BROAD OPTIMALITY IN AGENCY RULEMAKING

Vartan Shadarevian*

This Article discusses issues with how the success of aggregate agency rulemaking is evaluated. Rigorous methods are used for assessing the ‘optimality’—according to a chosen criterion—of individual agency regulations, and procedures such as Cost-Benefit Analysis provide a way for agencies to estimate how effective a considered regulation will be. By contrast, overall agency behavior (over the course of a period of time or of a regulatory program) is not evaluated nearly as stringently, leading to politicized debates and band-aid solutions. To help bring the rigor used in individual rulemaking to the evaluation of aggregate agency behavior, this Article proposes a definition of “broad optimality” and presents a comprehensive taxonomy of the ways in which an agency may fail to achieve it. This Article also discusses why agencies fall short of achieving broad optimality and implications for agency procedure.

INTRODUCTION..................................................................................................................336
I. AGENCY RULEMAKING: AN OVERVIEW .................................................................339
II. THE DISCUSSION ON EVALUATING AGENCY RULEMAKING ................343
   A. Procedural Layering ...............................................................................................345
   B. Concerns About the Big Picture ..........................................................................346
      1. Concern about Agency Agendas .......................................................................346
      2. Ossification .........................................................................................................348
      3. Cumulative Effects of Regulation .....................................................................349
      4. Retrospective Review and Regulatory Budgets ...............................................350
      5. Sunsetting & Experimental Rules ....................................................................351
   C. Ships Passing in the Darkness ............................................................................353
III. TWO CONCEPTS OF OPTIMALITY .......................................................................355
   A. Optimality, Metrics, Criteria ...............................................................................357

* Princeton University, 20 Washington Rd, Princeton, NJ 08540. vshadarevian@jd20.law.harvard.edu. I am grateful to Howell Jackson and Cary Coglianese for helpful comments. I am also grateful for support from the John M. Olin Fellowship in Law and Economics at the John M. Olin Center for Law, Economics, and Business at Harvard Law School. Any errors remain my own.
1. Optimality and Criteria in Evaluating Rules .................................. 357
2. Single-dimensional Metrics vs Multi-dimensional Approaches ................................................................. 359
3. Criteria vs Decision Procedures ............................................. 360
B. Narrow vs Broad Optimality .................................................. 361
1. Narrow Optimality ............................................................... 361
2. Optimal Regulatory Strategies .............................................. 363
3. Broad Optimality for Agency Decisions ................................... 364
C. Political vs. Technical Decision-making .................................. 366
IV. ANALYZING FAILURES OF BROAD OPTIMALITY ......................... 368
A. The Problem of Foregone Regulation ............................................... 368
1. Understanding the Problem of Foregone Regulation ............... 369
2. Foregone Deregulatory and Modifying Rulemakings ........... 370
3. Foregone Regulation vs. Inaction .............................................. 371
B. Interdependency Error .............................................................. 372
1. Defining Interdependency Error ............................................. 373
2. Examples of Interdependencies ................................................. 374
3. The Pitfalls of Narrow Optimality ............................................. 374
C. Negligence of Procedural Value .................................................. 376
1. Credible Commitment Value .................................................. 376
2. Trust and Relationship-Building .............................................. 379
3. Soft Law & Influence .............................................................. 380
4. Democratic Values ................................................................. 381
D. Existing Critiques Conceptualized as Failures of Broad Optimality ................................................................. 382
V. WHY BROAD OPTIMALITY FAILS ................................................. 383
A. Agency Behavior ................................................................. 384
B. Oversight .......................................................... 386
C. Procedure .......................................................... 390
CONCLUSION ................................................................................ 391

INTRODUCTION

On the second-last day of the Trump administration, the U.S. Department of Health and Human Services (HHS) published the “SUNSET” rule. The SUNSET rule, had it gone effective as planned on March 22, 2021, would have amended nearly all of the approximately 18,000 HHS regulations to include self-executing “sunset” provisions—provisions that add expiration dates for rules, and would act to terminate the rule at some future date, unless the HHS expressly renews the rule. The HHS under the Biden administration quickly changed tune, initially
delaying implementation of the SUNSET rule, and eventually proposing its re-

1. The SUNSET rule was ostensibly driven by a real concern about agencies systematically failing to repeal obsolete regulations. However, the resulting politicized back-and-forth over the SUNSET rule, a “midnight regulation” published by the outgoing Trump administration,2 was indicative of a wider trend in agency rulemaking, whereby pragmatic arguments provide a thin veil for partisan visions of aggregate rulemaking. As a result, the proposed solutions to concerns about the “big picture” of rulemaking, such as the SUNSET rule, have been blunt, band-aid solutions that fail to address the nuanced problems they claim to solve.

This lack of rigor stands in contrast with the processes that drive individual rulemakings. Concerns about arbitrariness in agency action led policymakers to adopt increasing levels of procedure for agency action.3 Implicit in these procedures were two priorities: the idea that procedures should ensure that a promulgated rule is better—according to some measure—than similar alternatives, including the status quo. The result, in terms of developing agency procedures, was a progressive layering of additional types of due diligence that the agency was required to carry out. Agencies, in turn, have become increasingly analytical in considering rules, producing Regulatory Impact Analyses stretching for hundreds of pages. Some scholars have even gone so far as to suggest that a technocratic agency, carefully weighing benefits and costs, negates the importance of partisanship or value disagreements in rulemaking.4 The standards for adjudicating rules have become increasingly precise and technocratic, and ostensibly insulated from the more capricious of political winds.5

On the other hand, agencies lack technical approaches and standards for evaluating aggregate rulemaking behavior. Debates about overall rulemaking effectiveness remain intractably political; empirical and technical questions about aggregate agency behavior have become conflated with value judgments. Moreover, procedure and oversight, where they exist, are in the wrong place since they only address the process behind proposing individual rules. Agencies face remarkably little scrutiny and procedure when it comes to their overall decisions

2. For a discussion of “midnight regulations,” see Miller & Daniel Perez, note 229 below.
3. See infra Part II.B.
5. Of course, a complete detachment from politics is nearly impossible, and even technocratic approaches can take on a political character. See, e.g., Simon F. Haeder & Susan Webb Yackee, Influence and the Administrative Process: Lobbying the U.S. President’s Office of Management and Budget, 109 AM. POL. SCI. REV. 507, 518 (2015); see also Chase Foster, Technocratic democracy and the politics of cost-benefit analysis, 37 LSE RISK & REGULATION, Summer 2008, at 35, https://perma.cc/WLX7-3PMB.
on what to regulate, what not to regulate, and how to fact-find to make better decisions. The U.S. public has been forced to place an increasing amount of trust in career regulators to choose the right combinations of agency rulemaking decisions from a sea of potential options, with no guarantee that principles of sound deliberation are being followed in the aggregate.

Indeed, aggregate agency behavior is significantly suboptimal. It has become clear that focusing excessively on evaluating individual rules—and adding procedures to an agency’s rulemaking checklist—has outlived its usefulness. In the earlier days of the administrative state, what we shall term “narrow optimality”—the idea that agencies must choose the best rule out of alternatives (including that of doing nothing) may have been sufficient to guarantee optimality overall; agencies did not have to choose from quite as many regulatory options, and the analysis an agency could carry out was simpler and less cumbersome. But rulemaking has become an increasingly complex activity, with agencies having to narrow down reasonable courses of action from a large universe of potential courses of action. And agencies are expected to carry out increasingly thorough due diligence on rules they are proposing. To this end, the contemporary debates on rulemaking reflect an increasing sense that there is more to evaluating agency conduct than ensuring they pick well between regulatory alternatives or doing nothing. However, aside from pointing out individual ways in which aggregate rulemaking fails to be effective (or as effective as it could be), commentators have failed to articulate how we should assess agency rulemaking on-the-whole. Analyses of rulemaking lack a conception of “broad optimality”.

This Article therefore proposes a concept of “broad optimality” to judge aggregate rulemaking behavior and defends its use in judging agency action. According to such a standard, agencies behave optimality when—according to a criterion chosen by the agency, such as Cost-Benefit Analysis—they could do no better in their rulemaking actions. This standard stands in stark contrast to the current procedural and oversight focus on ensuring that regulators do no harm and pick the best option out of a limited set of alternatives, both of which establish a minimum standard for individual rules to meet but which fail to consider the broader objectives picture of a regulatory project. Indeed, if we like the idea of narrow optimality in principle—even if we do think agencies might spend too little or too long time on it—there is no reason not to think about agency action in terms of broad optimality as well.

The link between narrow and broad optimality is not straightforward, and one does not guarantee the other. Even when an agency always picks the best rule out of immediate alternatives (including doing nothing), it may fail to achieve broad optimality in important and systematic ways. This Article analyzes

6. See supra note 5.

7. Cost-Benefit Analysis refers to a family of methods aimed at judging the net social benefit or cost of a project or policy. For a discussion of the rise and role of Cost-Benefit Analysis generally, see CASS R. SUNSTEIN, THE COST-BENEFIT REVOLUTION (2018).
the way in which a narrow conception of optimality, even when correctly applied, results in suboptimal agency action. In doing so, it proposes a taxonomy for understanding failures of broad optimality, categorizing the resulting suboptimal behavior into three categories: (1) foregone rulemakings; (2) interdependency error; and (3) negligence of procedural value. Prominent critiques of regulatory procedure and of agency regulations in general, such as concerns about ossification or cumulative effects, can be understood in the context of our taxonomy.

The analysis has distinct policy implications. Current procedure and oversight of agencies is distortionary, focusing too much on making the case for individual rules and removing the burden for agencies to prove they are generally acting efficiently and thinking about the overall effect of their regulations. Successful reforms would move the focus away from the rule, and to the rulemaking program at large. Furthermore, there is evidence that neglecting broad optimality is costly, potentially losing billions of dollars in potential net benefits and compromising the ability of the administrative state to carry out its statutory commands. For example, another article points out that very few scholars or practitioners have noted the problem of rule interdependency—the idea that groups of rules have benefits and costs different from the sum of benefits and cost of the individual rules.  

Part I of this article gives an overview of agency rulemaking. Part II summarizes the ongoing discussion on how agency rulemaking should be evaluated. Part III discusses ‘optimality’ as a concept and introduces the concepts of ‘narrow optimality’ and ‘broad optimality’. Part IV introduces a taxonomy of broad optimality failures. Part V discusses the reasons broad optimality fails. Part VI lays out proposals for optimizing agency rulemaking.

I. AGENCY RULEMAKING: AN OVERVIEW

An agency’s ability to regulate begins with a delegation of rulemaking ability by Congress. Once Congress does so, the Administrative Procedure Act

---


Regulatory Flexibility Act, the Paperwork Reduction Act, and several Executive Orders lay out the general procedural requirements for rulemaking for most agencies. The APA creates various means by which agencies may promulgate a rule. The APA defines a rule to mean any “statement[s] of general or particular applicability and future effect designed to implement, interpret, or prescribe law or policy.” The most common method that the APA authorizes agencies to use is informal notice-and-comment rulemaking under §553 of the APA. Agencies may also choose other rulemaking options, such as formal, hybrid, direct final, and negotiated rulemaking.

Rulemakings are initiated for several reasons. First, statutes might directly mandate rules. Statutes can also authorize agencies to initiate rulemaking for certain purposes at their discretion. Lawsuits, petitions, and Office of Management and Budget (OMB) prompt letters also cause agencies to initiate rules.

When an agency does decide to pursue a rule, informal rulemaking is the most common form of rulemaking used by an agency.

When an agency wishes to promulgate a legislative rule, or any rule made pursuant to congressionally delegated authority, the agency must follow the informal rulemaking procedures set out in § 553 of the APA.

Agencies must provide the public with adequate notice of a rule. Agencies provide notice of a proposed rule by publishing a Notice of Proposed Rulemaking (NPRM) in the Federal Register. This notice, according to the APA, must include the time, place, and nature of rulemaking proceedings, a reference to the

18. Id.
20. 5 U.S.C. § 553(c).
21. Id.
legal authority under which the rule is proposed, and a description of the rule or the subjects and issues involved.

Once an agency publishes an NPRM, it must provide the public an opportunity to comment on the proposed rule through the notice-and-comment process. This process works by allowing submission of data, opinions, or arguments. There is no formally mandated minimum time that the agency must be open to comments; the only requirement is that the agency provide adequate opportunity for public comment. Generally, agencies provide a period of 30 to 60 days for public comment, although sometimes they will hold a comment period open for up to 180 days. An agency must respond to comments in a reasoned manner. After the comment period closes, an agency must incorporate comments and the rulemaking record in general in forming the final rule. If the changes to the rule are minor or are a “logical outgrowth” of the proposed rule, then the agency can directly institute a final rule. The agency must publish the rule at least 30 days before the final rule takes effect.

