *copy* each other's regulations, it can sometimes amount to that due to a desire to promote consistent policy. One order from President Carter, for example, called for his Attorney General to coordinate and, more importantly, approve regulations regarding nondiscrimination policy across various statutes.¹⁶² The agencies that issued regulations in response published rules with the same regulatory texts.¹⁶³ In this manner, diffusion can occur because of mandates external to the agency.

Interest-Group and Lobbyist Pressure. Other external pressures on the agency come in the form of interest groups and their lobbyists. It is already

are not necessary or appropriate in the public interest or for protection of investors, and publish such findings, and the detailed reasons therefor, in the Federal Register." *Id.*

159. Bradley, *supra* note 9, at 751 (footnote omitted).

160. See Freeman & Rossi, *supra* note 37, at 1146, 1160.

161. FOIA, 5 U.S.C. § 552; Privacy Act of 1974, Pub. L. No. 93-579, 88 Stat. 1896 (codified as amended at 5 U.S.C. § 552a).

162. Exec. Order No. 12,250, 3 C.F.R. 298 (1981).

163. See, e.g., Enforcement of Nondiscrimination on the Basis of Handicap in the Environmental Protection Agency's Programs, 52 Fed. Reg. 30,598 (Aug. 14, 1987) (codified at 40 C.F.R. pt. 12); Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. 4566 (Feb. 5, 1986) (codified in scattered sections of the C.F.R.); Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. 22,880 (June 23, 1986) (codified in scattered sections of the C.F.R.).

well-known that lobbyists supply model legislation to state legislators.¹⁶⁴ One study, for example, found that “at least 10,000 bills almost entirely copied from model legislation were introduced nationwide in the past eight years, and more than 2,100 of those bills were signed into law.”¹⁶⁵ For legislators, copying model legislation is a low-cost way to get credit for introducing and writing bills, while also currying favor with campaign donors. Interest groups, for their part, can exert influence under the radar: Providing legislative text does not need to be disclosed on campaign-finance or other expense forms. But once introduced, model bills can “go viral” across states, “executing an agenda to the letter.”¹⁶⁶

Thus, it is unsurprising to find that interest groups supply regulatory templates to federal agencies as well. After all, regulations can be even more consequential than statutes—they actually execute the relevant policy choices. Indeed, interest groups like the National Association of Insurance Commissioners and United for Efficiency draft and post model regulations.¹⁶⁷ They likely encourage agency rule drafters to adopt them through the same informal channels that interest groups normally use to influence agencies.¹⁶⁸ More formally, private actors also propose regulatory text to agencies through rulemaking petitions.¹⁶⁹ The New Civil Liberties Alliance, for example, has petitioned more than two dozen agencies to adopt its proposed regulatory text that would limit agency use of guidance documents.¹⁷⁰ The organization

164. See Rob O'Dell & Nick Penzenstadler, *You Elected Them to Write New Laws. They're Letting Corporations Do It Instead.*, USA TODAY NEWS (updated Dec. 16, 2019, 5:13 PM PST), <https://perma.cc/2FLH-F5VB>.

165. *Id.*; see also, e.g., Catherine Rocchi, Note, *Climate Protagonists? Strategic Misrepresentation and Corporate Resistance to Climate Legislation*, 74 STAN. L. REV. 1153, 1160-61, 1166 (2022) (discussing model environmental laws written by lobbying and trade organizations).

166. O'Dell & Penzenstadler, *supra* note 164.

167. See, e.g., *Model Laws*, NAT'L ASS'N INS. COMM'RS, <https://perma.cc/XT8G-MUR7> (archived Apr. 10, 2022); *Model Regulation Guidelines*, UNITED FOR EFFICIENCY, <https://perma.cc/GHV3-5VJQ> (archived Apr. 10, 2022).

168. See Scott R. Furlong & Cornelius M. Kerwin, *Interest Group Participation in Rule Making: A Decade of Change*, 15 J. PUB. ADMIN. RSCH. & THEORY 353, 362-63 (2005) (describing various methods of interest-group participation before the formal notice-and-comment period).

169. See 5 U.S.C. § 553(e). See generally JASON A. SCHWARTZ & RICHARD L. REVESZ, ADMIN. CONF. OF THE U.S., PETITIONS FOR RULEMAKING (2014), <https://perma.cc/K63T-SSXC> (describing how stakeholders use the petition process as well as the procedural requirements for agencies responding to these petitions).

170. *Petitions for Rulemaking Filed By NCLA: The New Civil Liberties Alliance Is Taking Federal Departments and Agencies to Task*, NEW C.L. ALL., <https://perma.cc/84BY-BVDL> (archived Apr. 10, 2022).

submitted written comments to an agency to adopt the same regulatory text as well.¹⁷¹

Learning. There are also potential explanations for regulatory diffusion arising from the agency’s perspective. For starters, agencies learn from other agencies.¹⁷² When rule drafters confront a novel subject area, it would be natural for them to look at how other agencies have approached similar issues. The need for agencies to learn would be particularly acute when agencies are newly created or when they gain new statutory authorities.

Learning, in this context, implies that a policy or drafting decision by another agency has been perceived to be successful, thus meriting adoption.¹⁷³ “Successful” rules could include those that have been upheld in court, desirably interpreted, or fostered compliance. Risk-averse lawyers, for example, prefer language from other agencies that have survived litigation.¹⁷⁴ When success is more difficult to measure or observe, agencies can also use proxies: For example, rules may be perceived as successful if they have not been abandoned over time.¹⁷⁵ In this sense, learning results in a kind of standardization.¹⁷⁶ As one rule writer put it, drafters sensibly want to “take the best pieces of regulations” from other agencies and “mix and match” provisions accordingly.¹⁷⁷

171. See, e.g., Kara Rollins, Litig. Couns., New C.L. All., Comment Letter on Department of Health and Human Services Good Guidance Practices (Sept. 16, 2020), <https://perma.cc/Y5UL-J6HU>.

172. See Dorit Rubinstein Reiss, *Account Me In: Agencies in Quest of Accountability*, 19 J.L. & POL’Y 611, 678 (2011) (“Agencies learn from each other—for example, other agencies emulated the experience of the first agencies with negotiated rulemaking, and OMB incorporated it into an executive order, recommending it to all agencies.”).

173. See Shipan & Volden, *supra* note 26, at 841-42 (“[L]earning involves a determination of whether a policy adopted elsewhere has been successful.”).

174. Telephone Interview with Daniel Cohen, *supra* note 90. Lawyers are often rule drafters, sometimes writing the first draft and other times providing “critical input.” Thomas O. McGarity, *The Role of Government Attorneys in Regulatory Agency Rulemaking*, LAW & CONTEMP. PROBS., Winter 1998, at 19, 26; accord BLAKE EMERSON & CHERYL BLAKE, ADMIN. CONF. OF THE U.S., PLAIN LANGUAGE IN REGULATORY DRAFTING 26 (2017), <https://perma.cc/6A7V-CVL5> (“In some agencies, such as the [Internal Revenue Service] (which considers their regulations an exercise in statutory interpretation, rather than novel policy-making), rules are drafted by lawyers in the first instance. Most [offices of general counsel], however, will mainly be responsible for ensuring compliance with the [Administrative Procedure Act] and other relevant legal considerations.” (footnote omitted)).

175. Shipan & Volden, *supra* note 26, at 842.

176. Cf. Marcel Kahan & Michael Klausner, *Standardization and Innovation in Corporate Contracting (or “The Economics of Boilerplate”)*, 83 VA. L. REV. 713, 719-20 (1997) (identifying the “potential ‘learning benefits’” of adopting previously used contract terms).

177. Telephone Interview with Anonymous Agency Official (Feb. 26, 2021).

Resource Costs. Text reuse becomes even more attractive when drafters are operating under time or resource constraints. Say, for example, that there is a statutory deadline on the horizon. Or an outgoing President demands midnight rules. Or there is a scheduled speech during which the regulation will be announced. When deadlines like these loom, drafters would be more tempted to turn to preexisting regulatory texts, at least on the margin. Drafting rules from scratch is costly. It usually requires coordination between multiple team members—lawyers, economists, and program officers.¹⁷⁸ For substantive issues, research must be done, options memos must be written, and analyses must be completed.¹⁷⁹ Thus, the more a drafter is resource constrained, the more likely she will be to borrow language from other regulations. One would thus expect an inverse relationship between an agency’s resources—measured perhaps by budget or staffing numbers—and rates of regulatory text reuse. Note that the prospect of text reuse could also help “deossify” rulemaking—that is, make it easier for agencies to amend rules by lowering the costs of drafting new ones.¹⁸⁰

Regulatory consistency and coordination. Finally, we turn to the idea that regulations should be considered not as individual units in isolation, but rather as elements of a larger regulatory system contained in the CFR. In this view, text reuse allows new regulatory language to be more easily embedded into a system of increasingly complex rules. By contrast, when an agency drafts language from scratch, it risks creating unintended inconsistencies and conflicts with preexisting policy choices.

Consider, for example, the Dodd–Frank Act, which requires the SEC and Commodity Futures Trading Commission (CFTC) to “consult and coordinate” with each other in the regulation of credit swaps “for the purposes of assuring regulatory consistency and comparability.”¹⁸¹ After the CFTC issued a final rule regarding business conduct standards for swaps, the SEC reopened its

178. These teams or “work groups” are usually led by a program office and include members from other subunits that have a stake in the rule. *See* CORNELIUS M. KERWIN & SCOTT R. FURLONG, *RULEMAKING: HOW GOVERNMENT AGENCIES WRITE LAW AND MAKE POLICY* 140 (5th ed. 2019) (“Where responsibility for writing rules is delegated to a single office or individual, it is still rare for the work to be done in truly splendid isolation.”); McGarity, *supra* note 174, at 20–21 (“The team model is the predominant model for internal agency decisionmaking in the context of informal rulemaking.”); EMERSON & BLAKE, *supra* note 174, at 26.