Even though informal rulemaking is the least demanding of agency rulemaking procedures, it can be very resource and time intensive. A sum of the estimated timeframe of various stages taken from Occupational Safety and Health Administration (OSHA) informational materials shows that rulemaking can take well over 10 years. According to that same document, preliminary rulemaking work on a particular rule can take 12 to 36 months.

In certain cases, agencies must undergo formal rulemaking. The APA mandates additional procedures in § 556 and § 557 of the APA. These procedures are only required of an agency if Congress expressly states that rulemaking be “on the record.” Formal rulemaking is more onerous on agencies than is informal rulemaking, requiring a hearing. The process must also be presided over by an agency official or Administrative Law Judge.

---

23. 5 U.S.C. § 553(c).
24. Id.
25. See N.C. Growers’ Ass’n v. United Farm Workers, 702 F.3d 755, 770 (4th Cir. 2012) (“Although the APA has not prescribed a minimum number of days necessary to allow for adequate comment, based on the important interests underlying these requirements . . . the instances actually warranting a 10-day comment period will be rare.”).
26. See supra note 22, at 5.
27. Logical outgrowth doctrine states that an agency’s final rule must be a “logical outgrowth” of the proposed rule. See Long Island Care at Home, Ltd., 551 U.S. 158, 174 (2007). Outgrowth language was first used by courts in South Terminal Corp. v. EPA, 504 F.2d 646, 659 (1st Cir. 1974). For a discussion of logical outgrowth doctrine, see generally Phillip M. Kannan, The Logical Outgrowth Doctrine in Rulemaking, 48 ADMIN. L. REV. 213, 216 (1996).
28. See N.C. Growers’ Ass’n, 702 F.3d at 768 n.5.
29. See infra note 78 (discussing ossification).
31. Id.
The APA provides for a certain number of exemptions to default notice-and-comment rulemaking. Non-legislative rules—defined as “interpretative rules, general statements of policy, or rules of agency organization, procedure, or practice”—are not subject to notice-and-comment procedures. Similarly, the APA allows for an exception to notice-and-comment if an agency, for “good cause” finds “that notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest.” By relying on one of these exemptions, an agency can either issue an interim final rule or direct final rule, both of which become effective immediately. An agency follows an interim final rule with a public comment period, after which any changes are reflected in a brief final rule that otherwise reaffirms the interim rule. If an agency publishes a direct final rule, the rule becomes effective immediately upon completion of public comment, provided no adverse comments are received. If adverse comments are received, the rule does not become effective, and an agency must instead undergo the typical notice-and-comment process.

Congress can also request that agencies engage in “hybrid” rulemaking. Hybrid rulemaking lies somewhere between informal and formal rulemaking. Generally, the authorizing statues will mandate additional procedures to the informal rulemaking ones, but that are less burdensome than those of formal rulemaking. Hybrid rulemaking is only required of agencies when expressly authorized by Congress.

33. 5 U.S.C. § 553(b)(B). When an agency finds as such, it must incorporate the finding and a brief statement of reasons in the rule issued. The good cause has traditionally been narrowly used, but its popularity is increasing. See James Yates, “Good Cause” Is Cause for Concern, 86 GEO. WASH. L. REV. 1438, 1449-50 (2018); Kyle Schneider, Judicial Review of Good Cause Determinations Under the Administrative Procedure Act, 73 STAN. L. REV. 237, 239 (2021).
34. An interim rule also has the same legal effect as other final rules, and is judicially reviewed in the same manner. See, e.g., Career College Ass’n v. Riley, 74 F.3d 1265, 1268 (D.C. Cir. 1996); see also Michael Asimow, Interim-Final Rules: Making Haste Slowly, 51 ADMIN. L. REV. 703, 712-15 (1999).
35. See supra note 22, at 9.
36. Id. (“If adverse comments are submitted, the agency is required to withdraw the direct final rule before the effective date. The agency may re-start the process by publishing a conventional proposed rule or decide to end the rulemaking process entirely.”).
38. See Vermont Yankee Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 520 (1978) (finding that § 553 established the “maximum procedural requirements that Congress was willing to have the courts impose upon federal agencies in conducting rulemaking proceedings”).
Finally, agencies can engage in Negotiated Rulemaking, as authorized by the “Negotiated Rulemaking Act.” Negotiated Rulemaking serves as an addition to informal rulemaking procedures. The Negotiated Rulemaking Act authorizes the head of an agency to “establish a negotiated rulemaking committee” containing relevant private parties. The Act also mandates that an agency must consider a number of factors in determining whether a negotiated rulemaking would be in the public interest. If an agency decides to form a negotiated rulemaking committee, it must, in accordance with the Federal Advisory Committee Act, publish a notice in the Federal Register containing the duties and proposed membership of the committee. Generally, a committee may have a maximum of 25 members, with at least one agency representative. The agency must afford the public an opportunity to comment on the proposed committee.

A committee that achieves consensus on a proposed rule will issue a report which outlines the proposed rule. If it does not achieve consensus, the committee may issue a report containing negotiated positions which did not achieve consensus. No report issued by the committee is binding on the agency, but it may provide a basis for subsequent notice-and-comment procedures.

All of this rulemaking undergoes executive branch scrutiny carried out by the Office of Management and Budget (OMB), and within it the Office of Information and Regulatory Affairs (OIRA). Both OMB and OIRA provide top-level guidance for agency analysis of regulation. Notably, OMB Circular A-4 provides direction for agencies analyzing the costs and benefits of regulations pursuant to Executive Order 12,866. The executive also conducts formal review of agency rulemaking via OIRA, usually by reviewing certain draft proposed and final regulations.

II. THE DISCUSSION ON EVALUATING AGENCY RULEMAKING

The growth of the administrative state was accompanied by the question of how to evaluate the large number of rules being considered. In the early stages of the Administrative State, and particularly during the flurry of new regulations that came about because of the New Deal, rulemaking decisions were mostly left to the discretion of the implementing agency. As the discussion continued, there was a shift to the view, often held by economists, that regulators were meant to

---

40. Id.
41. See 5 U.S.C. app. 2 § 10.
43. See 5 U.S.C. § 564.
44. The OIRA review process, through draft rule review, seeks to ensure that agencies comply with the regulatory principles stated in the Executive Order, and that the president’s policies and priorities are reflected in agency rules. OIRA proposes alterations to reviewed rules and may also suggest priorities through “prompt” letters. See Exec. Order No. 12,866, supra note 13.
dispassionately search for some kind of ‘optimum’ for a rule. This meant choosing—according to technical considerations and findings—whether to enact the regulation and if so, determining the right features and levels of that regulation. For example, scholars have suggested that regulators should look for the optimal in choosing the precision,\(^45\) complexity,\(^46\) stringency,\(^47\) wording,\(^48\) timing,\(^49\) and other features of the regulation.

Central to this debate has been the rise of Cost-Benefit Analysis (CBA) as a means for evaluating rules.\(^50\) CBA refers to a family of methods used to judge the social net benefits of a given policy.\(^51\) Giving a precise definition of CBA is difficult, since it can encompass many different decision-procedures that use different methods and have differing levels of formality.\(^52\) However, the common feature of the different forms of CBA is that they involve a comparison—often in numerical terms—of the costs and benefits of a regulation. CBA has become increasingly common in agency decision-making.\(^53\) Since the Reagan administration, it has become codified in executive order for agencies—with some exceptions—to conduct CBA on proposed rules. However, CBA has also been attacked by critics, for reasons ranging from its tendency to place numerical values on the incommensurable to a belief that it tends to understate the benefits of regulation.\(^54\)


\(^47\). There is a literature on determining the optimal exceptions to regulations. See, e.g., Louis Kaplow, *Optimal Regulation with Exemptions*, 66 INT. INDUS. ORG. 1 (2019); Eduardo Dávila, *Using Elasticities to Derive Optimal Bankruptcy Exemptions*, 87 REV. ECON. STUD. 870 (2020).

\(^48\). See Potter, supra note 16 (arguing that the wording of regulations can be used by the agency to effect substantive outcomes).


\(^52\). Sinden, supra note 50; Coates, supra note 50.


A. Procedural Layering

Almost as quickly as the rise of CBA, however, came a series of reforms and additions to the required analysis. Scholars were quick to point out that CBA neglected to analyze important consequences of rules, such as equity and dignity concerns.\(^{55}\) Consequently, the White House, Congress, and courts continued to ‘layer’ on additional concerns that an agency should account for, or that we—the public and the other three branches of government—should care about in analyzing the desirability of a rule. Examples of this include considering distributional concerns,\(^{56}\) environmental impacts,\(^{57}\) effect on small businesses,\(^{58}\) paperwork burdens on regulated entities,\(^{59}\) and non-monetizable benefits such as fairness and dignity.\(^{60}\) Many of these resulted in additional procedural burdens for the agency; as part of regulatory impact analyses today, on top of standard CBA procedures, agencies generally have to consider the impact on “small entities”\(^{61}\) and paperwork burdens imposed on regulated entities.\(^{62}\) In coming years, agencies may also, should OIRA deem it necessary, have to consider competitive effects in regulatory impact analyses.\(^{63}\)

---


\(^{58}\) There is a literature that examines the effects of regulation on business. See, e.g., Dustin Chambers, Courtney A. Collins & Alan Krause, How Do Federal Regulations Affect Consumer Prices? An Analysis of the Regressive Effects of Regulation, 180 PUB. CHOICE 57 (2019) (finding that regulations led to consumer price increases); see also James B. Bailey & Diana W. Thomas, Regulating Away Competition: The Effect of Regulation on Entrepreneurship and Employment, 52 J. REG. ECON. 237 (2017).


\(^{60}\) See, e.g., Rachel Bayefsky, Dignity as a Value in Agency Cost-Benefit Analysis, 123 YALE L.J. 1732, 1735 (2014). On Jan. 20, 2021, the Biden White House issued a memorandum asking the OMB to generate proposals to adjust the regulatory process to better account for distributional effects, public health and safety, economic growth, social welfare, racial justice, environmental stewardship, human dignity, equity, and the interests of future generations. There is a possibility that this will result in additional procedural layering. Memorandum from President Joseph R. Biden for the Heads of Executive Departments and Agencies: Modernizing Regulatory Review, (Jan. 20, 2021), https://perma.cc/SQ6L-ZT2Z.


\(^{63}\) See Exec. Order No. 36,998, 86 Fed. Reg. 36,987 (“The Director of the Office of Management and Budget, through the Administrator of the Office of Information and Regula-
The implicit concern driving procedural layering is that agencies are picking rules that are not preferable to their alternatives (including the alternative of not regulating). For example, if an agency neglects to consider environmental impacts, it might neglect those effects and end up making the wrong rulemaking decision when considering whether to promulgate that rule or one of its alternatives. From the perspective of “narrow” optimality, procedural layering is therefore acceptable and possibly beneficial, since, arguably, the more analysis an agency does on a rule, the likelier they are to make correct decisions as to the choice of a rule in terms of its features and amongst its alternatives. However, from a broader perspective, additional procedural burdens can serve to stifle an agency’s rulemaking, at the opportunity cost of passing other regulations effectively.

B. Concerns About the Big Picture

As rulemaking has grown more complex, there has also been growing concern about agency behavior in the aggregate. Critics have pointed out that agency agendas are often arbitrary, often reflecting popular mood and political expediency to excessive degree. This discussion has evolved separately, for the most part, from the consideration of optimal behavior in agency rulemaking. In this Part, I discuss some of the prevailing concerns about aggregate agency behavior that have emerged.

1. Concern about Agency Agendas

Justice Breyer famously complained in his book, “Breaking the Vicious Circle: Toward Effective Risk Regulation,” of the “random agenda selection” problem. His concern at the time was that agencies, in regulating risks (such as in the workplace), were acting against perceived risks instead of focusing on more important actual risks. In regulating environmental and workplace chemicals, for example, regulators were in his view excessively focused on cancer risks, while paying inadequate attention to other risks, such as those from neurotoxicity. As a whole, regulators tend to over-regulate certain risks, while under-

64. Narrow optimality refers to the optimal choice of a rule in terms of its features and amongst alternatives. See infra Part III.B.
65. See infra Part III.B.
67. Id. at 19-20.
68. Id. at 20.
regulating others where a government rulemaking could reduce harmful activities at significantly lower cost than the benefits. Scholars have pointed out that these “random agendas” can come about due to excessive concerns about political bargaining, the pressure of public concerns, and the biases of regulators themselves.

A more recent literature has focused on studying how agencies set agendas. There is a growing concern about the constellation of interests that interact and lead to “random” agenda selection. In a similar vein, there are concerns about the correctness of agency decisions not to decide on rules—to defer decision-making on certain matters to a later date. There is evidence that agencies use control over the timing of rulemaking to their advantage. Breyer, Sunstein, and others are concerned about agency choices of which regulations to pursue, and when to pursue them. Because judicial oversight of such decisions is difficult, such decisions often remain squarely within the discretion of the agency. Moreover, because there are relatively few procedural requirements for agenda-setting, agencies can make agenda choices without producing much in the way of a record that can be scrutinized. As a result, critics point out that much of an agency’s regulatory direction is characterized by arbitrariness and a lack of transparency or accountability to guide it.

69. Id.
75. Potter, supra note 16.
76. See infra Part IV.C.3.
77. Early-stage discussions and proposals may not trigger agency recordkeeping requirements, since generally agencies only have to maintain records if a meeting is important, or a substantive decision has been made. See 36 C.F.R. § 1222.22 (documenting when agencies “must prescribe the creation and maintenance of” records).
2. Ossification

A view of rulemaking that has found widespread acceptance holds that rulemaking is ‘ossified’. According to such a view, progressive layers of procedural requirements for agencies looking to engage in informal rulemaking have become burdensome. As a result, agency rulemaking has grown slow, lengthy, and tortuous. While there is mixed evidence on the true extent to which procedure slows down rulemaking, it seems to be true that certain constraints can delay promulgation of rules at least some of the times.

Proponents of the ossification view hold that the level of analysis required of agencies is too high. A 2009 report by the Government Accountability Office (GAO) noted that 10 out of 12 rules promulgated by the Department of Transportation (DOT), the Environmental Protection Agency (EPA), and the Food and Drug Administration (FDA), issuance of the NPRM for that rule took at least two years. Two of the FDA rules were under development for at least 6 years. Yet there has been a lively debate amongst regulation scholars as to whether ossification even exists. And scholars have pointed out a puzzle: if agencies are on a rulemaking ‘retreat’, or if procedure is slowing down agency rulemaking, then why does the empirical evidence shows that agencies continue to produce a large number of rules? One resolution of these two views hold that agencies get around rulemaking exemptions through statutory exemptions to notice-and-comment.

83. See supra note 78; see also Cass R. Sunstein, The Cost-Benefit State (2002) (arguing that too many requirements can lead to “excessive proceduralism”).
it does. When it cannot, it takes a long time, which suggests that at least in some cases, ossification might be an issue.

What has been missing in the discussion on ossification is an intelligible principle by which to judge whether ossification, to the degree it does occur, is a good thing or not. How long, and how much resources, should it take to pass a rule? If determining the net benefits of rules is hard, or if there is a lot of uncertainty around the process, then perhaps taking a long time is a good thing. On the other hand, if the agency has many regulations it could pass, or if the effects of a potential rule are obvious, then perhaps a long time is not needed.

3. Cumulative Effects of Regulation

While agencies evaluate potential rules independently against a baseline, regulations do not exist in a vacuum. Rather, regulations interact directly and indirectly with one another, and can increase the costs or benefits of other regulations. If two regulations have net benefits lower than the individual net benefits of each, they show a “negative interdependency.” If they have net benefits that are higher, they show “positive interdependency.” Agencies that fail to understand these interdependencies, and that analyze the optimality of regulations individually, will commit “interdependency error” and will not produce an optimal outcome overall.

The executive branch has shown some concern for interdependencies, referring in several documents over the years to “cumulative effects”. Cumulative effects were first explicitly mentioned by the executive in Executive Order 12,866, which instructs agencies to “take into account, among other things, and to the extent practicable, the costs of cumulative regulations.” Further clarification and instruction came in Executive Order 13,563, which emphasizes that “sectors and industries face a significant number of regulatory requirements, some of which may be redundant, inconsistent, or overlapping.” An OIRA memorandum penned by Cass Sunstein added support to the notion that Executive Order 13,563 acknowledged that “regulated entities might be subject to requirements that, even if individually justified, may have cumulative effects imposing undue, unduly complex, or inconsistent burdens.”

85. See OFFICE OF MGMT. & BUDGET, CIRCULAR A-4, REGULATORY ANALYSIS (2003), https://perma.cc/36Q5-GL5K [hereinafter OMB, CIRCULAR A-4] (“You need to measure the benefits and costs of a rule against a baseline. This baseline should be the best assessment of the way the world would look absent the proposed action.”).

86. This terminology is adopted from Shadarevian & Delaney, supra note 8.

87. Id.

88. See Exec. Order No. 12,866, supra note 13, at 2.


As used in these documents, “cumulative effects” seems to refer to the case whereby large numbers of regulations create significant costs or benefits that significantly exceed the sum of individual costs and benefits of the individual rules involved. Efforts by the executive branch to account for the cumulative effects of regulations have focused on negative interdependencies in terms of the cost of regulations.91 This focus follows an increasing concern that regulations are creating “sludge”: inefficient amounts of red tape that are a significant burden on businesses and individuals, and can impair health, reduce growth, entrench poverty, and exacerbate inequality.92 Yet the executive branch’s focus is incomplete, since there is evidence that there could be cumulative effects in benefits, interdependencies between small numbers of regulations, and positive interdependencies in cost.

4. Retrospective Review and Regulatory Budgets

Scholars, particularly on the right, have complained that agencies, once created by statute, continue to add rules and regulations to the table, while rarely removing them. However, regulations become obsolete, or initial analyses of the usefulness of regulations turns out to be wrong.93 These regulations stay on the books, continuing to impose costs on society.

First, the regulatory state has seen the adoption of certain retrospective review or lookback requirements, which instructs agencies to look back at previous regulations and analyze whether they still meet certain evaluative criteria.94 Retrospective review can be traced back to the Carter Administration, which issued Executive Order 12044 requiring agencies to, amongst other things, undertake periodic review of their existing regulations.95 Certain agencies now will occasionally or periodically revisit existing regulations to ensure that they are still have expressed support for the memorandum. See, e.g., Statement in Support of OMB Memorandum: Cumulative Effects of Regulations (Mar. 20, 2012).

91. For an example of the focus of cumulative effects study on negative interdependencies, see, e.g., Susan E. Dudley, Considering the Cumulative Effects of Regulation (2015), https://perma.cc/2M4T-XLGY. For analysis of interpretation of “cumulative effects,” see Shadarevian & Delaney, supra note 8.


95. See Exec. Order No. 12,044.
good regulations to keep on the books. If the agency finds that they are not, the agency will initiate the process of repealing the rule.

Regulatory budgeting seeks to limit the total amount of an agency to regulate, by placing a “budget” on the new regulations it can promulgate. The Trump Administration enacted a form of “Regulatory Budgeting” with Executive Order 13771, signed on January 30, 2017, and since revoked by the Biden Administration. Executive Order 13771 introduced two new requirements for federal Departments and Agencies to reduce the costs of regulation. The first requirement was “One-In Two-Out”, which requires agencies to identify two regulations for elimination for every new regulation they implement. The second requirement was “Net-Zero”, which mandated that the net additional costs of regulation in the Fiscal Year 2017 must be zero. That is, for every dollar of additional cost imposed on society by regulations, an equivalent reduction must be made elsewhere.

5. Sunsetting & Experimental Rules

Concerns about obsolete rules have led to another solution: the use of “sun-set” provisions in rulemaking. Sunset provisions are clauses included in a rule that limit the duration of that rule’s validity. For example, if a rule has a sunset provision of 10 years, then that rule will cease to be in force 10 years after enactment without further action by the agency. Unlike with cases of retrospective review or regulatory budgets, sunset provisions are put into place at the time of the rule’s promulgation. Including a sunset provision in an agency rule means that an agency does not need to take further action to stop the rule from being in effect. Sunset rules are enacted in the anticipation in advance that rules often become obsolete, thus placing the onus on the agency to renew the rule, rather than to repeal it.

Sunset provisions can be desirable because they avoid the dangerous default outcome of a rule staying on the books, even when it has outlived its usefulness, or when an agency has learned new information that suggests the rule should be

97. Id.
101. Id.
When agencies have limited resources and often pass rules to satisfy a temporary regulatory need, sunset provisions can be incredibly useful. On the other hand, again when agencies are limited in resources but where rules are promulgated in a particularly static environment, sunset provisions are less useful.

The HHS SUNSET rule is a notable recent example of a sunset provision. HHS issued, on January 19, 2021—the second-last day of the Trump administration—the “SUNSET” regulation, which would have amended nearly all of the approximately 18,000 regulations to include self-executing sunset provisions. However, in a sign of the political nature of disagreement on sunset provisions, the HHS under the Biden administration has delayed implementation and has further stated its intent to repeal the rule.

Agencies can also promulgate “experimental” rules, which are rules with a sunset provision promulgated expressly to generate data. When an agency promulgates an experimental rule, they automatically build in a sunset provision that allows the rule to be reevaluated at the end of some length of time. By doing so, the agency aims to learn additional information about the effects of a rule, and to decide whether the rule should remain in place permanently at the end of the defined period.

Both generic sunset provision periods and experimental rules aim to anticipate the problem of changing circumstances and information in advance. If an agency expects to have superior information in the future regarding the rule—either through the ‘experiment’ or otherwise—then it is optimal to build in a sunset provision that allows easy reevaluation of the rule at the end of a period. Sunset provisions also provide the benefit of acting as “temporary law” that can


104. There are other potential benefits to sunset rules, such as increasing the legitimacy of the law. See, e.g., Kristen Underhill & Ian Ayres, *Sunsets Are for Suckers: An Experimental Test of Sunset Clauses* (Columbia L. & Econ. Working Paper, Paper No. 651, 2021).


109. See Michael Greenstone, *Toward a Culture of Persistent Regulatory Experimentation & Evaluation*, in NEW PERSPECTIVES ON REGULATION 111, 113 (David Moss & John Cisternino eds., 2009) (“The single greatest problem with the current system is that most regulations are subject to a cost-benefit analysis only in advance of their implementation. This is the point when the least is known and any analysis must rest on many unverifiable and potentially controversial assumptions.”).
shift private actors away from an undesirable equilibrium to a good one.\textsuperscript{110} Once the equilibrium is shifted, there is no longer a need for the rule, and therefore a sunset provision allows for easy repeal of the rule.\textsuperscript{111}

C. Ships Passing in the Darkness

Two observations become salient upon looking at the increasing focus on ‘big-picture’ concerns. First, there has been an increasingly granular and nuanced discussion about how we should properly evaluate rules. Each iteration of this discussion has resulted in procedural layering, adding another layer of concerns and details that an agency or its overseers should consider in analyzing a rule. In the meanwhile, there has been a parallel discussion about how agencies behave in the aggregate and about problems with the broad effects of an agency’s rulemaking enterprise. The four methods discussed—retrospective review, regulatory budgeting, sunsetting, and experimental rules—all reveal a concern that agencies will forego opportunities to remove existing rules when doing so would be beneficial. The tools suggested are ways to induce agencies to consider deregulatory rulemakings in more depth. But there is not much in the way of a framework to compare these methods. In general, this second discussion, while discussing issues with agency rulemaking, has not been couched in the language of optimality. In fact, these two discussions have occurred, for the most part, separately, with little interaction.\textsuperscript{112}

The failure to bridge this gap has come at the expense of both discussions. Conversations about evaluating individual rules are incomplete if, by the same criteria that we judge those individual rules, agencies are not doing well in aggregate. In some cases, spending too many agency resources on evaluating rules can come at the expense of aggregate agency performance. Similarly, efforts to improve agencies’ ability to achieve broad objectives lack an overarching analytical framework to judge such conversations, especially when arguments seem to be in tension with each other.\textsuperscript{113} That is, much of the literature is descriptive of agency behavior, but lacks rigor with respect to the normative implications.