179. *See* KERWIN & FURLONG, *supra* note 178, at 148–50 (describing the various sources from which agencies gather substantive legal information).

180. *See generally* Thomas O. McGarity, *Some Thoughts on “Deossifying” the Rulemaking Process*, 41 DUKE L.J. 1385 (1992) (suggesting tools to encourage flexibility and efficiency in informal rulemaking).

181. Dodd–Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111–203, § 712(a)(1), 124 Stat. 1367, 1641 (2010) (codified at 15 U.S.C. § 8302(a)(1)).

comment period on its own rules.¹⁸² Unlike the SEC's original proposal, where "commenters were divided as to whether they preferred the [SEC]'s or the CFTC's proposed approach to specific issues," commenters "overwhelmingly urged the [SEC] to harmonize its external business conduct rules with those of the CFTC."¹⁸³ The difference now was that industry groups had already "invested significant resources and infrastructure to develop and implement systems, policies, and procedures to comply with [the CFTC's] final rules."¹⁸⁴ In response to these comments, the SEC indeed revised its final rules to "conform them to the rules adopted by the CFTC."¹⁸⁵ In this manner, copying another agency's regulation helps ensure regulatory consistency and the possibility that the new rule better fits better into the regulatory system as a whole.¹⁸⁶

B. Channels of Diffusion

When drafters seek to emulate regulations from other agencies, through what channels do these texts diffuse? Sometimes, it is as simple as pulling up the electronic version of the CFR and running a keyword search.¹⁸⁷ Indeed, one government lawyer reported doing just that: surveying published regulations on the same subject matter to emulate those she thought the most appropriate.¹⁸⁸ But rule drafters share information through many other channels as well. Some of these channels are formal and mandated by Congress or the President. Consider statutorily required consultation requirements, bilateral agency memoranda of understanding, and presidential tools of coordination such as policy councils and regulatory review.¹⁸⁹

182. Business Conduct Standards for Security-Based Swap Dealers and Major Security-Based Swap Participants, 81 Fed. Reg. 29,960, 29,961, 29,964 (May 13, 2016) (codified at 17 C.F.R. pt. 240).

183. *Id.* at 29,964 (footnotes omitted).

184. Robert G. Pickel, CEO, Int'l Swaps & Derivatives Ass'n, Inc., Comment Letter on Proposed Rule: Trade Acknowledgment and Verification of Security-Based Swap Transactions 3 (July 22, 2013), <https://perma.cc/J5VE-2PVJ>.

185. Business Conduct Standards for Security-Based Swap Dealers and Major Security-Based Swap Participants, 81 Fed. Reg. at 29,962.

186. *Cf.* Spencer Williams, *Contracts as Systems*, 45 DEL. J. CORP. L. 219, 222, 235 (2021) (making a similar argument in the context of contracts).

187. *See* Freeman & Rossi, *supra* note 37, at 1156 ("Informal coordination regularly occurs without any explicit communication between agencies, as where one agency observes what another agency is doing or anticipates another agency's decisions and adjusts its decisions accordingly to avoid tension or friction.")

188. Telephone Interview with Anonymous Agency Official, *supra* note 177.

189. These are the formal coordination tools identified in Freeman & Rossi, *supra* note 37, at 1155-81.

Take the Obama Administration's Second Open Government National Action Plan.¹⁹⁰ As part of this plan, the Administration pledged to "initiate an interagency process" to draft a potential "core" FOIA regulation "that is both applicable to all agencies and retains flexibility for agency-specific requirements."¹⁹¹ The Office of Information Policy within DOJ led a two-year group to fulfill the National Action Plan's commitment, after which it issued template FOIA regulations for other agencies to adopt.¹⁹² The template succeeded in getting some agencies to adopt the same regulatory language, though its record of success was mixed.¹⁹³

Congress can also create more indefinite offices to coordinate the implementation of trans-substantive statutes like FOIA. In 2009, for example, the Office of Government Information Services (OGIS) was established as part of the National Archives and Records Administration to "advocate for the proper administration of FOIA."¹⁹⁴ OGIS provides feedback on individual agencies' proposed FOIA regulations for "clarity and readability"¹⁹⁵ through

190. See OPEN GOV'T P'SHIP, SECOND OPEN GOVERNMENT NATIONAL ACTION PLAN FOR THE UNITED STATES OF AMERICA (2013), <https://perma.cc/3LYS-2KAJ>.

191. *Id.* at 3.

192. See *Guidance for Agency FOIA Regulations*, U.S. DEP'T JUST., <https://perma.cc/9GRV-KQTS> (last updated June 26, 2019).

193. The Office of Government Information Services (OGIS) recommended that the Department of the Interior (DOI) follow the template regulations and promise to forward misdirected requests to the appropriate component within the Department. See Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Department of the Interior Proposed Rule to Revise Its Freedom of Information Act Regulation (Jan. 29, 2019), <https://perma.cc/99XD-RAT6>. DOI refused to follow the template, instead promising to forward only requests that were "clearly intended" for a different component. Freedom of Information Act Regulations, 84 Fed. Reg. 61,820, 61,822 (Nov. 14, 2019) (codified at 43 C.F.R. § 2.4). The agency argued that this was the only way it would be able to meet its statutory obligations under FOIA as the amount of FOIA requests the Department receives in a year had recently exploded. See *id.* at 61,820, 61,822. OGIS also made two other suggestions, based on DOJ's template regulations, to the Department of Veterans Affairs (VA) regarding its 2018 proposed rule. See Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Department of Veterans Affairs Proposed Rule Regarding Release of Information from Department of Veterans' Affairs Records (June 1, 2018), <https://perma.cc/SJ8K-77S3>. The VA agreed with one suggestion and adopted the template regulation word for word, but it rejected the second. Release of Information from Department of Veterans Affairs' Records, 84 Fed. Reg. 12,122, 12,123-24 (Apr. 1, 2019) (codified at 38 C.F.R. §§ 1.556, 1.561). The VA reasoned that the change it accepted was required by the FOIA statute; the rejected suggestion, however, was merely discretionary and the VA felt that its existing regulation was "sufficient." *Id.* at 12,123-24.

194. OFF. OF GOV'T INFO. SERVS., THE FIRST YEAR: BUILDING BRIDGES BETWEEN FOIA REQUESTERS AND FEDERAL AGENCIES 1 (2011), <https://perma.cc/WDP4-J8NR>.

195. U.S. GOV'T ACCOUNTABILITY OFF., GAO-13-650, FREEDOM OF INFORMATION ACT: OFFICE OF GOVERNMENT INFORMATION SERVICES HAS BEGUN IMPLEMENTING ITS
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both direct contact with agencies and comments on their proposed rules.¹⁹⁶ As part of this process, OGIS often provides drafting templates or recommends that agencies use the same language adopted by another agency. For example, from 2011 to 2013, OGIS submitted comments to various agencies recommending that they adopt the same language as the FOIA fee-waiver regulation drafted by the Central Intelligence Agency (CIA).¹⁹⁷ One agency, the Privacy and Civil Liberties Oversight Board (PCLOB), adopted language modeled after the CIA's regulation as cited by OGIS.¹⁹⁸ Other agencies, however, either ignored the suggestion¹⁹⁹ or rejected it with an accompanying explanation.²⁰⁰

RESPONSIBILITIES, BUT FURTHER ACTIONS ARE NEEDED 8 (2013), <https://perma.cc/G6SJ-8VM4>.

196. See OFF. OF GOV'T INFO. SERVS., BUILDING A BRIDGE BETWEEN FOIA REQUESTERS & FEDERAL AGENCIES: 2013 REPORT FOR FY 2012, at 18 (2013), <https://perma.cc/Q6JQ-8DN8>.
197. See, e.g., Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Defense Logistics Agency Proposed Rule to Update its Freedom of Information Act Regulation (Dec. 13, 2012), <https://perma.cc/3LRR-7TM2>; Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Department of the Interior Freedom of Information Act Regulations (received Nov. 12, 2012), <https://perma.cc/XF9U-5YU3>; Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Department of Justice's Proposed Rule for Freedom of Information Act Regulations (received Apr. 20, 2011), <https://perma.cc/GF7U-6TAL>; Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Financial Stability Oversight Council Proposed Rule for Implementation of Freedom of Information Act Regulations (received May 26, 2011) [hereinafter OGIS FSOC Comment Letter], <https://perma.cc/PF9N-3RFD>; Off. of Gov't Info. Servs., Nat'l Archives & Recs. Admin., Comment Letter on Privacy and Civil Liberties Oversight Board Notice of Proposed Rulemaking, Freedom of Information, Privacy Act, and Government in the Sunshine Act Procedures (July 13, 2013) [hereinafter OGIS PCLOB Comment Letter], <https://perma.cc/4X5B-9TZU>.
198. See Freedom of Information, Privacy Act, and Government in the Sunshine Act Procedures, 78 Fed. Reg. 66,995, 66,995, 67,000 (Nov. 8, 2013) (codified at 6 C.F.R. § 1001.10); OGIS PCLOB Comment Letter, *supra* note 197. The PCLOB identified OGIS as the "third commenter." Freedom of Information, Privacy Act, and Government in the Sunshine Act Procedures, 78 Fed. Reg. at 66,995. In its discussion of the final rule, the PCLOB did not mention allowing for discretion when waiving fees like the CIA regulation, but the final rule includes language that mirrors the CIA rule cited in OGIS's comment letter. See *id.* at 67,000.
199. For example, FSOC did not adopt OGIS's suggestion to make fee waivers discretionary and made no mention of why it chose not to adopt the change. In fact, nowhere in the preamble did FSOC even acknowledge that OGIS made any suggestion concerning the granting of fee waivers. See Implementation of the Freedom of Information Act, 77 Fed. Reg. 21,628, 21,628-29 (Apr. 11, 2012) (codified at 12 C.F.R. pt. 1301); see also OGIS FSOC Comment Letter, *supra* note 197.
200. DOJ rejected OGIS's suggestion, but it at least explained why it made that choice. According to DOJ, FOIA "establishes a standard for waiver or reduction of fees" and DOJ's regulations "are intended to define the manner in which this standard is to be
- footnote continued on next page*

Of course, regulatory drafters also interact with each other informally: through one-off phone calls or emails to former colleagues or respected individuals in other agencies; periodic meals or coffees; or conversations at social events.²⁰¹ Sometimes these interactions become more institutionalized.²⁰² Indeed, for decades, there was a brown bag lunch group consisting of career staff from across government.²⁰³ They would meet regularly to exchange information, develop contacts, and brainstorm how to approach similar issues.²⁰⁴ The longevity of the group was a testament to its perceived usefulness and the “shared institutional memory” of its participants.²⁰⁵ These more informal mechanisms are more likely to explain how regulatory texts diffuse across agencies with different statutory authorities or who otherwise have very little formal interaction.²⁰⁶

Another potential mechanism of agency cross-pollination is that of staff migration, whether at the career or political level. A number of the government officials we interviewed had helped write rules while employed at different agencies.²⁰⁷ This movement of rule drafters between agencies helps to foster the networks between agencies. While systematic data on this phenomenon is sparse, the Office of Personnel Management has a dedicated transfer process for those serving in the competitive service, which suggests that it is at least common enough to have a dedicated procedure for it.²⁰⁸ This

applied.” Revision of Department’s Freedom of Information Act Regulations, 80 Fed. Reg. 18,099, 18,102 (Apr. 3, 2015) (codified as amended at 28 C.F.R. pt. 16). Thus, it felt that OGIS’s suggestion went too far in allowing discretion in granting fee waivers under FOIA. Similarly, DOI declined to adopt adding discretion because “it [was] concerned that [the suggested language] would create unrealistic expectations on the part of requesters, undercut FOIA’s statutory fee requirements, and provide Department employees with an unacceptably vague standard.” Freedom of Information Act Regulations, 77 Fed. Reg. 76,898, 76,901 (Dec. 31, 2012) (codified as amended at 43 C.F.R. pt. 2). Finally, the Defense Logistics Agency rejected adopting the CIA’s language as suggested by OGIS because it found “it unnecessary to duplicate information published by [the Department of Defense].” Defense Logistics Agency Freedom of Information Act Program, 79 Fed. Reg. 30,463, 30,465 (May 28, 2014) (codified at 32 C.F.R. pt. 300).

201. See Spencer Overton, Foreword, *Political Law*, 81 GEO. WASH. L. REV. 1783, 1794 (2013) (“Receptions, lunches, and other informal gatherings give people an opportunity to build relationships and speak more intimately about substantive issues.”).

202. Freeman & Rossi, *supra* note 37, at 1156 & n.106 (“Over time, certain interagency practices may become institutionalized while still remaining informal.”).

203. *Id.* at 1156 n.106.

204. *See id.*

205. *See id.*

206. *See id.*

207. Telephone Interview with Daniel Cohen, *supra* note 90.

208. *Policy, Data, Oversight: Hiring Information*, OPM.GOV, <https://perma.cc/UW2A-29PN> (last updated Oct. 2011).

transfer process allows civil servants to work in another agency without undergoing another civil-service examination.²⁰⁹ In addition, there are also executive-branch employees that are temporarily assigned (“detailed”) to other agencies.²¹⁰ They, too, bring with them knowledge and experience from their home agencies into their new roles.

To illustrate many of the themes above, consider one government lawyer who had recently begun work at a new agency.²¹¹ Under pressure from a sixty-day appropriations-related deadline, he reported modeling a new rule he was drafting after language from one of his previous agencies’ regulations. The rule dealt with various paperwork and procedural requirements.²¹² He felt the text represented the “wisdom” of the previous, more experienced, agency.²¹³ In this manner, this lawyer brought his experience from his previous agency to bear on his work at a new agency—a dynamic heightened by a time constraint. Regulatory text therefore had diffused across agencies through staff migration.

III. Implications

This Part now considers some of the implications of text reuse for the administrative process, judicial interpretation, and regulatory drafting. Subpart A considers the potential benefits and risks of diffusion. In particular, it argues that agencies should have a duty to explain why they have borrowed regulatory texts to allow for executive-branch oversight. The Subpart B then considers the implications of diffusion for regulatory interpretation. In particular, it argues that the maxim to read similar regulations similarly—the *in pari materia* canon—is appropriate in the context of legislative rules.

A. Evaluating Diffusion

Regulatory drafters can reuse texts for praiseworthy or pernicious reasons. Perhaps the most obvious benefit of the practice is to promote consistency across agencies. Textual consistency can reduce compliance costs. The more that rules are standardized, the less regulated entities must spend on lawyers to

209. *Id.*

210. See David Fontana & Aziz Z. Huq, *Institutional Loyalties in Constitutional Law*, 85 U. CHI. L. REV. 1, 67 (2018); U.S. GEN. ACCT. OFF., GGD-93-14, PERSONNEL PRACTICES: SCHEDULE C AND OTHER DETAILS TO THE EXECUTIVE OFFICE OF THE PRESIDENT app. iv at 27 (1992) (defining “detail” as “the temporary assignment of an employee to a different position in the same or another agency for a specified period” (quoting previous Government Accountability Office reports)).

211. Telephone Interview with Daniel Cohen, *supra* note 90.

212. *Id.*

213. *Id.*

interpret new terms or otherwise comply with novel requirements.²¹⁴ Consistent policies across agencies, in turn, can also increase business certainty, especially if the resulting guidance is consistent as well. These benefits are especially important to firms that engage in activities that implicate the jurisdiction of multiple agencies.

Consider, for example, a requirement in the 2009 American Recovery and Reinvestment Act for “vendors of personal health records” to notify their customers of any breach of sensitive health information.²¹⁵ The statute called for the Department of Health and Human Services (HHS) to regulate those entities covered by the Health Insurance Portability and Accountability Act (HIPAA) whereas the Federal Trade Commission (FTC) would cover all other entities.²¹⁶ Various commenters demanded harmonization between the rules in order to “create a level-playing field for HIPAA and non-HIPAA covered entities.”²¹⁷ Another group noted that having different standards would “only increase administrative complexity and cost.”²¹⁸ Finally, one organization said that it “may have business components subject to [both the FTC’s and HHS’s] rules” so harmonization between the rules would “greatly facilitate prompt notice to consumers in the event of any breach of their personal health information.”²¹⁹ Heeding these concerns, both agencies decided to consult with each other “to ensure both sets of regulations were harmonized by including the same or similar requirements, within the constraints of the statutory language.”²²⁰

Moreover, in line with the learning theory discussed above, agencies also borrow texts from more knowledgeable agencies that have more experience in

214. Cf. Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 47 (2000) (“The one out of one hundred who adopts a nonstandard form for property rights can increase the costs of processing the rights of ninety-nine others.”).

215. 42 U.S.C. § 17937.

216. See American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, §§ 13401-13402, 13407, 123 Stat. 115, 260-63, 269-71 (codified at 42 U.S.C. §§ 17931-17932, 17937).

217. Health Breach Notification Rule, 74 Fed. Reg. 42,962, 42,963 (Aug. 25, 2009) (codified at 16 C.F.R. pt. 318); see, e.g., Am. Benefits Council, Comment Letter on Health Breach Notification Rulemaking 2 (June 1, 2009), <https://perma.cc/GN5Z-3VMM> (“The Council supports the harmonization of HHS and FTC rules as it would provide HIPAA covered entities and [personal health record] related entities with a consistent set of rules within which to work.”).

218. HealthITNow.org, Comment Letter on Health Breach Notification Rulemaking 2 (June 1, 2009), <https://perma.cc/FQ74-GE99>.

219. WebMD, Comment Letter on Health Breach Notification Rule 3 (June 1, 2009), <https://perma.cc/X4W3-3NLF>.

220. Breach Notification for Unsecured Protected Health Information, 74 Fed. Reg. 42,740, 42,743 (Aug. 24, 2009) (codified as amended at 45 C.F.R. pt. 160, 164).

a particular subject area or a greater enforcement role. Take the earlier example involving Title IX regulations prohibiting sex-based discrimination.²²¹ Recall that twenty-one agencies copied most of ED's regulations on the subject. In doing so, they cited ED's "history of public participation in the development and congressional approval" of the regulations as well as the agency's "leadership role" in enforcing them.²²² In this manner, regulatory diffusion could foster the dissemination of expertise and experience across agencies administering a statute.

Borrowing language from other agencies also reduces rulemaking costs—the time and effort otherwise spent on drafting texts from scratch. As previously mentioned, the practice can help to "deossify" the regulatory process (that is, render it less resource intensive) as a result.²²³ Rulemaking can thus be more efficient, facilitating more updates of existing rules or other necessary changes. The resources saved, in turn, could be spent addressing more urgent or high-priority tasks within the agency.

While there are many reasons to celebrate the reuse of regulatory text, there are risks to consider as well. The most obvious is the temptation for drafters to use templates without sufficiently tailoring them; as a result, agencies could promulgate regulations that are ill-fitting to the specific regulatory issue at hand. One striking illustration from abroad can be found in Argentina's hazardous-waste regulations.²²⁴ They are verbatim copies of the EPA's rules—including their internal cross-references to the obviously inapplicable CFR.²²⁵ The cross-references in particular suggest that Argentina was merely importing language without considering the unique demands of the country or its specific legal authorities.

It is difficult to find such clear examples of rote copying among U.S. agencies. One possible explanation is that the practice is more subtle here, without obvious giveaways like irrelevant cross-references. Absent such evidence, it would be challenging for outside observers to know whether regulatory diffusion was the result of thoughtless imitation or not. Another possibility is that few examples of careless borrowing, if any, actually exist. The notice-and-comment process could make it especially difficult for agencies to adopt language without adequate justification.²²⁶ Rule writers eager to avoid

221. See *supra* notes 10-12 and accompanying text.

222. Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance, 65 Fed. Reg. 52,858, 52,859 (Aug. 30, 2000) (codified in scattered sections of the C.F.R.); see also *supra* note 12.