Moreover, in the absence of a coherent framework for adjudicating overall rulemaking success, arguments within both discussions have taken on an overly

\begin{itemize}
\item \textsuperscript{111} For a discussion of the use of law as a coordination mechanism, see generally Iris Bohnet & Robert D. Cooter, \textit{Expressive Law: Framing or Equilibrium Selection} (U.C. Berkeley Sch. of Law Working Paper, Paper No. 138, 2003), https://perma.cc/9CQQ-JUFJ.
\item \textsuperscript{112} Some discussion has emerged on how process choices by agencies should be evaluated on a grander scale. See, e.g., Andrew Morriss, Bruce Yandle, & Andrew Dorchar, \textit{Regulation by Litigation} (2002).
\item \textsuperscript{113} For example, Cary Coglianese has suggested that regulatory lookback and retrospective review needs a more comprehensive framework. Cary Coglianese, \textit{Moving Forward with Regulatory Lookback}, 30 YALE J. ON REGUL. 57, 58 (2013).
\end{itemize}
political character. While some partisanship is inevitable in any discussion of the regulations that affect our lives, the debates about reform of rulemaking have become unproductively partisan, suffering from the lack of a common language or a yardstick for comparing the merits of competing claims about agency procedure. Conservative efforts to curtail the overall level of regulation have led to efforts to introduce more and more procedural hurdles for agencies to pass to promulgate rules.114

Similarly, in the context of optimizing aggregate agency behavior, conservative criticism that there is too much regulation led to efforts to set “regulatory budgets,” culminating in the Trump administration’s “One-In, Two-Out” (OITO) rule (subsequently revoked by the Biden administration).115 By contrast, more liberal commentators have complained that rulemaking is “ossified”: agencies are unable to pass rules that they should because of a suffocating level of procedure.116 How do we reconcile these two critiques? Both are onto something. But they are blunt critiques, and they are in almost direct tension with each other. If rulemaking is ossified, then OITO risks making the problem worse. By contrast, if rulemaking has gotten out of hand, leading to large amounts of redundant or ineffective rules on the books, then concerns about ossified rulemaking are probably misplaced. Who is right, and when are they right? And how do we size up these competing claims?

Agencies do little in the way of answering these questions through an explicit, broad analysis of their regulatory programs.117 Perhaps the closest directive for such analysis comes from the Government Performance and Results


117. While there is conversation about the evaluation of regulatory policy (as opposed to evaluation of individual regulations), such discussion remains hypothetical. See, e.g., Cary Coglianese, Measuring Regulatory Performance: Evaluating the Impact of Regulation and
Act (GPRA),\textsuperscript{118} enacted in 1993 and later amended in 2010.\textsuperscript{119} The amended GPRA requires federal agencies to prepare a strategic plan covering a period of not less than four years, outlining agency goals and priorities.\textsuperscript{120} Also required by the amended GPRA are performance plans covering each program activity set forth in an agency’s budget and describing, in an “objective, quantifiable, and measurable form” agency performance goals and its means for achieving them.\textsuperscript{121} However, the GPRA, as amended, does not contain specific directions for evaluating agency performance. Thus, GPRA leaves for agencies the challenge of finding an “objective, quantifiable, and measurable form” of assessing regulatory programs.

Reflecting the failure to apply an overarching framework, the fixes that have come out of big-picture concerns—such as the HHS’s sweeping SUNSET rule,\textsuperscript{122} executive branch language to address ‘cumulative effects,’\textsuperscript{123} or simply reducing mandated procedures to address ossification—are blunt, band-aid solutions that fail to address the underlying issues and often create problems of their own. In some cases, the lack of an analytical framework has obscured the full extent of the administrative branch’s shortcomings. For example, the discussion of agency agendas has made clear that an agency’s choice of direction is important. But, as will become clear, it seems like if anything, the scholars are understating the problem.\textsuperscript{124} Agencies are not necessarily even getting close to picking the optimal sequences of actions.

III. \textbf{TWO CONCEPTS OF OPTIMALITY}

What does it mean for rulemaking to be optimal? Can we come up with a satisfactory notion? The idea that an agency should aim for optimality (or its cousin concept, efficiency\textsuperscript{125}) in its regulation is not a new one. Economists have


\textsuperscript{120}. 5 U.S.C. § 306.

\textsuperscript{121}. 31 U.S.C. § 1115.


\textsuperscript{123}. See Memorandum from Cass R. Sunstein, Adm’r, Office of Mgmt. & Budget, to Heads and Acting Heads of Exec. Dep’ts and Agencies (Mar. 20, 2012). Agencies have expressed support for the memorandum. \textit{See}, \textit{e.g.}, Statement in Support of OMB Memorandum: Cumulative Effects of Regulations (Mar. 20, 2012). Multiple-Rule Cost-Benefit Analysis will be defined later in this paper. \textit{See} Shadarevian & Delaney, supra note 8, at 434.

\textsuperscript{124}. Scholars have made some attempt to understand how agendas are designed, without considering the wider issues of foregone regulation. \textit{See infra} Part IV.A.

\textsuperscript{125}. “Economic efficiency” has been used in the law and economics literature to refer
long asked what the optimal way is to regulate market inefficiencies. One such example is that of the choice between taxes and cap-and-trade as a way of addressing pollution harms. Such queries, however, only help in the pursuit of what we will term narrow optimality, which only looks for the optimal solution amongst different levels of regulation, and with respect to regulatory alternatives. To illustrate with the above example, regulators generally ask, for a given issue, which of a tax or cap-and-trade—two regulatory alternatives—is a superior means of addressing the problem. If they decide on taxation, they then try to determine the optimal level of taxation to address the relevant pollution concerns. The defining feature of such queries are that they ask about the best choice amongst an already narrow set of regulatory options: they ask the agency to choose the optimal between the regulation, the status quo, its alternatives, and alternate levels of the regulation. Economists usually approach such questions from the welfarist perspective: that is to say, they look at whether a regulation leads to higher welfare than the other considered options. However, total welfare need not be the standard; antitrust laws in the U.S., for example, sometimes use the alternative consumer welfare standard instead.

Such concerns are incorporated into the current requirements placed on agencies. Generally, an agency has a responsibility to consider alternatives to a proposed rule. Moreover, an agency must justify why it chose to set a standard, tax, or other amount at the level that it did. Usually, such decisions are justified to the degree possible in an agency’s regulatory impact analysis. By contrast, the issue of broad optimality has generally been understudied in the literature. Questions of broad optimality ask instead whether the agency is broadly behaving optimally. That is, it asks whether the agency could have taken a course of rulemaking actions that were better overall.

In what context should we adjudicate on the optimality of rulemaking? Suppose we have a criterion (as will be discussed later, a criterion is just a way of ranking rulemaking outcomes) for evaluating the value of a legal rule. The most obvious example here is Cost-Benefit Analysis, but another, multidimensional

to Pareto efficiency, see infra Part A.1, Kaldor-Hicks, id., and welfare maximization, id. See Richard O. Zerbe Jr., Economic Efficiency in Law and Economics (Edward Elgar Pub. 2001).


129. See Exec. Order No. 12,866; OMB Circular A-4.

measure is multi-criteria analysis. Now, suppose further that agencies can accurately evaluate any legal rule according to a criterion. If agencies correctly use such a criterion, is that enough to ensure the optimality of rulemaking? For example, if agencies accurately construct a CBA estimate using the best information that they have, for each rule that they pass, to what degree have we ensured that the optimal rulemakings happen, in terms of CBA? And if not, why not?

The answer, unsurprisingly, is no. It is, of course, not a great achievement to say that correct use of a criterion does not by itself achieve optimal rulemaking. Rather, part of the contribution of this Article is in explaining exactly how criterion-based rulemaking falls short of optimality, and how even an agency that rigorously evaluates potential rules might fall short of the broader standard.

A. Optimality, Metrics, Criteria

1. Optimality and Criteria in Evaluating Rules

To truly analyze whether an action is optimal, one needs a criterion—also called a standard—by which to judge optimality. It is possible to avoid specifying the criterion entirely and still have a meaningful discussion about broad optimality. However, it is important to understand the nature of what a criterion is. Formally, what is a criterion? What makes a criterion suitable for understanding agency regulation? Must a criterion assign numbers to rules, as is done by CBA?

A criterion determines, for at least two possible outcomes, which outcome is preferable. That is, if we imagine two ways the world could be—call them A and B—a criterion will tell us, at least some of the time, which of A or B is preferable. A metric, on the other hand, is an assignment of either a single-dimensional or multidimensional numerical value to states of affairs (depending on whether it is single or multi-dimensional). For example, a metric may assign a number 10 to state of the world A, and a number 15 to state of the world B. A corresponding criterion would choose worlds based on which had the higher metric value. Unlike a metric, a criterion does not necessarily assign a number to states of the world, or rules.

There are many criteria that have formed the centerpiece for discussions by academics and policymakers.\(^\text{131}\) A particularly influential one is the concept of Pareto optimality (or Pareto efficiency), according to which an outcome is optimal if no individual can be made better off without making another worse off.\(^\text{132}\) Roughly speaking, it means there are no win-win opportunities left on the table—any action taken differently creates at least some losers, relative to the current


scenario. The issue with Pareto optimality is that it is incomplete—many scenarios cannot be ranked against each other according to Pareto optimality because each scenario creates winners and losers relative to the other.

Another suggested criterion is the Kaldor-Hicks criterion. According to the Kaldor-Hicks criterion, a state of affairs A is preferable to a state of affairs B if, through a series of monetary transfers between individuals in A, we can arrive at a state of affairs A′ which is preferable, according to the Pareto criterion, to B. While the Kaldor-Hicks criterion was influential in early discussions about rulemaking, scholars have criticized it, arguing that the potential for such a monetary transfer scheme is morally irrelevant if the transfer does not actually occur.

The welfare criterion grew out of these other standards. According to the welfare criterion, an outcome A is preferable to B if it is better on a metric of social welfare. The requirements for a metric to be a welfare metric are that (1) it must determine the utility for all individuals in a state and (2) that it must amalgamate these utilities in some way. Often, welfare economists have supported a version of welfare where individual willingness-to-pay for a regulation is aggregated to produce an overall welfare estimate.

Out of the advocacy for welfare economics grew the move towards Cost-Benefit Analysis as a metric. With CBA, the status quo, as a state of the world, is assigned a numerical value of zero. Then, each of the considered regulatory options is assigned a number, representing the difference in costs and benefits from the status quo state of the world. The regulatory option with the greatest net benefits (benefits minus costs) is then chosen. Proponents of CBA have defended it for many reasons—including as a proxy for welfare, or as a rough heuristic to improve agency decision-making.


134. The Kaldor-Hicks efficiency criterion has a number of issues. One major one is that it is antisymmetric. That is, a state of affairs A might be preferable to B according to Kaldor-Hicks, and B might also be preferable to A according to Kaldor-Hicks. T. Scitovsky, A Note on Welfare Propositions in Economics, 9 REV. OF ECON. STUD. 77, 88 (1941).


137. See, e.g., Matthew D. Adler & Eric A. Posner, New Foundations of Cost-Benefit Analysis 167-68 (Harvard Univ. Press 2006). Scholars also argue that CBA can have other beneficial effects on agency decision-making. See, e.g., Cass R. Sunstein, Is Cost-Benefit Analysis for Everyone?, 53 ADMIN. L. REV. 299, 303 (2001) (arguing that “CBA can have a salutary ‘cooling effect’”). In general, in our article, we contrast decision-procedures (which determine how agencies should behave), such as CBA, from criteria (which determine how agency decisions should be assessed). See infra III.A.3.
September 2022] BROAD OPTIMALITY 359

However, the claim that agencies should ultimately seek to maximize welfare—and should use CBA to help them do such—has attracted significant controversy, with fierce advocates on either side of the divide.\textsuperscript{138} Out of this controversy, there has also increasingly been a movement to find a grounding for agency Cost-Benefit Analysis that does not depend on a welfarist view.