223. See McGarity, *supra* note 180, at 1385-87 (describing ossification of the rulemaking process).

224. See Miller, *supra* note 3, at 846.

225. *Id.*

226. See *infra* notes 233-36 and accompanying text.

litigation risk likely avoid importing language from other agencies without careful thought.²²⁷

That said, public comments have criticized agencies for reusing regulatory texts without sufficiently adapting them. For example, a number of agencies reused language from a DOJ template regarding nondiscrimination on the basis of handicap.²²⁸ During the rulemaking, a commenter argued that the “agency should have tailored the regulation to its particular programs and activities instead of adopting the Justice Department’s prototype.”²²⁹ The agencies rejected this criticism.²³⁰ Regardless of whether this choice was justified, only a fraction of agency rulemakings are challenged in court,²³¹ thus mitigating the check that arbitrariness review provides. As a result, the risk of reflexive regulatory borrowing remains real—especially when there are time and resource constraints.

There are other costs of regulatory diffusion as well. One is that text reuse stifles policy innovation. Instead of studying a problem anew amidst updated information, a borrowing agency in the name of consistency could instead freeze into place an outdated or ill-considered approach. In other words, instead of serving as “laboratories of democracy,”²³² agencies could thwart experimentation by merely copying existing texts. Falling into line too quickly could, in turn, grant outsized influence to the agency that simply promulgated

227. See KERWIN & FURLONG, *supra* note 178, at 164 (discussing how “[l]itigation” challenging rules before their implementation “has a profound effect on the rulemaking programs of many agencies”).

228. Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. 4566, 4567 (Feb. 5, 1986) (codified in scattered sections of the C.F.R.); Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. 22,880, 22,881 (June 23, 1986) (codified in scattered sections of the C.F.R.).

229. Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. at 4567; Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. at 22,881.

230. See Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. at 4567; Enforcement of Nondiscrimination on the Basis of Handicap in Federally Conducted Programs, 51 Fed. Reg. at 22,881.

231. For example, from 1988 to 1990 only thirteen of the twenty-eight significant hazardous-waste rules from the EPA were challenged in court. See Cary Coglianese, *Litigating Within Relationships: Disputes and Disturbance in the Regulatory Process*, 30 LAW & SOC’Y REV. 735, 742 (1996).

232. See, e.g., Stuart Minor Benjamin, *Evaluating E-rulemaking: Public Participation and Political Institutions*, 55 DUKE L.J. 893, 898 (2006) (encouraging agencies, as “laboratories of democracy,” to experiment with e-rulemaking); Hannah J. Wiseman & Dave Owen, *Federal Laboratories of Democracy*, 52 U.C. DAVIS L. REV. 1119, 1173 (2018) (noting that “federal agencies may be much more promising crucibles of experimental reform” such that “laboratories of democracy may be intertwined with, or largely outside of, the structures of federalism”).

its regulation first. Perhaps the agency was first because it drafted its regulation in haste. Or because it happened to confront the regulatory problem earlier. All of these scenarios would result in suboptimal rules that then proliferate through diffusion. Finally, to the extent that diffusion reflects the work of interest groups, the phenomenon grants private entities an outsized role in rulemaking. As a result, binding rules are written with little transparency or accountability.

Whether the benefits of regulatory diffusion ultimately outweigh the costs is an empirical question upon which our analysis does not shed light. That assessment would require data on the burdens avoided through standardized language; the benefits of the policies diffused; the costs saved by agency drafters; and the impacts of alternative activities agencies were able to address with those resources saved, among other factors. If an aggregate assessment of the practice of text reuse is exceedingly difficult, perhaps there is some value to having agencies themselves make this assessment on a case-by-case basis. The law could force these self-assessments by requiring agencies to internalize the social costs of sloppy drafting choices. The threat of external review would serve as an *ex ante* check on unjustified borrowing.

One natural question is to what extent agencies should be required to explain those reasons to facilitate oversight. Agencies already possess incentives under existing law to cite and justify their work. Reason-giving, for example, is a component of arbitrariness review under the Administrative Procedure Act (APA).²³³ While this standard is often described as a judicial “hard look,”²³⁴ in practice, courts are fairly deferential,²³⁵ in particular to an

233. Kathryn A. Watts, *Proposing a Place for Politics in Arbitrary and Capricious Review*, 119 YALE L.J. 2, 12 (2009) (describing the “reason-giving requirement of arbitrary and capricious review”); see *Motor Vehicle Mfrs. Ass’n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 57 (1983); *Greater Bos. Television Corp. v. FCC*, 444 F.2d 841, 851-52 (D.C. Cir. 1970).

234. See *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 57; *Greater Bos. Television Corp.*, 444 F.2d at 851-52. Under this standard, courts apply a “hard look” to agency decisions to interrogate whether the agency improperly relied on extra-statutory factors; failed to consider an important angle; proffered a rationale that conflicted with the evidence in the record; or generally failed to apply its expertise. See *Lion Oil Co. v. EPA*, 792 F.3d 978, 982 (8th Cir. 2015) (“An agency decision is arbitrary or capricious if: the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” (quoting *El Dorado Chem. Co. v. EPA*, 763 F.3d 950, 955-56 (8th Cir. 2014))).

235. See Jacob Gersen & Adrian Vermeule, *Thin Rationality Review*, 114 MICH. L. REV. 1355, 1358 (2016) (finding that “since October Term 1982 . . . the Court has passed on the merits of arbitrariness challenges sixty-four times” and, of the cases which the Court did consider, “agencies have lost arbitrary and capricious challenges only five times,” which is “a remarkable win-rate of 92 percent”). Agencies are unlikely to lose on

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agency's "drafting decisions."²³⁶ Given the possibility that regulatory borrowing could reflect the mindless use of a template, however, it might be tempting to argue that courts should apply a stricter standard of review. In this view, more scrutiny is necessary to evaluate why an agency made its drafting choices.

A major concern with this proposal, however, is that judges are particularly ill-suited to this task. A limited number have worked in the executive branch, let alone in agencies.²³⁷ Regulatory drafters, by contrast, have experience administering rules and therefore better appreciate the tradeoffs involved in drafting them—especially when such tradeoffs involve resource constraints.²³⁸ Judges, moreover, lack manageable standards for reviewing these choices: How much or how little explanation is enough? The resulting uncertainties, in turn, would risk ossification as agencies would have to spend resources papering over their drafting choices. In addition, heightened review would have chilling effects on text reuse when the benefits of the practice—for example, increased coordination, standardization, and learning—are likely to be substantial.

Given these concerns, a better alternative would be to leave oversight to other executive-branch actors who appreciate the kinds of considerations necessary when drafting rules. One candidate would be OIRA. By executive order, agencies are required to submit proposed and final rules to OIRA for review.²³⁹ One of the review's explicit purposes is to ensure that a rule does not

arbitrariness grounds in the lower courts as well. *Id.* at 1367. Gersen and Vermeule observed that "agencies rarely lose on arbitrariness grounds in the courts of appeals" and, based on their empirical evidence, suggested that "the Supreme Court is directing the lower courts to utilize a thinner form of rationality review, one that requires merely that the agency's decision not be pure caprice." *Id.*

236. See, e.g., *In re Gateway Radiology Consultants, P.A.*, 983 F.3d 1239, 1262-63 (11th Cir. 2020) ("Our deference extends both to an agency's ultimate findings as well as [to] drafting decisions like how much discussion to include on each topic, and how much data is necessary to fully address each issue." (alteration in original) (quoting *Black Warrior Riverkeeper, Inc. v. U.S. Army Corps of Eng'rs*, 833 F.3d 1274, 1285 (11th Cir. 2016))).

237. See Thomas J. Miles, *Racial Disparities in Wiretap Applications Before Federal Judges*, 41 J. LEGAL STUD. 419, 431 (2012) ("About 19 percent of [federal district] judges [in the author's sample] had previously worked in the legislative or executive branches of state government, and with respect to the federal government, about 16 percent had previously worked in the legislative branch or in nonprosecutorial positions in the executive branch.").

238. See Gersen & Vermeule, *supra* note 235, at 1395 ("It is often rational, indeed optimal, to not spend the time gathering information so that a clear rational connection exists between particular facts and the particular choice made, because that would require sacrificing the benefits of expedition." (emphasis omitted)).

239. More precisely, any agency (except those that are statutorily defined as "independent regulatory agenc[ies]") must submit regulatory actions to OIRA for review. See Exec.

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“[c]reate a serious inconsistency or otherwise interfere with an action taken or planned by another agency.”²⁴⁰ As a result, agencies must already explain how their rules are consistent with those of others during the OIRA review process. OIRA could also issue guidance requiring that agencies, as part of this process, explain more broadly why they borrow regulatory texts from other agencies. To reduce the potential burdens, those explanations could occur verbally in intra-executive-branch deliberations, instead of appearing in published rule preambles.²⁴¹

B. Interpreting Similar Regulations

Diffusion also implicates questions of regulatory interpretation. In this context, the main question is whether similar rules should be interpreted similarly. Indeed, rules, no less than statutes or contracts, require interpretation. Agencies regularly interpret their own rules—when enforcing them, adjudicating them, or providing guidance on what they mean.²⁴² Until recently, those views gained much respect from reviewing judges.²⁴³ As long as the agency’s interpretation is not “plainly erroneous or inconsistent with the regulation,” it was entitled to “controlling weight”²⁴⁴—a standard known as *Auer* deference. Some courts understood *Auer* as demanding even more deference than that given to agency interpretations of statutes.²⁴⁵ Courts often defended the doctrine on the grounds that agencies were better positioned to understand why a rule was drafted the way it was.²⁴⁶ Alternatively, agency

Order No. 12,866, 3 C.F.R. 638, 641, 644-48 (1994), *reprinted as amended* in 5 U.S.C. § 601 note (defining “agency” as excluding “independent regulatory agencies” as defined in 44 U.S.C. § 3502(10)). As for independent agencies not covered by this executive order, other coordinating bodies such as FSOC could serve a similar OIRA-like role. *See supra* Part I.B.2.

240. Exec. Order No. 12,866, 3 C.F.R. at 642.

241. *See* Cass R. Sunstein, Commentary, *The Office of Information and Regulatory Affairs: Myths and Realities*, 126 HARV. L. REV. 1838, 1856-57 (2013) (explaining OIRA’s role in facilitating interagency communication).

242. *See* Kevin M. Stack, *The Interpretive Dimension of Seminole Rock*, 22 GEO. MASON L. REV. 669, 672 (2015) (“Administrative agencies frequently offer interpretations of their own regulations, whether in adjudicative decisions, guidance documents, the preambles to the regulations, opinion letters, or briefs.”).

243. *Kisor v. Wilkie*, 139 S. Ct. 2400, 2414-16 (2019).

244. *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 414 (1945).

245. *Kisor*, 139 S. Ct. at 2416 (“Some courts have thought (perhaps because of *Seminole Rock*’s ‘plainly erroneous’ formulation) that at this stage of the analysis, agency constructions of rules receive greater deference than agency constructions of statutes.”).

246. *Id.* at 2412 (plurality opinion) (noting that “the agency that promulgated a rule is in the ‘better position [to] reconstruct’ its original meaning” (alteration in original) (quoting *Martin v. Occupational Safety & Health Rev. Comm’n*, 499 U.S. 144, 152 (1991))).

deference was a sensible interpretive presumption about congressional intent given agencies' comparative expertise.²⁴⁷ As a result, judges often gave regulations cursory glances before blithely adopting the agency's view.²⁴⁸

No longer. In *Kisor v. Wilkie*, the Supreme Court demanded greater judicial skepticism.²⁴⁹ Declining to overrule *Auer*, Justice Kagan, writing for the majority, nevertheless sought to “reinforce [the] limits” of the doctrine and to explain how it was “cabined in its scope.”²⁵⁰ First, she clarified that the doctrine applied only when “the character and context” of the agency’s interpretation entitled it to deference.²⁵¹ For example, the interpretation must represent the agency’s high-level “official position,” rather than an informal ruling by staff.²⁵² It must also exhibit the agency’s expertise and “considered judgment.”²⁵³ If these conditions are satisfied, an agency’s “reasonable” views are eligible for deference.²⁵⁴

Whether deference will be granted depends on whether the judge, using interpretive tools, can disambiguate the regulation at issue. In Justice Kagan’s words, “[T]he possibility of deference can arise only if a regulation is . . . genuinely ambiguous, even after a court has resorted to all the standard tools of interpretation.”²⁵⁵ Put differently, judges cannot just “reflexive[ly]”²⁵⁶ capitulate to the agency’s interpretation but must rather consider the “text, structure, history, and purpose of a regulation,” just as they would have done had there been no agency to rely upon.²⁵⁷

247. *Id.* (“We have explained *Auer* deference (as we now call it) as rooted in a presumption about congressional intent—a presumption that Congress would generally want the agency to play the primary role in resolving regulatory ambiguities.”); *see also id.* at 2413 (noting that “[a]gencies (unlike courts) have ‘unique expertise,’ often of a scientific or technical nature, relevant to applying a regulation ‘to complex or changing circumstances’” (quoting *Martin*, 499 U.S. at 151)).

248. *See, e.g., id.* at 2414 (majority opinion) (acknowledging that “[a]t times, this Court has applied *Auer* deference without significant analysis of the underlying regulation”).

249. *Id.* at 2416-18.

250. *Id.* at 2408.

251. *Id.* at 2416.

252. *Id.* (quoting *United States v. Mead Corp.*, 533 U.S. 218, 257 (2001) (Scalia, J., dissenting)).

253. *Id.* at 2417 (quoting *Christopher v. SmithKline Beecham Corp.*, 567 U.S. 142, 155 (2012)).

254. *Id.* at 2415-16 (quoting *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 515 (1994)) (“If genuine ambiguity remains, moreover, the agency’s reading must still be ‘reasonable.’ In other words, it must come within the zone of ambiguity the court has identified after employing all its interpretive tools.” (citation omitted) (quoting *Thomas Jefferson Univ.*, 512 U.S. at 515)).

255. *Id.* at 2414.

256. *Id.* at 2415 (quoting *Pereira v. Sessions*, 138 S. Ct. 2105, 2120 (2018) (Kennedy, J., concurring)).

257. *Id.*

Consequently, judges will now have to grapple with regulatory interpretation on its own terms. Basic questions remain unsettled. What is the relevant “text”? Does it consist only of the text codified in the CFR or does it also include the preamble?²⁵⁸ If a judge decides to look to regulatory purpose or intent, to what sources should she turn?²⁵⁹ More broadly, is regulatory history (analogous to legislative history) a valid source of interpretation?²⁶⁰ All of these questions demand answers unique to the regulatory context. Commenters and courts can no longer blindly import insights from the statutory realm.²⁶¹

The most relevant inquiry for our purposes is whether there is a valid role here for canons of interpretation. Interpretive canons are “rules of thumb,” often deployed in the statutory context, which judges deploy to ascertain meaning.²⁶² Consider the *in pari materia* canon, the notion that “similar statutes should be interpreted similarly.”²⁶³ The rule—literally meaning “in the

258. Compare Jennifer Nou, *Regulatory Textualism*, 65 DUKE L.J. 81, 138 (2015) (“The regulatory text alone is published in the Code of Federal Regulations, an important legal touchstone for determining whether an agency has issued a substantive, legislative rule.”), with Kevin M. Stack, *Interpreting Regulations*, 111 MICH. L. REV. 355, 407 (2012) (suggesting “that both regulatory text and the regulation’s statement of basis and purpose count as part of the ‘text’ on which a textualist should center her interpretive inquiry”). Stack refers to a regulatory “preamble” as the agency’s published “detailed explanation of the grounds and purposes of the regulation, [also] called a ‘statement of basis and purpose.’” See Stack, *supra*, at 360-61.

259. See Lars Noah, *Divining Regulatory Intent: The Place for a “Legislative History” of Agency Rules*, 51 HASTINGS L.J. 255, 261, 280-82 (2000) (listing a hierarchy of sources from which to construct a “regulatory history”); Nou, *supra* note 258, at 84-86 (“[T]he preamble’s detailed provision-by-provision analysis of the regulation . . . is the best evidence of the regulatory text’s public meaning . . .”); Stack, *supra* note 258, at 358-61 (“[I]t does not make sense to interpret the text of a regulation independently from its statement of basis and purpose.”); Russell L. Weaver, *Judicial Interpretation of Administrative Regulations: An Overview*, 53 U. CIN. L. REV. 681, 708-17 (1984) (reviewing various sources of regulatory intent and their applicability in judicial interpretations).

260. See Noah, *supra* note 259, at 306-07 (“Possible materials include the preamble accompanying the final rule, regulatory analyses of various sorts prepared in tandem with promulgation of the final rule, notices of proposed rulemaking and similar published documents, internal agency memoranda, and even the recollections of persons involved in the formulation of the rule.”).

261. See also *id.* at 282 (noting that “it is far easier to ascribe an intent to an agency when it issues a rule than to a legislature when it enacts a statute, both because of differences in their decisionmaking routines and because of the greater reliability of the materials that document the bases for their decisions”).

262. *Varity Corp. v. Howe*, 516 U.S. 489, 511 (1996) (quoting *Conn. Nat’l Bank v. Germain*, 503 U.S. 249, 253 (1992)) (“Canons of construction, however, are simply ‘rules of thumb’ which will sometimes ‘help courts determine the meaning of legislation.’” (quoting *Germain*, 503 U.S. at 253)).

263. William N. Eskridge, Jr. & Philip P. Frickey, *The Supreme Court, 1993 Term—Foreword: Law as Equilibrium*, 108 HARV. L. REV. 26, 105 (1994); see also 1 WILLIAM BLACKSTONE, *footnote continued on next page*

same matter”²⁶⁴—encourages courts confronting an ambiguous statute to look at another statute on the same subject. In the Supreme Court’s formulation:

The correct rule of interpretation is, that if divers[e] statutes relate to the same thing, they ought all to be taken into consideration in construing any one of them If a thing contained in a subsequent statute, be within the reason of a former statute, it shall be taken to be within the meaning of that statute²⁶⁵

Some courts justify the canon in terms of legislative intent, a “presum[ption] that Congress intended th[e] text to have the same meaning in both statutes” absent evidence to the contrary.²⁶⁶ Others ground the canon in a kind of legal pragmatism, which calls for judges to rationalize the law and consider its consequences.²⁶⁷ In this view, when two different statutes bear on similar subjects and use similar language, the role of the court is to interpret them so as not to functionally conflict.²⁶⁸

In the statutory context, however, some have argued that the canon is inappropriate given the “structural separation” of Congress into committees, which do not communicate with each other.²⁶⁹ Put differently, committees with disparate jurisdictions often do their work in “silos.”²⁷⁰ These realities “pose[] a perhaps insurmountable obstacle to the accuracy of assumptions of linguistic consistency.”²⁷¹ Courts and commenters alike also express skepticism that statutes should be read as if Congress actually sought

COMMENTARIES *60 n.8 (“It is an established rule of construction that statutes *in pari materia*, or upon the same subject, must be construed with reference to each other.”).

264. *In pari materia*, BLACK’S LAW DICTIONARY (11th ed. 2019).

265. *Branch v. Smith*, 538 U.S. 254, 281 (2003) (plurality opinion) (second and third alterations in original) (quoting *United States v. Freeman*, 44 U.S. (3 How.) 556, 564 (1845)).