Use of a criterion can also be used to rank outcomes that involve some level of uncertainty. For example, a rulemaking may succeed in achieving net benefits worth $1,000 with 50\% certainty and will otherwise not effect any change. How should we evaluate the value of that rule versus doing nothing? One criterion is to maximize expected value, which represents an average of the possible outcomes weighted by their probability.\textsuperscript{139} Thus, in the above example, the rulemaking has an expected value of $500. Because use of expected value in decision theory is ubiquitous,\textsuperscript{140} in our hypothetical examples we will use expected value over some measure of benefits. However, other criteria do exist, such as the maximin approach, under which the best outcome is the one which has the best worst-case outcome.\textsuperscript{141}

2. Single-dimensional Metrics vs Multi-dimensional Approaches

In the pursuit of providing agencies with a complete framework for making regulatory decisions, scholars and practitioners have often focused on “single-dimensional metrics” for valuing rules, assigning a single numerical value to each regulatory option. Cost-Benefit Analysis, in its most formal realization, is such a metric, because it ultimately assigns a single value to each rule. Such approaches have been roundly criticized for incommensurability issues—that is, for failing to accurately capture societal value judgments correctly because they try to reduce them to a single dimension.\textsuperscript{142}

To better deal with incommensurate values, commentators have suggested multidimensional approaches.\textsuperscript{143} For example, an agency looking to regulate internet privacy might produce a CBA estimate for a particular regulation, and then

\textsuperscript{141} See Albright & Winston, supra note 1399, at 226.
\textsuperscript{142} A good definition of incommensurability is given by Cass Sunstein, who stipulates that “incommensurability occurs when the relevant goods cannot be aligned along a single metric without doing violence to our considered judgments about how these goods are best characterized.” See Cass R. Sunstein, Incommensurability and Valuation in Law, 92 Mich. L. Rev. 779, 795-812 (1994). Proponents of such a view have suggested that there are important human and political values, such as fairness, dignity, and distribution, that cannot be aligned on a single metric.
\textsuperscript{143} For a discussion of such multidimensional methods, see Matthew D. Adler & Eric
might also try to assess qualitatively the effect of the regulation on human dignity. Such methods have been suggested to account for distributive effects,\textsuperscript{144} fairness,\textsuperscript{145} and quality of life.\textsuperscript{146}

3. Criteria vs Decision Procedures

Critics of optimality-based standards, such as CBA, argue that use of such criteria is ultimately detrimental to an agency’s decision-making.\textsuperscript{147} However, it is important to distinguish between an agency’s active use of a criterion or metric as a decision procedure, and the rightness of a criterion or metric as the ultimate standard by which to judge the agency’s success. For example, proponents of the welfare criterion advocate for CBA as a decision procedure because they believe that using a welfare criterion as such is impractical.\textsuperscript{148}

I make the same distinction. We are focused on the following question: what decision procedures should an agency adopt if it wishes to behave optimally on a particular criterion? However, I ask the question broadly, asking about their success on the criterion evaluated on the aggregate of all their decisions and actions. Heuristics and simple rules may lead to a better outcome overall than explicit focus on the evaluation criterion. Framed as such, this Article has an answer to the criticism that addressing broad optimality according to some criterion will paralyze an agency. If an agency’s explicit focus on broad optimality is self-

\begin{footnotesize}
\textit{A. Posner, Rethinking Cost-Benefit Analysis}, 109 Yale L.J. 165, 165-247 (1999). \textit{See also Nie \textsuperscript{M}outer, Marco \textsuperscript{D}ean, Carl \textsuperscript{K}oopens & Jose \textsuperscript{V}assallo, Comparing Cost-Benefit Analysis and Multi-Criteria Analysis, in Advances in Transport Policy and Planning 210-35 (2020), https://perma.cc/9V8C-ZYFQ. In some cases, some of the dimensions—for example, the value dignity as a dimension—need not and should not be quantified.}

\textsuperscript{144} \textit{See generally} Revesz, \textit{supra} note 56 (arguing that distributional consequences should be a core concern of the regulatory state).


\textsuperscript{146} \textit{For example, in some cases agencies will use quality-adjusted life years (QALYs) as a way of measuring the potential benefits of regulations, especially in the healthcare sphere. This measure attempts to measure the value of a year of life accounting for the quality of life for that year. See Milton C. Weinstein, George Torrance & Alistair McGuire, QALYs: The Basics, 12 Value in Health S5, S5 (2009). One QALY equates to one year lived in perfect health. The FDA often uses QALY analysis, see, e.g., Food & Drug Admin., Analysis of Economic Impacts — Standards for the Growing, Harvesting, Packing and Holding of Produce for Human Consumption, 377-82 (2013), https://perma.cc/C6DD-WMLR.}

\textsuperscript{147} \textit{For example, agency procedures have been criticized for imposing procedural hurdles that exacerbate ossification. See Stephen M. Johnson, Junking the “Junk Science” Law: Reforming the Information Quality Act, 58 Admin. L. Rev. 37, 61-65 (2006); Sidney A. Shapiro & Robert L. Glicksman, Risk Regulation at Risk: Restoring a Pragmatic Approach 1-208 (2003); Ronald M. Levin, The REINS Act: Unbridled Impediment to Regulation, 83 Geo. Wash. L. Rev. 1446, 1453-63 (2015).}

\textsuperscript{148} \textit{See, e.g., Adler & Posner, \textit{supra} note 137, at 225.}
\end{footnotesize}
defeating, an agency simply shouldn’t focus on broad optimality. In fact, in some cases, agencies should deliberate less to achieve broad optimality.

B. Narrow vs Broad Optimality

Over the years, the idea that optimality (sometimes called efficiency) should guide agency rulemaking has found its way to the center of agency rulemaking procedure. What started out in economic academic circles as a way of understanding the social purpose of regulation, was eventually adopted by regulatory scholars as a guide for evaluating individual regulations.

In this Article, I establish a distinction between narrow and broad optimality. While the procedural layering that we discuss has often focused on narrow optimality, I argue that broad optimality poses different big-picture concerns. In this Section, I will give formal definitions of the two concepts of narrow optimality and broad optimality.

1. Narrow Optimality

Before contrasting “narrow” and “broad” definitions of optimality, it is important to give a definition of the narrow conception of optimality. In giving such

---

149. This is the “public interest” theory which conceives of the goal of regulation as increasing economic welfare by correcting market failures. This theory is represented by the writings of economists Baumol and Pigou. See generally W. Baumol, Welfare Economics and the Theory of the State (2d ed. 1965); A. Pigou, The Economics of Welfare (4th ed. 1932).

150. Our concepts of narrow and broad optimality are inspired by the applied mathematics concepts of “local” optimality and “global” optimality. See generally Edwin K. P. Chong & Stanislaw H. Zak, An Introduction to Optimization (2d ed. 2001). For an optimization problem—a problem of determining the best solution of all possible solutions—a local optimum is one that is the best amongst its neighbor solutions, whereas a global optimum is one that is the best amongst all solutions. All global optima are local optima, but not vice versa, since there might be far-off solutions that are better than a local optimum. The distinction is important because many practical algorithms for solving mathematical optimization problems only discover local optima, with no guarantee that the solution is global. There is an analogy to agency behavior—agencies, when they analyze rules, are only comparing a regulatory solution to “neighboring” solutions (such as promulgating an alternative rule, or choosing not to pass the rule at all). As a result, they may generally fail to achieve or get close to the “global” optimum of regulatory rulemaking. We explore this idea in depth in this paper. The contrast between local and global optimization has been discussed in the context of business decision-making. See, e.g., H.A. Simon, Economic Rationality, in The Sciences of the Artificial 31-61 (MIT Press 1981); Eric Ries, Learning is better than optimization (the local maximum problem), Startup Lessons Learned, (Apr. 7, 2010), https://perma.cc/92RJ-89B6. One significant such application is in the area of product design, where overuse of A/B testing may lead to a product design that is “locally optimal” for its purpose but nonetheless not globally so. We will present an analogous argument for the claim that piecemeal analysis of regulations leads to narrow rather than broad optimality. See Anthony Wing Kosner, Are You Solving Your Biggest Problem, Or Blinded by Your Local Maxima?, Forbes (June 19, 2012), https://perma.cc/AL9A-ST9C.
a definition, I hope to capture the prevailing lens through which agency rulemaking has been seen so far. Let narrow optimality be defined as follows:

An agency’s rulemaking is narrowly optimal if, in considering a set of close alternatives (including the alternative of not regulating), and the levels and features of a regulation, the agency picks the best option according to a specified criterion.\textsuperscript{151}

This definition makes no assumptions about the underlying criterion. In this Article, it is preferable to remain agnostic to the matter. As discussed earlier, however, there are many criteria that could do the job, and as discussed by some commentators, assessing rules and behavior according to multiple dimensions is a feasible solution. The definition also allows multi-dimensional criteria.\textsuperscript{152} While we do not give a precise definition of “close alternatives”, solutions to the same regulatory problem generally qualify as such.\textsuperscript{153}

As discussed, much of the discussion about agency behavior has focused on this narrow optimal standard. That is, the executive, Congress, and courts alike have generally judged an agency’s rulemaking success by asking whether the rule improves affairs (compared to not regulating), and whether there were superior alternatives.\textsuperscript{154} This has led to procedural layering, where agencies must undergo more procedure to pass rules out of the prevailing belief that this will make agencies more likely to pass rules that are preferable to their immediate alternatives (including the alternative of not regulating).

But what about agency behavior at large? The above definition does not capture what it means for agencies to have an optimal regulatory program in the aggregate. Crucially, an agency could meet narrow optimality in all its rulemaking decisions, and yet still be subject to any one of the critiques discussed earlier. In establishing a definition to understand aggregate rulemaking, we are better

\textsuperscript{151} An even narrower conception is do-no-harm optimality, by which only false positives are considered suboptimal. That is: an agency’s rulemaking decision is do-no-harm optimal if, in considering a set of alternatives (including the alternative of not regulating), and the levels and features of a regulation, the agency does not choose to regulate if keeping the status quo would have been preferable according to a specified criterion. Skeptics about agency regulation often implicitly or explicitly endorse a do-no-harm version of optimality. See, e.g., Richard W. Rahn, Making Regulations That Do More Harm than Good, CATO INST. (Aug. 6, 2013), https://perma.cc/WU55-FMX3 (originally appeared in WASH. TIMES).

\textsuperscript{152} As discussed in Part III.A.2, commentators have noted that certain values and goods are incommensurate, and a reduction to a single metric violates that notion. A multi-dimensional metric gets around this problem.


\textsuperscript{154} See generally infra Part IV.C.
equipped to ask to determine how an agency should behave optimally, and whether its processes are sufficient to get it there.

2. Optimal Regulatory Strategies

To provide a satisfactory definition of broad optimality, it is first necessary to define a regulatory strategy. A regulatory strategy describes an agency’s rule-making decision at every decision-making situation\textsuperscript{155} for a given regulatory program or for a duration of time. We do not specify how broad a net we cast in terms of decisions considered.\textsuperscript{156} For example, it will be possible to consider regulatory strategies for a given regulatory program, agency bureau, or time period, depending on the context in which we are analyzing optimality. Moreover, I refer here to “rulemaking decisions”, not just a rulemaking itself, since I will use “rulemaking decisions” to include other decisions that are relevant to an agency’s rulemaking activities. These include choices of rulemaking procedure, agency communications surrounding its rulemaking, and choices to promulgate non-legislative rules that clarify statutes or existing rules.\textsuperscript{157}

As an example, consider Figure 1, which displays a hypothetical decision tree for an agency looking to consider several regulatory decisions. Square nodes represent decision-making situations for the agency. Branches relate to outcomes, and final payoffs are represented by the numbers at the end of the terminal branches. First, an agency must decide whether to enact a regulation. If it does not, it receives a payoff of 0. If it chooses to, then, and only then, can it learn whether the regulation had high benefits. Evaluated at the outset, the probability that the enacted regulation has high benefits, thus yielding a payoff to the agency of 100, is 50%. Otherwise, benefits are low and outweighed by costs, yielding a payoff is -100. At that stage, an agency has an opportunity to repeal the rule, which would leave the agency with a payoff of 0. A regulatory strategy here would describe both an agency’s initial decision to regulate, and then the agency’s response at the second decision-making point, when it decides whether to repeal the rule or keep it.

\textsuperscript{155} A situation generally refers to every opportunity where an agency may make a decision, or where it may respond to new information or other parties’ actions. Situations are often represented as nodes in decision-tree analyses. \textit{See, e.g.}, ALBRIGHT & WINSTON, supra note 1399, at 230. Decision trees are often useful for understanding legal problems. \textit{See generally} Howell E. Jackson, Louis Kaplow, Steven Shavell, W. Kip Viscusi \& David Cope, \textit{ANALYTICAL METHODS FOR LAWYERS} (3d ed. 2017).

\textsuperscript{156} Restricting analysis to a particular regulatory program or time period, for example, may lead to us ignoring real issues of optimality between decisions within that program or period, and decisions outside of it.

\textsuperscript{157} For a discussion of the distinction between legislative and non-legislative rules, \textit{see generally supra} note 9 and accompanying text.
We can now define an *optimal regulatory strategy*. The definition is as follows:

*A regulatory strategy is optimal if it leads to at least as good an outcome as any other regulatory strategy according to a specified criterion, given the agency’s knowledge at the point it implements the strategy.*

To see how this notion of optimality works, consider again the hypothetical agency problem in Figure 1. Where our criterion is maximum expected payoff, the optimal regulatory strategy for the decision is as follows: Enact the regulation, and if benefits turn out to be low, repeal the regulation. For example, the EPA might consider a rule limiting river pollutants, but due to information limits might be unable to learn with precision the costs to companies of implementing these pollutants until after the regulation is promulgated. Then, the optimal regulatory strategy is to implement the rule, wait until it learns more about costs, and then repeal (or adjust) the regulation if the costs are too high to justify the benefits.