266. *Smith v. City of Jackson*, 544 U.S. 228, 233 (2005) (plurality opinion).

267. See Anuj C. Desai, *The Dilemma of Interstatutory Interpretation*, 77 WASH. & LEE L. REV. 177, 193-94 (2020).

268. See *id.* at 183.

269. Abbe R. Gluck, *Congress, Statutory Interpretation, and the Failure of Formalism: The CBO Canon and Other Ways That Courts Can Improve on What They Are Already Trying to Do*, 84 U. CHI. L. REV. 177, 202-03 (2017); see also RICHARD A. POSNER, *THE FEDERAL COURT: CRISIS AND REFORM* 277 (1985) (expressing skepticism over linguistic canons since they are premised on “wholly unrealistic conceptions of the legislative process”).

270. See Lisa Schultz Bressman & Abbe R. Gluck, *Statutory Interpretation from the Inside—An Empirical Study of Congressional Drafting, Delegation, and the Canons: Part II*, 66 STAN. L. REV. 725, 747-48 (2014) (observing “how the division of Congress into committees creates drafting ‘silos’ that exacerbate drafting fragmentation and also ‘turf’ consciousness that incentivizes drafting to protect jurisdiction”).

271. Gluck, *supra* note 269, at 202.

consistency, whether linguistic or policy oriented, across time.²⁷² Maxims to read statutes coherently, in this view, are naive about the extent to which legislative drafters are aware of different parts of the same statute or the *United States Code*.²⁷³

The picture, however, looks different in the administrative state, where disparate rulemakers from distinct agencies regularly communicate and coordinate with one another.²⁷⁴ As previously discussed, OIRA reviews rules from executive agencies to ensure they do not “[c]reate a serious inconsistency or otherwise interfere with an action taken or planned by another agency.”²⁷⁵ In other words, OIRA helps to promote coherence, whether on textual or policy grounds, among regulations from different executive agencies. At least for “significant” rules issued by these executive agencies, then, a presumption that regulations should be read coherently arguably has empirical grounding. Maybe a more general way to think about a regulatory *in pari materia* canon is as a way to vindicate the executive branch’s own explicit desire for coherence.

Beyond centralized coordination, agencies also regularly interact with each other through formal and informal means. As discussed, they can enter into memoranda of understanding, form working groups, and informal get-togethers.²⁷⁶ While it is true that agencies can be more fragmented than congressional committees are, the executive branch as a whole possesses more coordinating mechanisms than Congress does.²⁷⁷ Moreover, since agencies actually implement the regulations that they write—unlike Congress with respect to statutes—they are likely to be more familiar with the relevant sections of the CFR than Congress is with the *United States Code*. As a result, agencies are better positioned to draft with an eye to consistency.

272. See, e.g., *K.L. v. R.I. Bd. of Educ.*, 907 F.3d 639, 646 (1st Cir. 2018) (“[T]he notion that Congress, acting on legislation separated by forty years and addressing different subjects, would be attentive to the consistent usage of a phrase, reflects a fanciful version of the legislative drafting process.”); Abbe R. Gluck & Lisa Schultz Bressman, *Statutory Interpretation from the Inside—An Empirical Study of Congressional Drafting, Delegation, and the Canons: Part I*, 65 STAN. L. REV. 901, 936 (2013) (noting that congressional staffers “vigorously disputed that the first cousin of the whole act rule—the ‘whole code rule,’ under which courts construe terms *across* different statutes consistently—reflects how Congress drafts or even how it *tries* to draft”).

273. See Gluck & Bressman, *supra* note 272, at 936.

274. See Freeman & Rossi, *supra* note 37, at 1148-49.

275. Exec. Order No. 12,866, 3 C.F.R. 638, 642 (1994), *reprinted as amended* in 5 U.S.C. § 601 note.

276. See *supra* notes 40, 201-06 and accompanying text.

277. See Bressman & Gluck, *supra* note 270, at 746 (comparing the Office of the Legislative Counsel with OIRA and noting that the former “does not appear to have the reach, the convening power, or even the consistency of practice to coordinate Congress’s drafting process”).

Another broader source for the norm comes from the APA’s prohibition against arbitrary agency action.²⁷⁸ Nonarbitrariness requires policy coherence, which arguably demands attention to the possibility of interagency conflict.²⁷⁹ This necessity is particularly true when commenters raise concerns about inconsistent regulations across agencies, which occurs often.²⁸⁰ When such concerns are raised, agencies have a duty to consider them.²⁸¹ For all these reasons, reading regulations *in pari materia* arguably makes more sense in the regulatory, rather than statutory, context.

Indeed, parties have sometimes asked judges to apply the canon to regulations—not always by name but by invoking the idea that similarly worded regulations should be interpreted consistently.²⁸² Faced with this prospect, some judges have applied the canon, with little discussion about its appropriateness in the regulatory context.²⁸³ Others have asked for supplemental briefing on the question, feeling lost on how to approach it.²⁸⁴ Given the previous regime of strong deference, there were few precedents for them to analyze.²⁸⁵ Post-*Kisor*, however, judges will be confronted with calls to read regulations *in pari materia* more often, especially given our finding that

278. See 5 U.S.C. § 706(2)(A).

279. See, e.g., U.S. Dep’t of Just. Fed. Bureau of Prisons Fed. Corr. Complex *Coleman v. FLRA*, 737 F.3d 779, 785 (D.C. Cir. 2013) (declaring that “pursuant to arbitrary and capricious review, if an agency’s ‘explanation for its determination . . . lacks any coherence,’ a court owes ‘no deference to [the agency’s] purported expertise’” (alterations in original) (quoting *Tripoli Rocketry Ass’n, Inc. v. Bureau of Alcohol, Tobacco, Firearms & Explosives*, 437 F.3d 75, 77 (D.C. Cir. 2006))).

280. See, e.g., Business Conduct Standards for Security-Based Swap Dealers and Major Security-Based Swap Participants, 81 Fed. Reg. 29,960, 29,964 (May 13, 2016) (codified at 17 C.F.R. pt. 240) (describing commenters who “overwhelmingly urged the [SEC] to harmonize its external business conduct rules with those of the CFTC”).

281. See *United States v. N.S. Food Prods. Corp.*, 568 F.2d 240, 252-53 (2d Cir. 1977).

282. See, e.g., *ATK Thiokol, Inc. v. United States*, 598 F.3d 1329, 1334-36 (Fed. Cir. 2010); *Willis v. Conopco, Inc.*, 108 F.3d 282, 284 (11th Cir. 1997) (per curiam); *First Am. Bank v. RBS Citizens, N.A.*, No. 14-cv-08120, 2015 WL 3919588, at *4-6 (N.D. Ill. June 25, 2015); *United States v. Moesser*, No. 09-cr-00842, 2010 WL 4811945, at *6-9 (D. Utah Nov. 19, 2010); *United States v. Biocic*, 730 F. Supp. 1364, 1365 (D. Md. 1990), *aff’d*, 928 F.2d 112 (4th Cir. 1991); *Big Branch Res., Inc. v. Ogle*, 737 F.3d 1063, 1071 (6th Cir. 2013).

283. See, e.g., *United States v. Moss*, 872 F.3d 304, 310 (5th Cir. 2017) (“It is a hornbook principle of interpretation that when ‘two provisions operate *in pari materia*,’ they ‘should not be read in isolation,’ but must be construed together.” (quoting *United States v. Onick*, 889 F.2d 1425, 1433 (5th Cir. 1989))).

284. In *Moesser*, for example, the judge asked for briefing specifically on the issue of reading regulations from different agencies *in pari materia*. See 2010 WL 4811945, at *1, *7.

285. The *Moesser* briefing, for example, resulted in only two cases that directly supported reading regulations *in pari materia*. *Id.* at *7 (citing *Biocic*, 730 F. Supp. 1364; and *United States v. Olesen*, 196 F. Supp. 688 (S.D. Cal. 1961)).

the number of substantially similar rules, as well as the number of agencies engaged in textual borrowing, have been increasing over time.

The question of whether and when the canon makes sense in the rulemaking context depends on its perceived logic and maps onto broader debates about regulatory interpretation, which will not be resolved here. Suffice to say that the textualist judge would likely focus on linguistic coherence, reading the text of the two regulations as though they were one.²⁸⁶ This judge would apply textualist canons such as the rule to avoid redundancy or presumption of consistent usage (giving the same words the same meaning) to maintain the textual integrity of the similar regulations. By contrast, a more pragmatic, purposivist judge would focus on policy coherence, ensuring that both regulations are read so as not to functionally conflict.²⁸⁷ On this view, the *in pari materia* canon seeks to resolve any policy conflicts between the two statutes, to make the overall statutory scheme work or “make sense” together.²⁸⁸

In this manner, the *in pari materia* canon would operate in different ways depending on one’s approach to regulatory interpretation more generally. Those diverging orientations would also help inform another question that judges would need to confront: *Which* regulations are appropriate to read against each other? In other words, which rules are similar enough to warrant application of the canon?²⁸⁹ The textualist judge is unlikely to deploy the technical methodology used here as a metric for similarity.²⁹⁰ Nor should she: While that approach sought to operationalize a general search for regulatory texts that drafters had likely used as a model or template, judges will have the benefit of briefing in specific cases to be able to make those determinations with more information.

286. Cf. Desai, *supra* note 267, at 183 (noting that the *in pari materia* doctrine’s approach of “treating the two statutes as one” means “harmonizing them linguistically” (emphasis omitted)).

287. See *id.* See generally Stack, *supra* note 258, at 383-408 (describing the “purposive technique” of regulatory interpretation).

288. Desai, *supra* note 267, at 183 (describing this approach as an effort by courts to “harmonize to ‘make sense’ of the two statutes together”).