3. Broad Optimality for Agency Decisions

Having defined regulatory strategies, we are able to give a definition of broad optimality. In practice, we often are not able to observe the full regulatory strategy of the agency since a strategy will generally involve responses to events

---

158. We also consider optimality when other “players”—such as firms and special interest groups—respond strategically to agency actions. In such a case, we consider the regulatory strategy that is optimal given that other players best-respond to the agency strategy. The notion of a “best response” is taken from game theory. *See generally AVINASH DIXIT & SUSAN SKEATH, GAMES OF STRATEGY* (2d ed. 2004).
that do not occur. For example, a strategy might involve responding with regulation to a private party’s refusal to voluntarily comply with agency demands. If the private party complies, we never observe what the agency would have done had such compliance not occurred. In many cases, an agency will not have a fully articulated regulatory strategy. Certainly, as a practical matter, it is impossible for an agency to spell out how it will react to every possible situation it encounters in real-life rulemaking.

Therefore, for our definition of broad optimality to be practical, we ought to provide a definition for understanding whether an agency’s observed behavior was broadly optimal. Unlike with narrow optimality, where we consider individual decisions, here we consider sequences of decisions. As with regulatory strategies, we leave it open how broad a ‘sequence’ is, the idea is that a sequence can involve a long string of agency decisions taken over months or years.

An agency’s sequence of rulemaking decisions is broadly optimal if it is consistent with an optimal regulatory strategy.

The definition here deals with sequences of decisions. A regulatory strategy being “consistent” with a rulemaking decision sequence just means that if the agency follows that regulatory strategy, there is a possibility that we observe that sequence of agency decisions. While we leave it open how broad a ‘sequence’ is, the idea is that a sequence can involve a long string of agency decisions taken over months or years. As will become clear, narrow optimality does not imply broad optimality. In fact, too much of a focus on narrow optimality—on making sure we get the ‘right’ rules—can in fact be harmful from the broader perspective. To illustrate, consider Figure 2, which represents the same decision-making procedure as in Figure 1. Here, however, the green and orange represent a potential sequence of events. The green sequence is broadly optimal, since it is consistent with an agency that enacts the regulation, and then repeals if it has low benefits. The orange sequence, on the other hand, is not an optimal sequence if observed—the agency departs from broad optimality in choosing not to repeal a rule it found suboptimal.

As will become clear, narrow optimality does not imply broad optimality. In fact, too much of a focus on narrow optimality—on making sure we get the ‘right’ rules—can in fact be harmful from the broader perspective.
C. Political vs. Technical Decision-making

The idea that agency decision-making should be subject to evaluation according to certain criteria—particularly in assessing a broad scheme of action—has its skeptics, who argue that much of agency decision-making should aim to be accountable to the polity, and technocratic procedures such as CBA detract from the ideals of accountability and democratic deliberation. According to them, it is a mistake to view agency regulation as a matter of maximizing benefits minus costs. Even when such critics approve of cost-benefit analysis, they might argue that its real value is to preclude clearly bad decision-making—such as by having a “salutary cooling effect” on discussion—rather than by approximating a necessarily flawed definition of rationality. According to such a view, good agency decision-making should seek to be both politically accountable and faithful to the legislative command. Agency rulemaking should be viewed through the same lens as, for example, a public policy decision to allocate public funding to one policy problem and not another; in both cases the problem is better viewed as political rather than technical.

First, such a view underestimates the importance of technical, metric-based decision-making to the ultimate conduct of an agency. The modern administrative state is built on the assumption that insulating bureaucrats from political

---

159. See, e.g., Henry S. Richardson, The Stupidity of the Cost-Benefit Standard, 29 J. LEGAL STUD. 971, 971-1003 (2000); see also Henry S. Richardson, Democratic Autonomy: Public Reasoning About the Ends of Policy 119-29 (2002). We discuss the importance of democratic values, to the degree they can be measured, in Part IV.C.

160. See Cass R. Sunstein, Is Cost-Benefit Analysis for Everyone?, 53 ADMIN. L. REV. 299, 312 (2001). Cass Sunstein’s exposition of CBA as reducing behavioral biases is a good example of such a view. See also Jonathan S. Masur & Eric A. Posner, Cost-Benefit Analysis and the Judicial Role, 85 U. CHI. L. REV. 935, 944 (2018) (“A decision procedure like CBA or an NPV calculation formalizes the process of decisionmaking so as to maximize the probability that a correct decision will be made. It does so by helping agents remember to consider all relevant factors, and, by requiring a common metric, facilitating comparison of those factors.”).
processes and subjecting their decision-making to independent standards of non-arbitrariness and reasonableness improves regulatory decision-making.\textsuperscript{161} At a bare minimum, in the case of post-NPRM regulatory analysis, courts and commentators have argued for the importance of logical, reasonable and non-arbitrary agency reasoning. In fact, the very concept of arbitrariness review of agency action (or inaction), as it came from the legislature in the APA, is based on the notion that there is a standard of agency rationality that goes above political concerns.

Second, the boundary between the political and technical aspects of early agency rulemaking is unclear. The legislature speaks. Something happens in the middle, during which the Executive and private parties each say something to the agency. Then emerges a proposed rule! A lot of inherently political decision-making occurred in the middle. But so too must the agency have made some technical decisions about how to apply the political priorities it was given.\textsuperscript{162} In the relatively process-free jungle that is early agency rulemaking, it is impossible to tell which is which.\textsuperscript{163} Broad optimality, by separating the criteria used to judge agencies from the agency’s execution towards that criteria, helps make the delineation clearer.

The status quo, which makes demands of agencies once they publish an NPRM but requires none of that rigor at an earlier stage, demarcates an arbitrary line. If reasonable, expertise-driven decision-making is important in defending a particular regulation, it should also be important in achieving the broader objectives of agency decisions. The same concerns that go into individual rule analysis—for example, through CBA—should also drive judgments of aggregate agency behavior. Making reasonable choices between different regulatory approaches is often also a technical, fact-based inquiry. Similarly, measures that might have a “salutary cooling effect” and preclude clearly bad decision-making may be effective at a broader level than through specific rulemaking requirements. In trying to respond to the political pressures imposed by the various bodies it interacts with, agencies should be using data and technical expertise not

\textsuperscript{161} The conception of an administrative state characterized by insulated agencies with broad discretion owes much to the New Deal. See Cass Sunstein, \textit{Constitutionalism after the New Deal}, 101 Harv. L. Rev. 421 (1987) (“Nonetheless, the enduring legacy of the [New Deal] period is the insulated administrator, immersed in a particular area of expertise, equipped with broad discretion, and expected to carry out a set of traditionally separated functions.”).

\textsuperscript{162} For example, agencies will often take years to get to the NPRM stage, and substantial technical expertise will be utilized in this period in issuing, for example, concept documents for rules. See supra text accompanying note 81; Curtis W. Copeland, Cong. Rsch. Serv., \textit{The Unified Agenda: Implications for Rulemaking Transparency and Participation} 4 (2009), https://perma.cc/ZHJ9-JH55.

\textsuperscript{163} Afraid of overstepping this unclear line and being seen as counter-majoritarian and undemocratic, courts have often taken a light touch, leaving meaningful agency oversight to the political branches. See Sidney A. Shapiro, \textit{Rulemaking Inaction and the Failure of Administrative Law}, 68 Duke L.J. 1805, 1806 (2019). A similar dilemma applies to the Executive and Legislative branches.
just in building the case for rules it wants to promulgate, but also in their conduct at large.

The idea of broad optimality is thus two-fold, serving to: (1) provide a clearer and better delineation between political decisions—that those decisions that reflect the values of Congress, the White House, and the American people—and those decisions that are about using expertise to ‘get it right’ (to achieve some standard of broad optimality) and (2) help agencies and those overseeing better judge whether an agency is correctly using its expertise, independently of the political concerns at play.164

IV. ANALYZING FAILURES OF BROAD OPTIMALITY

The existing critiques of agency discussed in Part II.B are not about its narrow optimality, but concern a failure of broad optimality. This Part asks the following: how can rulemaking fail to be optimal, even when each rulemaking action taken in isolation meets the requirements of narrow optimality? Suppose that when an agency does consider a rule, it does so carefully and thoroughly, and generally does the following three things: (1) chooses the best option in terms of levels and features of the regulation; (2) chooses the best amongst close alternatives; and (3) only then regulates if the regulation improves on the status quo. How then might an agency still fail to be optimal?

I present a comprehensive taxonomy that captures what the agency can get wrong even when they their actions in isolation are narrowly optimal. This taxonomy consists of three categories of “error” that we consider, that will be analyzed separately. The first problem is that of foregone regulation, where an agency fails to pass regulations that would be optimal or desirable. This includes missed deregulatory rulemakings or rulemaking actions which amend rulemakings based on new or better information or changed circumstances. The second problem is that of interdependency error, where the aggregate effects of a group of rules might differ from their effects in isolation. The third problem is procedural value: processes might yield intrinsic benefits or harms, even holding the regulatory outcomes of those processes fixed. Existing concerns and critiques of agency rulemaking are placed in the context of our framework.

A. The Problem of Foregone Regulation

The political scientist Thomas Dye wrote that public policy can be defined as “whatever governments choose to do or not to do,”165 which reveals an implicit understanding that what governments do not do is as important as, if not more important than, what they do. Regulation is no different. The focus, in terms of academic scholarship and agency practice, has been on what the agencies do:

164. See generally Part IV.C.1 (outlining the difficulty of oversight).
165. See generally THOMAS R. DYE, UNDERSTANDING PUBLIC POLICY (14th ed. 2013).
what rules they pass, how much analysis and due diligence they do on those rules, and how they enforce those rules. By contrast, scholars and practitioners alike have neglected the analysis of those things that an agency does not do. There has been little discussion of how agencies choose from the universe of potential regulations, the vast majority of which are discarded with little consideration or paper trail.

1. Understanding the Problem of Foregone Regulation

Consider the following stylized example. An agency, due to resource constraints, is only capable of promulgating one rule. It chooses a rule to fix an obvious market failure that it sees. It fulfills all the procedural requirements needed to pass that rule, including cost-benefit analysis. Upon scrutiny, external overseers—Congress, the White House, and courts—find no issue: the agency did not engage in arbitrary behavior, and there is no obvious less restrictive alternative. On the face of it, this simple example feels like a regulation success story. An agency acts. It acts well and solves a market failure. It justifies its action to the point where external bodies scrutinizing the agency have no grounds to criticize the action it took.

The truth, however, is more complicated. Whether the agency was successful depends in large part on the space of possible regulations that it ended up not considering. When it chose its rule, this rule came at the opportunity cost of considering other rules. If there were other rules that were preferable to the current rule, then arguably the agency was not successful.

While the assumption that an agency can only pass one rule is clearly fictional, it captures an important feature of the regulation story: an agency cannot pass anywhere near to all possible regulations, due to resource constraints. Therefore, what rulemaking it engages in with its finite resources is an important question. Passing some rules will inevitably come at the opportunity cost of considering other potentially better rules.

The idea that agencies should be aiming to improve social welfare has been around in the literature on administrative law for some time. The increasing use of cost-benefit analysis, for example, underpins an understanding that, generally, the higher net benefits are, the better. Despite this focus on net benefits, agencies have neglected the problem of whether they are actually maximizing the benefits of their rules, as opposed to merely ensuring that their rules are net-beneficial. Beyond the difficult task of balancing political pressures from Congress, the Executive, and private parties, agencies should be attempting to solve the complex problem of how to optimize for the costs and benefits of the regulations they pick, given their constraints.
Agencies have limited resources and information, and the notice-and-comment process is time-consuming and resource-intensive. Moreover, agencies have limited cognizance of the full universe of regulations that they could be considering. The task is inherently difficult: the space of possible regulations is large, and difficult to ascertain. Moreover, the agency choice of regulation depends on early-stage, often informal decisions, and these are particularly difficult to review. Moreover, looking at the agency records on the regulations it did pass tells us little about the space of possible regulations.

Foregoing a regulation is not a discrete event; regulations can be foregone at any number of stages in the lifecycle of a particular regulation. These stages of foregoing a regulation are: (1) unawareness of a possible regulation; (2) dismissal or delay of possible regulation at an internal, informal stage; (3) dismissal or delay of possible regulation at consideration stage; and (4) dismissal or delay post Notice of Proposed Rulemaking.