289. Cf. *id.* at 184 (exploring “the determination of whether two statutes are *in pari materia*,” which must be “answer[ed] . . . in the affirmative” before “the court can then treat the two statutes as one” (emphasis omitted)). Desai further explains that:

Courts have no analytical tools for determining when two statutes are on the same subject. Indeed, it is difficult to escape the conclusion that the determination is made intuitively and may well be made after the judge has decided how the statute should ultimately be interpreted. In other words, it seems likely that the determination is not in fact one of the levers of decision, but is instead a results-oriented fig leaf.

Id. (emphasis omitted) (footnote omitted).

290. See *supra* Part I.A.2.

Conversely, a more purposivist judge would likely have to determine whether two regulations in question implicate the same policy, rather than share similar text. These judges could rely on more institutional proxies such as whether the two rules were coordinated by another entity such as OIRA or were borne of the same working group. If so, then a more accountable actor in the executive branch has determined that the two regulations at issue merit some kind of policy consistency. A court could then act as a faithful agent of the drafting bodies and apply the *in pari materia* canon accordingly.

Conclusion

Regulations diffuse across agencies and over time. This Article has explored how and why they do so. Specifically, it has operationalized the idea of text reuse between administrative agencies using methods of text analysis. The empirical results suggest that regulatory diffusion is increasing over time and through a broader network of agencies. These patterns suggest mechanisms of coordination between agencies that are more informal in nature than the current literature's understanding of interagency coordination might otherwise suggest. Moreover, these findings heighten the importance of debates over regulatory interpretation, at a time when the Supreme Court is calling upon judges to read regulations with less deference to agencies.

More broadly, this work has sought to generate further lines of inquiry regarding regulatory drafting and policy diffusion more broadly. Indeed, many research questions remain: What other aspects of agency variation explain differences in diffusion patterns? Are there significant differences due to regulatory subject matter: for example, perhaps national security-related agencies exhibit more diffusion than others? Is it possible to observe the influence of interest groups on drafting decisions through notice and comment? While administrative law has paid more attention to the ways in which agencies interact, further study of their underlying networks and patterns of behavior may continue to reveal new insights on the levers of administrative influence and power.

Appendix A: Detailed Description of Similarity Measure

Our goal was to identify all texts that are textually similar. Most existing measures of textual similarity compare texts pairwise. In a dataset of n texts, there are $n(n - 1) \div 2$ to be made. In our application, since $n = 651,164$, comparing each paragraph to each other paragraph would require 212 billion comparisons. This is computationally infeasible, regardless of which algorithm is used. Hence, instead of comparing every document to every other document, we relied on recent methodological advancements in big data analysis to identify similar documents probabilistically.²⁹¹

In particular, we followed Leskovec, Rajaraman, and Ullman and used two approaches to drastically simplify the problem of identifying text reuse: minhashing and locality-sensitivity hashing.²⁹² An example illustrates the approach. Consider the following two texts:

TEXT A:

Contemporaneous record means any document created at the time of the event.

TEXT B:

Current Record means any writing created at the time of the event.

We first converted each text to “shingled k -grams” with $k = 5$. An n -gram is simply a collection of n consecutive words. Shingling means that the n -grams consist of overlapping, contiguous sequences. For instance, in the above example, TEXT A and TEXT B can be expressed as the following shingles:

291. For an overview, see generally JURE LESKOVEC, ANAND RAJARAMAN & JEFFREY DAVID ULLMAN, *MINING OF MASSIVE DATASETS* 81-91 (2014) (discussing efficient ways to compute document similarities for large datasets).

292. *Id.* at 76-86.

Table A.1
Example of Shingled 5-grams

Text	Shingle #	Words
A	1	contemporaneous record means any document
A	2	record means any document created
A	3	means any document created at
A	4	any document created at the
A	5	document created at the time
A	6	created at the time of
A	7	at the time of the
A	8	the time of the event
B	1	current record means any writing
B	2	record means any writing created
B	3	means any writing created at
B	4	any writing created at the
B	5	writing created at the time
B	6	created at the time of
B	7	at the time of the
B	8	the time of the event

Generally, a text consisting of n words can be represented as $n - k + 1$ shingles. Here, both texts have twelve words and can be represented as eight shingles. We would then compute the Jaccard similarity, which divides the number of overlapping shingles by the total number of unique shingles. Here, that fraction is

$$J(A, B) = \frac{3}{13} = 23\%$$

This simple exercise is helpful in illustrating two characteristics of our approach. First, the k in k -grams shingling can be thought of as a threshold that determines the number of consecutive words that need to be identical between the two texts in order for them to “count” as text reuse. For instance, if we set $k = 2$, any identical sequence of two words will count as text reuse. Naturally, small values of k will lead to many false positives.²⁹³ Similarly, if k is set too

293. For instance, in the two sentences “The quick brown fox jumps over the lazy dog” and “I just quickly read over the document,” there is overlap in the words “over the.” But it is unlikely that a human would assume that text has been reused.

high, the results may include many false negatives.²⁹⁴ Second, while the measure is sensitive to textual similarity, it is not sensitive to semantic similarity. Indeed, dependent on the context, the words “document” and “writing” may be highly semantically similar. But the use of the word “document” in TEXT A and of “writing” in TEXT B breaks the chain of consecutive words, yielding a low textual similarity.

Computing $J(A, B)$ exactly, while generally workable, is computationally expensive for longer texts. Assume, for instance, that TEXT A and TEXT B contain a total of 1,000 unique shingles. Computing $J(A, B)$ exactly would require a comparison of all 1,000 unique shingles. For long texts, rather than computing $J(A, B)$ exactly, we approximated it with 360 independent random draws from all shingles, yielding an estimate of $\widehat{J(A, B)}$ with a standard error of approximately 0.06.²⁹⁵

To further increase computational efficiency, we relied on a minhashing procedure. A hash function $H(x)$ maps shingles into fixed, pseudorandom numerical hash values.²⁹⁶ Hence, translating shingles into hashes and choosing the hash value with the smallest number is equivalent to choosing a shingle at random. The advantage in operating with hash values, rather than shingles, is that computers are extremely efficient in computing hash values. Hence, through repeated minhashing with randomly chosen hash functions, we can achieve an estimate of $\widehat{J(A, B)}$ at low computational cost.

So far, we have discussed efficient ways to obtain an estimated, pairwise text similarity. As mentioned above, however, our full dataset contained over 200 billion unique pairs. Even with the efficiency gains obtained through minhashing, making all comparisons was still infeasible. We thus relied on locality-sensitive hashing to further reduce the computational burden. Intuitively, the goal of local-sensitivity hashing is to divide texts into buckets in a way such that similar texts are likely to be assigned the same bucket, whereas dissimilar texts are likely assigned to different buckets. Then, only texts in the same bucket are compared to each other pairwise. Local-sensitivity hashing achieves this goal during the hashing process. Assume that each text is represented by m hash values. These m hash values can be broken into n bands, such that each band includes $m \div n$ rows. Each band is then hashed to a bucket. All documents with bands assigned to overlapping buckets are then compared to one another.

294. Consider the twenty-word sentence “Welcome, my name is Kim and I will be your guide today. I sincerely hope you will enjoy the tour.” Under $k = 20$, a second sentence that replaces “Kim” with “Tim” would be considered as not reusing any text.

295. That is, if $J(A, B) = 0.2$, the estimated mean of lies in $[0.14, 0.26]$ 95% of the time.

296. The probability that two shingles containing different words are translated into the same hash value is virtually zero.

To illustrate on our example above, assume that we draw six random shingles with replacement from TEXT A and TEXT B. We represent these shingles as hash values. Next, we divide each set of six random shingles into three bands, where each band includes two shingles. For instance, the three bands for TEXT A could contain $[[A_1, A_3], [A_2, A_8], [A_6, A_7]]$ and the three bands for TEXT B could contain $[[B_3, B_4], [B_1, B_4], [B_6, B_7]]$. The bands would then be hashed into buckets. Because the bands $[A_6, A_7]$ and $[B_6, B_7]$ include identical shingles, they get hashed into the same bucket, making the TEXT A and TEXT B pair a candidate for estimating the pairwise Jaccard similarity, $J(\overline{A}, \overline{B})$. In contrast, if TEXT A and TEXT B do not contain the same band, $J(\overline{A}, \overline{B})$ will not be computed.

The example above is stylized. In practice, the number of hash values m and the number of bands n were much larger. It is helpful to understand, however, that local-sensitivity hashing is a probabilistic process. In particular, if two documents have only few identical shingles (i.e., they are dissimilar), it is unlikely that their Jaccard similarity will be estimated, because they will not share any hash values, and thus will never appear in the same bucket. In contrast, if two documents share many shingles (i.e., they are very similar), it is likely that their Jaccard similarity will be computed. Indeed, for a given combination of parameters m and n , it is possible to compute the probability that the Jaccard similarity for two documents will be computed pairwise as a function of their similarity. After manual inspection of our results, we determined that it can be virtually ruled out that two documents have reused the same text if their Jaccard similarity is less than 0.5. We thus set m and n such that it was very likely for us to compare documents pairwise if their Jaccard similarity was at least 0.5.

Figure A.1
Probability of Detection over Jaccard Similarity

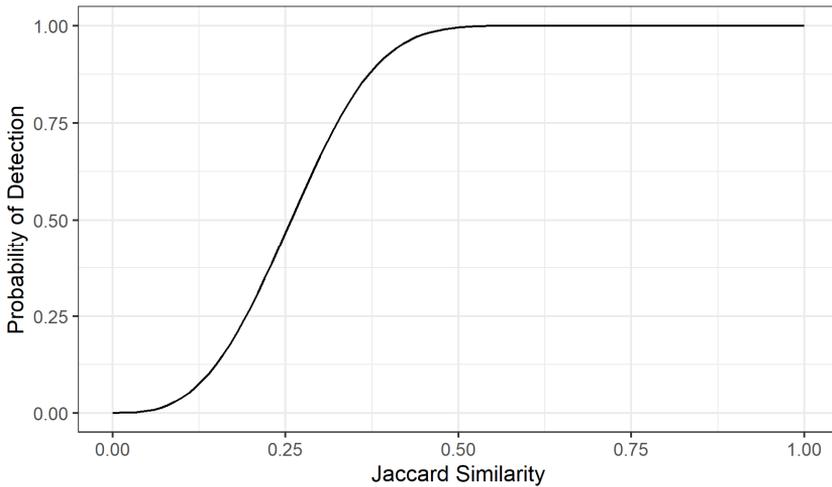


Figure A.1 above depicts the probability that we detect and explicitly compare two texts as a function of their Jaccard similarity for our parameters of choice ($m = 120$ and $n = 40$). It shows that, at our threshold of 0.5, the probability that we compute the Jaccard similarity specifically is 1. This means that we are confident that our dataset contains all pairs of texts with a Jaccard similarity of 0.5 and above. To implement the above techniques, we relied on the text-reuse package in R.²⁹⁷

Appendix B: Detailed Description of Weighted Leadership Scores

To assign leadership scores, we cannot simply add up the number of times an agency's regulatory text is reused by another agency. Doing so would overcount pairs in situations where an agency copies texts reused by multiple agencies before it. To understand why, imagine that, in the year 2005, agency A_2 reuses text from A_1 . Then, in the year 2010, A_3 reuses that same text. Our dataset would contain three pairs: $\{A_1, A_2\}$, $\{A_1, A_3\}$, and $\{A_2, A_3\}$. Note, however, that A_3 appears in two observations, even though it copied the text only once in 2010.

297. Lincoln Mullen, *Detect Text Reuse and Document Similarity: R Package Version 0.1.4.9000*, TEXTREUSE, <https://perma.cc/883D-CQ5E> (archived Apr. 17, 2022).

Instead, the most intuitive approach is to divide the leadership score between the preceding agencies. Imagine that, in the year 2005, agency A_2 reuses text from A_1 . Then, in the year 2010, A_3 reuses that same text. It is most likely that A_3 used the text from *either* A_1 *or* A_2 , but not of both.

When determining the leading agencies in the network, it thus appears appropriate to assign lower weight to the pairs $\{A_1, A_3\}$ and $\{A_2, A_3\}$. Assume that each instance of text reuse is worth one “leadership point” that the borrowing agency assigns to the agency it borrowed text from. In the above example, we assign equal weight of 0.5 to both $\{A_1, A_3\}$ and $\{A_2, A_3\}$. This is synonymous with distributing the “leadership point” of A_3 equally between A_1 and A_2 . There are two substantive interpretations of our weighting approach. First, one could assume that A_3 used the text from *either* A_1 *or* A_2 , but not of both. Because we are not able to observe whom A_3 copied from, we assign the leadership point equally among the two lending agencies. Otherwise, one could also assume that A_3 used both the text of A_1 and A_2 as a template. However, we would still need to weight the pairs down in which A_3 appears, because otherwise, agencies that borrow text later would arbitrarily have more leadership points to distribute than agencies that appear earlier.

For instance, in the example above, A_2 would assign a single leadership point to A_1 , whereas A_3 would assign a point both to A_1 and A_2 . Although this does not affect the relative ordering of leadership agencies within a single, reused paragraph, it is problematic when comparing agency influence across multiple instances of text reuse. In a first step, all agencies within a joint rulemaking are treated as a single agency. Whatever share of the leadership point they receive is then distributed equally across them. As such, each agency within a joint rule receives $(1 \div n) * (1 \div k)$ leadership points, where $n - 1$ is the number of lending agencies outside the joint rule and k is the number of agencies participating in the joint rule. Similarly, all agencies within a joint rule can distribute only a single leadership point.

Having thus defined our weighting scheme, we calculated each agency’s “leadership score” as an expression for how often others borrow that agencies’ text. In other words, the numbers reflect how many of the agency’s regulatory paragraphs appear in the CFR.

Appendix C: Additional Tables and Figures

Figure A.2

Classifier Performance: Substantive Paragraphs

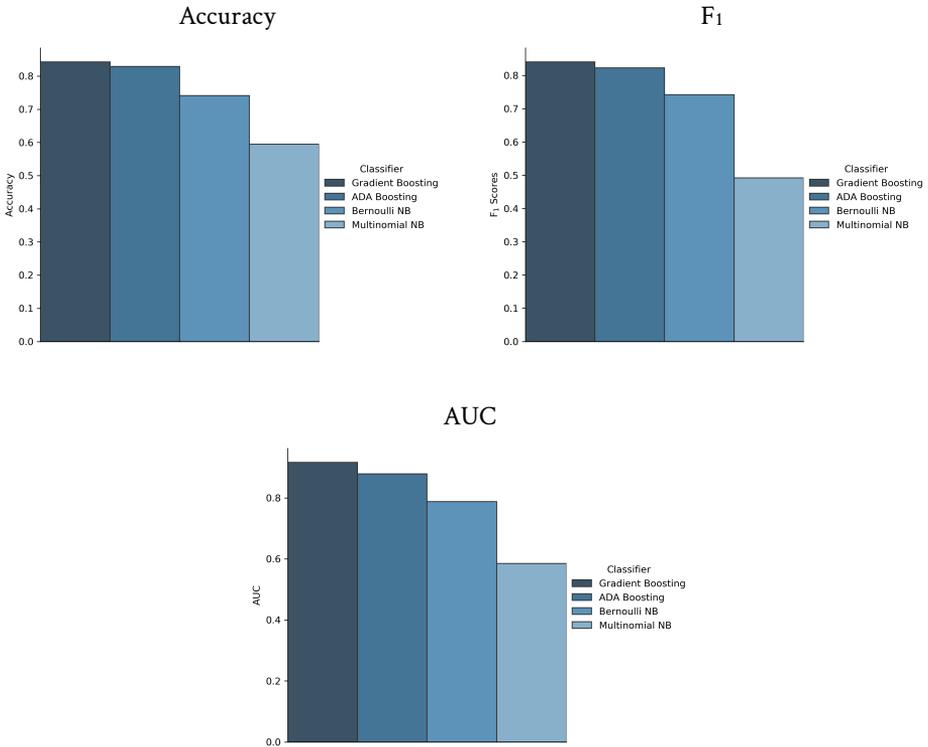


Figure A.3
Classifier Performance: Procedural Paragraphs

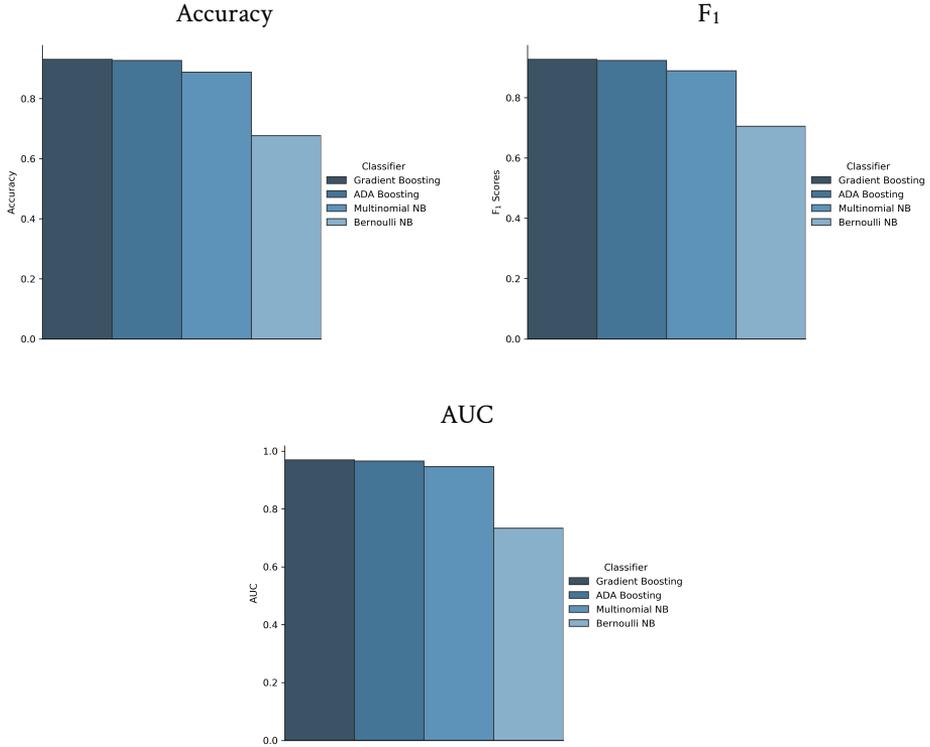


Table A.2
Top Ten Agencies by Regulatory Activity²⁹⁸

Agency	Number of Paragraphs
Environmental Protection Agency	84,284
Department of the Treasury	84,172
Department of Agriculture	55,934
Department of Transportation	48,591
Department of Health and Human Services	48,198
Department of Commerce	42,469
Department of the Interior	42,087
Department of Homeland Security	38,478
Department of Labor	33,268
Department of Defense	32,525

Table A.3
Summary of Paired Dataset (Relative Percentages in Parentheses)

Unit	0	1
Interagency	257,388 (55%)	210,052 (45%)
Joint Rulemaking	211,185 (45%)	256,255 (55%)
Republished	445,402 (95%)	22,038 (5%)
Procedural	431,674 (92%)	35,766 (8%)

298. This table indicates the most active agencies, as measured by the total number of paragraphs promulgated by it during our period of observation.

Table A.4
Top Five Agencies by Adjusted Leadership Score²⁹⁹

Agency	Adjusted Leadership Score
Defense Nuclear Facilities Safety Board	1.26
Morris K. Udall Scholarship and Excellence in National Environmental Policy Foundation	0.95
Nuclear Waste Technical Review Board	0.80
Farm Credit System Insurance Corporation	0.55
National Mediation Board	0.47

299. This table indicates adjusted leadership scores. It divides the absolute leadership scores depicted in Table 3 above by the amount of regulatory activity for each agency.