Why are foregone regulations worth thinking about distinctly from non-action in the legislative sphere? Agency foregone regulations are distinct in a few ways. First, notably, is the stark contrast between the amount of due diligence and process required for a particular action, and the lack of due diligence and process required for pre-NPRM decision-making and fact-finding. Second, as will be discussed, the problem of foregone agency regulation is distinct because it involves technical, expertise-driven decision-making. The administrative state exists because there was a need to insulate rulemaking and delegate it to those with the proper expertise. Unlike with more general issues of public policy, there are clear metrics (such as those yielded by cost-benefit) that determine which rules an agency would ideally pass.

2. Foregone Deregulatory and Modifying Rulemakings

The problem of foregone rulemaking applies not only to those actions that create new regulations, but also those that modify or eliminate regulations. In Motor Vehicle Manufacturers Ass’n v. State Farm Mutual Automobile Insurance Co., the Supreme Court found that decisions to deregulate, like regulatory decisions, were subject to “hard look” review under the arbitrary-or-capricious

---


167. See supra note 81.
test. Similarly, modifying rulemakings are also subject to notice-and-comment requirements.

Sometimes, deregulation or modification should happen according to some criterion, yet nonetheless fails to happen. This is also a case of foregone rulemaking. Such failures will occur for three reasons, even if the initial regulation was rational. First, changes in other parts of the regulatory landscape will change the desirability of a rule according to some criterion. Second, circumstances in the world may change, changing the net benefits of a rule. Third, the agency’s information or beliefs may change, meaning that a regulation that be worth revisiting (either to repeal or change it).

Ideally, the agency should modify or repeal a rule as soon as the circumstances evolve in one of the ways described above. Given resource constraints, it may be optimal to delay doing so until there are no better demands on the agency’s time and resources. However, due to agency inertia or biases, an agency might fail to do so even when it has no better use of resources. For example, an agency’s internal arrangements—such as the allocation of staff to projects—may simply preclude it from regularly reviewing existing rules or finding new data on existing rules. Moreover, agencies, eager to create a record of success, may be likelier to spend their scarce resources and time trying to solve new regulatory problems, rather than evaluating the rules they have on the books.

3. Foregone Regulation vs. Inaction

While much of the discussion here is similar to that on agency inaction, there are crucial distinctions. In both cases, there is an action that an agency could have taken but did not. However, the academic discussion of agency inaction has


169. However, as will be discussed, interdependency issues are not entirely avoided by eliminating issues of foregone regulation. See infra Part IV.B.1.

170. See JOSEPH E. ALDY, LEARNING FROM EXPERIENCE: AN ASSESSMENT OF THE RETROSPECTIVE REVIEWS OF AGENCY RULES AND THE EVIDENCE FOR IMPROVING THE DESIGN AND IMPLEMENTATION OF REGULATORY POLICY 14 (2014) (“For example, the sulfur dioxide cap-and-trade program established under Title IV of the 1990 Clean Air Act Amendments was motivated by concern about acid rain, which could result in acidification of streams and lakes and forest die-off. In the years after the implementation of this program, epidemiological research presented important evidence on how reducing sulfur dioxide emissions, and their associated fine particulates, delivers quite substantial human health benefits. As a result, the ecological benefits, which drove the initial rule, may be less than the compliance costs, but the human health benefits—which were not considered by Congress or the Environmental Protection Agency in the design of the program—are about 100 times the compliance costs (Schmalensee and Stavins 2013). A retrospective review of this rule would suggest that the Environmental Protection Agency should make the case to Congress for flexibility in setting the emissions cap in this program so that it can deliver more human health benefits that significantly exceed the costs.”).

171. See infra Part IV.A.3.
missed an important feature of the agency decision-making problem. Inaction on rulemaking—at least as it has been discussed in the literature—typically concerns the agency lack of action on a particular problem or statutory instruction.\textsuperscript{172} Issues of foregone regulation, on the other hand, concerns all potential regulations that are ultimately not passed. Foregone regulations are ubiquitous; an agency cannot possibly pass all potential regulations. Yet it is certainly not true that in each of those cases we have an issue of agency \textit{inaction}. Problems with agency inaction in rulemaking, therefore, are properly characterized as a subset of problems with agency foregone regulation.\textsuperscript{173}

The solutions that will be discussed are therefore designed just as much to improve problems of inaction as they are other foregone regulation problems. There is also a clear discrepancy between the solutions for inaction and those for foregone regulation. For example, suppose that new legal doctrine emerges that empowers plaintiffs to go after agency inaction. How might an agency respond? One way would be to hastily pass rules that address all the areas that it is expected to regulate. But then an agency might spend precious resources on these rules, and might neglect other, better regulations. The foregone regulation problem will have been made worse.

Another difference is that inaction is often visible: even when the agency has not explicitly made its inaction clear, its failure to tackle a regulatory problem can be easily determined. By contrast, foregone regulations are often invisible. Often, decisions to dismiss regulatory options do not make it onto the record. Decisions to dismiss alternatives or prioritize certain rules happen in informal meetings, water-cooler conversations and sometimes remain completely implicit in what the agency does.

B. Interdependency Error

Interdependency error occurs because a sequence of narrowly optimal decisions can ‘add’ up to an outcome that fails to be broadly optimal. This “Interdependency Error,” occurs because the aggregate effect of multiple rules can be very different to the effect of each of a number of rules individually.\textsuperscript{174}


\textsuperscript{173} Agency inaction \textit{in general} is not a subset of foregone regulation, since there are other types of agency inaction that do not necessarily involve rulemaking, like enforcement.

\textsuperscript{174} See Shadarevian & Delaney, \textit{supra} note 8, at 396-404. Formal definitions of positive and negative interdependencies are given in that paper in terms of CBA net benefits, but we generalize for other criteria here. Suppose an agency is considering a number of rules, $R_1$, $R_2$, \ldots $R_n$. Rules $R_i$ to $R_j$ exhibit negative interdependencies if the value, according to a criterion, of passing $N$ rules is \textit{lower} on at least one dimension than the value of passing each rule alone. Similarly, Rules $R_i$ to $R_j$ exhibit positive interdependencies if the value, according to a criterion, of passing $N$ rules is \textit{higher} on at least one dimension than the value of passing each rule alone. Note that for multidimensional criteria, a set of rules may exhibit \textit{both} positive and
1. Defining Interdependency Error

In conducting regulatory analysis, agencies usually take a ‘piecemeal’ approach that measures the effects of a rule against a baseline and holds other rules in the regulatory environment fixed. Done correctly and thoroughly, such an approach will ensure that a rule is narrowly optimal: the analysis will reveal whether the rule was preferable to the alternatives (including the alternative of not promulgating the rule). But an agency’s ability to pass multiple rules means the regulatory environment is not otherwise fixed. Rules can have ‘positive interdependencies,’ whereby one rule can increase the effectiveness of another rule. They can also have ‘negative interdependencies,’ whereby one rule can decrease the effectiveness of another rule. This can lead an agency to commit interdependency error, whereby a rule that is narrowly optimal against the agency’s chosen baseline might not be part of the broadly optimal set of rules.

As a hypothetical example, consider that an agency is considering two rules, rule A and rule B. Rule A, passed alone, has net benefits of -50. Rule B, passed alone, has net benefits of -50. However, an interdependency exists between the rules: passed together they have net benefits of 100. The optimal course of action to take is therefore to pass both. Yet consider an agency that merely considers each rule in turn, and compares it to the status quo. First, it will consider rule A, find that it achieves net benefits of -50 relative to the status quo, and will choose not to pass it. Then, and similarly, it will consider rule B, find that it achieves net negative interdependencies.

175. The concept of interdependency error, along with an analytical framework to understand and mitigate it, is introduced in Shadarevian & Delaney, supra note 8, at 404-09.

176. We note that another type of error can occur from aggregation if an agency uses inconsistent metrics. Specifically, inconsistent application of a multidimensional metric may result in aggregation error. In cases where agencies are attempting to find the best regulation according to a multidimensional metric, decisions that are ‘optimal’ in the narrow sense might aggregate to a suboptimal outcome overall, even if the rules otherwise do not have interdependencies. A multidimensional metric is inconclusive when two options each perform better than the other on at least some dimensions. In such cases, it is permissible for the agency to use its discretion to pick an option. However, doing so “inconsistently” across different rules may result in an outcome that is unequivocally worse according to that same multidimensional metric. As a concrete example, consider two potential rules, evaluated on a multidimensional metric consisting of two dimensions: monetizable benefits minus costs (net monetizable benefits), and an environmental friendliness score. The first regulation has net monetizable benefits of -100, and an environmental friendliness score of 10. The second regulation has monetizable benefits of 50, and an environmental friendliness score of -11. Evaluated alone, there is no clear answer (on the basis of our hypothetical metric) to the question of whether the rule should be passed, and so either choice for either rule is optimal. Therefore, an agency considering each rule alone might therefore well decide to exercise its discretion to pass both rules. However, on our metric, this is a bad idea: passing both rules leads to total monetizable benefits of -50, and a total environmental friendliness score of -11. Whatever the agency does, it should not pass both. Yet this only becomes clear when we look at the bigger picture: both rules together. While this type of error is distinct from interdependency error, it is difficult to show that it is a significant factor in agency practice, and so we abstain from further discussion of it.
benefits of -50 relative to the status quo, and will choose not to pass it. The result is that it will pass neither rule, when it should have passed both. The agency behaved narrowly optimally—it compared each rule compared to the specific alternative of doing nothing and found that doing nothing was better.

Interdependencies can exist between large numbers of rules, as well. For example, costs of regulatory compliance may increase non-linearly, creating negative interdependencies that become apparent as the number of rules becomes large.

2. Examples of Interdependencies

Examples of interdependencies in the benefits and costs of regulations are common in real-life regulatory practice, including in environmental, financial, and safety regulation.\(^{177}\) For example, in the financial sphere, a negative interdependency exists between bank leverage ratios and other bank safety measures, such as Dodd-Frank capital buffers, stress tests, liquidity requirements, and weighted asset ratios. Bank leverage ratios seek to ensure banks have adequate capital and therefore are not exposed to too much default risk. Other bank safety measures seek to ensure banks make prudent decisions. The value of these other safeguards is decreasing in the bank leverage ratio, since the greater the capital the bank holds, the lower the inherent probability of bank default and the lower the additional benefit of other safeguards. As an extreme, if the bank leverage ratio was raised to 100%, a bank could not default to creditors and the additional benefits of other bank safeguards are reduced to zero.

Another example, this time from environmental regulation the EPA’s Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR). In 2005, the EPA promulgated both the CAIR and the CAMR to mitigate pollution created by coal-fired power plants. While CAIR’s main purpose was to reduce sulfur dioxide (SO2) and nitrogen oxides (NOx), the control technologies necessary to achieve these reductions also incidentally reduced mercury emissions. Since CAMR also sought to reduce mercury emissions, a negative interdependency existed between the two rules: the benefits of implementing CAMR were smaller when taking CAIR as implemented, than in the scenario where CAIR was not implemented. An agency behaving according to a standard of narrow optimality may fail to account for the interdependency.

3. The Pitfalls of Narrow Optimality

Interdependencies can cause an agency acting according to a standard of narrow optimality to go seriously astray in terms of their overall regulatory program. Implicit in the concept of narrow optimality is that the agency takes the narrow

---

177. See Shadarevian & Delaney, supra note 8, at 409-23.
optimal decision given a fixed regulatory environment.\textsuperscript{178} An agency that is narrowly optimal may miss broad optimality due to interdependencies, because they fail to consider certain combinations of rules.\textsuperscript{179}

Where large amounts of regulations can interact to create interdependencies, even a diligent agency taking the narrowly optimal action at each stage may significantly stray from the optimal combination of rules. Consider Figure 3, where the $x$-axis represents the level of regulation passed by an agency (moving towards the right entails that an agency would pass more regulations). The $y$-axis represents the social value achieved by a given level of regulation. An agency making rulemaking decisions at the “current level of regulation” by evaluating a rule individually (compared to not passing the rule) would choose to increase its level of regulation, since every additional regulation from that point on increases net benefits, whereas every reduction in regulation would reduce net benefits. This would occur even though it is preferable for an agency to vastly reduce its level of regulation.\textsuperscript{180} A concern only with narrow optimality would preclude the agency from seeing the “far-off” possibility of vastly reducing regulations.

![Figure 3: Interdependencies and Narrow Optimality](image)

\textsuperscript{178} This is true because we measure regulatory action against the alternative of doing nothing. The alternative of doing nothing keeps the other, possibly interdependent rules, as they are.

\textsuperscript{179} This is well-analyzed in the context of agency CBA in Shadarevian & Delaney, supra note 8, at 396-433.

\textsuperscript{180} The converse could also occur—an agency could decide to make individual deregulation decisions, even though the global optimal is achieved by taking on a vast regulatory program.
C. Negligence of Procedural Value

Finally, looking at narrow optimality alone leaves open the possibility that the value of procedure—the methods by which an agency achieves regulatory outcomes—is ignored. Agency procedures can be statutorily mandated, can be imposed by executive order, or can be adopted by an agency’s own hand. In each case, the procedures an agency follows can, separate of the regulatory outcome achieved, themselves achieve certain benefits and harms. Agency process can create procedural value in three ways: by creating a “commitment” effect that can incentivize certain private actions; by building trust and relationships with private parties; and by promoting democratic values. A narrowly optimal agency may underutilize procedures that provide significant value in and of themselves.

Narrow optimality, as a concept, is agnostic as to the procedures that an agency uses to arrive at its rules, since it only asks about which rules the agency selects. This reflects the focus on agency rulemakings as the focal point for review of agency action.\(^{181}\) Broad optimality, on the other hand, asks about agency procedure, because procedural choices can create intrinsic value—agency communications, soft law, and relationship-building can all affect outcomes. In this Section, I discuss the ways in which procedural value might affect how an agency should behave if it is to aspire to a standard of broad optimality.

1. Credible Commitment Value

An agency’s procedure might give it the ability to make credible commitments to actions that can induce desirable behavior.\(^{182}\) An agency’s ability to promise—and credibly commit to—rulemaking decisions can induce desirable social and economic behavior without the need to engage in notice-and-comment rulemaking.\(^{183}\) In response to credible commitments to either punish or reward behavior, a private actor might voluntarily alter undesirable behavior or might provide useful information to help an agency understand the regulatory landscape.\(^{184}\) Having achieved voluntary compliance from private parties, the agency

\(^{181}\) However, courts will review agency guidance and other non-legislative rules. See generally Gwendolyn McKee, Judicial Review of Agency Guidance Documents: Rethinking the Finality Doctrine, 60 ADMIN. L. REV. 371 (2008). The Supreme Court decision in Kisor v. Wilkie to limit deference to agency rule interpretation may herald increased judicial review of agency guidance. See generally Kisor v. Wilkie, 139 S. Ct. 2400 (2019).

\(^{182}\) The value of ‘credible’ commitments. See generally Avinash Dixit & Susan Skeath, Games of Strategy (2004).


\(^{184}\) To see the value of information from private actors, consider the following example. An agency, such as the EPA, wants information about costs from a polluting factory. Given the agency’s current information, it is not narrowly optimal for the agency to regulate that type of pollution, but unbeknownst to the agency, the data the factory has changes that calculus. Since the factory knows this, it does not provide information about its costs of compliance, and the agency loses out on a potentially optimal regulation. Now suppose, on the
would then avoid having to follow-through on its commitment, which would allow it to realize benefits without carrying out a potentially costly promise (such as passing a suboptimal rule). An agency that always picks the narrowly optimal regulation cannot commit to rulemaking actions that are narrowly suboptimal, but the threat of which can induce desirable action. Therefore, if an agency picks and commits to narrowly optimal rules in a ‘mechanistic’ fashion, it may forego important regulatory benefits from having a more fluid and nuanced interaction with regulated industries, public interest groups, and citizens at large.

For an example of how commitment value works, consider the agency decision in Figure 4. In the example, an agency (whose decision-making nodes are denoted by “R”) and a firm (whose nodes are denoted “F”) must both make decisions. The agency begins with the option to announce a regulatory threat. The firm can then voluntarily comply with the threat or can choose not to. Voluntary compliance achieves payoffs of 100 for the regulator, and -10 for the firm. If the firm does not voluntarily comply with its demands, the agency can then pass a regulation forcing compliance. Doing so is costly and suboptimal both for the agency and the firm relative to voluntary compliance, resulting in payoffs of -100 and -50, respectively. A narrowly optimal agency, therefore, will not regulate in any instance. However, consider the following regulatory strategy: the agency announces a threat, and if the firm does not comply, enacts the regulation. Given this regulatory strategy, and the (credible) threat of regulation, the firm’s best response is to choose to voluntarily comply. As a result, the firm never needs to regulate; the threat is sufficient to ensure voluntary compliance. However, an agency that behaves narrowly optimally cannot commit to the threat, since once it gets to the second decision node, it chooses not to regulate. Knowing this, the firm does not voluntarily comply.

other hand, that the agency commits to passing a severe form of the regulation, regardless of whether it thinks it is narrowly optimal. The factory, hoping to avoid such a severe regulation, then provides information about its costs. This is a “stick”—the factory, now afraid that it will be regulated harshly if it fails to provide information, reveals its costs to the agency in hopes of getting a better outcome.
The use of commitments—especially threats—is prevalent in regulatory practice. In response to worries about the unauthorized sharing of digital media, in 2002, the then-Commissioner of the Federal Communications Commission used regulatory threats to help achieve voluntary compliance by industry stakeholders. Similarly, the EPA has used threats of regulatory intervention to achieve Greenhouse Gas (GHG) reductions. There is wider evidence of the importance of “regulatory credibility” in environmental regulation, where the ability to commit to long-term environmental regulations incentivizes higher levels of private investment in research & development and long-lived technologies. Negotiated rulemaking can be considered a “carrot”: an agency commits to giving up control over the deliberation of a rule in return for greater participation by the potential winners and losers of a regulation.

An agency that behaves according to a standard of narrowly optimality may lack commitment credibility, since it may lack the discretion to base its rulemaking outcomes on cooperation from the public. This is especially true if the agency is bound by too rigid a set of procedures on how it must consider rules it promulgates. Regulators may thus fail to achieve the best outcomes overall. For agency threats—both carrots and sticks—to be effective, agencies must have the ability to act on them, conditioning their rulemaking on the level of cooperation they receive.

Agencies can also engage in private communications with individuals and entities, communicating its intentions and requesting information. Similar to the case of threatening rulemaking, agencies can issue “threats” to private parties as a way of achieving desired behavior without engaging in rulemaking. The flip
side of that coin is that agencies can also issue promises to private parties in return for desired behavior. Like with rulemaking threats and promises, for an agency’s threats to be most effective, agencies must have some ability to follow through on them.

2. Trust and Relationship-Building

Beyond allowing agencies to commit to promises and threats, agency procedures can determine the relationships it has with private stakeholders. Agency procedure can thus also have value in building trust and incentivizing desirable behavior from the public—such as the disclosure of information or voluntary compliance with agency preferences. Crucial to this is the establishment of a long-term cooperative relationship. Agencies can build relationships with stakeholders through commitment (as described above), which helps an agency establish a reputation as a predictable and cooperative player. Agencies can also communicate by providing information, signaling intent through statements, or soliciting comments from private parties.

The existence of a trustful relationship between agency and stakeholder can be important in realizing beneficial outcomes. First, agencies often need information from the public to determine how to regulate. The establishment of a close relationship to private parties, such as the regulated, will mean those parties are likelier to be forthcoming with that information. Second, healthy relationships might allow an agency to induce desirable behavior through informal communication, and without engaging the full regulatory apparatus. This can take place because private actors are more willing to alter their behavior to meet agency preferences, or simply because actors are likelier to have good information on an agency’s preferred interpretations of rules and statutes.

Agency rulemaking structure can also affect the development of trust. The rise of negotiated rulemaking, while controversial, highlights this. In negotiated rulemaking, rules are developed using a neutral facilitator and a negotiating

---


195. Negotiated rulemaking, or “regneg”, developed in the 1980s as an alternative to
committee comprised of stakeholders. This process provides a means for interested parties to come to an agreement themselves as to the rule. Negotiated rulemaking offers stakeholders meaningful input in forming rules, and in so doing hope to take advantage of the unique information and ideas that private actors have. It also has the benefit of helping agencies and stakeholders establish a greater level of trust and mutual understanding. The use of informal, off-the-record communications between private parties and agency personnel can also help build trust.196

Agency procedures that help build trust are relevant to broad optimality. Even a narrowly optimal agency might nonetheless fail to cultivate relationships with regulatory stakeholders, missing out on broadly optimal cooperative arrangements and voluntary compliance with an agency’s preferences.

3. Soft Law & Influence

Procedural value also often comes from agency “soft law”, or “non-legisla-
tive” rules that agencies have discretion to issue.197 Such rules can clarify the language of statutes and prior rules and give structure to agency discretionary powers.198 While non-legislative rules do not have a formal binding effect, they may influence judicial outcomes, and they also have significant power to influence the behavior of private individuals. In many cases, out of an abundance of caution and a desire to remain on good terms with agencies, private individuals and companies will treat non-legislative documents, such as agency guidance, as law.199 Because of this, agencies will often use soft law as an alternative to the issuance of formal rules.
The use of soft law—especially when used as a substitute for informal rule-making to avoid mandated rulemaking procedures—may coerce or influence behavior. Private actors obey agency guidance because of a desire to remain on good terms with regulators as well as a desire to avoid enforcement.\textsuperscript{200} Because guidance is generally legally non-binding, the degree to which a private actor feels compelled to follow guidance is variable.\textsuperscript{201} In certain cases, private actors may go against agency guidance if they feel they have a particularly good reason to do so. This may be desirable from an optimality perspective—an agency lacks information on when a rule should have exceptions and relying on private actors to voluntarily comply with guidance, except when they have particularly compelling reasons not to do so, may better approximate the optimal exceptions. Moreover, soft law may also, without invoking the heavy approach of ‘hard’ law, help coordinate outcomes between various private parties and lawmakers.\textsuperscript{202} Finally, soft law may “facilitate constitutive processes such as persuasion, learning, argumentation, and socialization.”\textsuperscript{203} A focus on narrowly optimal rulemaking neglects these dimensions, and so may lead to the under- or over-utilization of soft law.

4. Democratic Values

Agency procedures may also promote or impede democratic values, such as accountability, transparency, and public participation.\textsuperscript{204} Such values are widely seen as important to the proper functioning of the administrative state.\textsuperscript{205} Agency procedures can serve to promote these values. Increased communication throughout the agency deliberative process—particularly, explaining the goals

\textsuperscript{200} Id. at 191.
\textsuperscript{201} Id. at 219.
\textsuperscript{204} See Alexander I. Ruder & Neal D. Woods, \textit{Procedural Fairness and the Legitimacy of Agency Rulemaking}, 30 J. OF PUB. ADMIN. RSCH. AND THEORY 400 (2019). While such values might be difficult to measure and thus reconcile with the standards of optimality, to the degree that they are, they will depend on agency procedures as well as rulemaking outcomes.
and features of a regulation—can help improve transparency and accountability. For example, an agency can achieve this by maintaining an accurate version of the agenda in the *Unified Regulatory Agenda* or producing well-explained, concise regulatory impact analyses. A healthy public comment process can help engender public participation. Agencies, for example, have discretion to conduct an Advance Notice of Public Rulemaking (ANPRM), which allows them to solicit public comment at an early stage. On the flip side, an overreliance on private communications, or the use of guidance statements as de facto rules (especially when the agency is issuing guidance to avoid rulemaking procedures) can reduce the accountability of the agency. To the degree that democratic values are part of a standard for broad optimality, focusing on narrow optimality at the expense of all else will preclude the use of procedures to promote these values.

D. Existing Critiques Conceptualized as Failures of Broad Optimality

The taxonomy developed in this section can account for existing critiques of agency action. Concerns about ossification fall under the category of foregone regulation, since they relate to concerns about delayed regulation, or else excessive procedure costing the agency the time and resources to promulgate more regulation. The same applies to concerns about agency agendas, where concerns about choosing the wrong agenda are in fact about the potential for foregone regulation due to the agency’s limited time and resources to attend to its agenda. Concerns about experimental rules and sunsetting are, similarly, a concern that agencies will forego deregulatory rulemakings without a sunset provision. The move towards regulatory budgeting can be categorized as a concern about foregone deregulatory rulemakings—optimal deregulation that an agency fails to act on. The move to consider the cumulative effects of regulation concerns the effect of interdependencies, especially interdependencies relating to regulatory cost.

However, while these critiques evidence increasing attention to certain examples of broad suboptimality, the solutions proposed are unsatisfactory when seen as an attempt to move agencies towards broad optimality. For example, consider the earlier discussed example of the tension between regulatory budgets and attempts to de-ossify rulemaking. Both can be conceived of as fixes to a broad optimality issue, but they remain rough fixes, and implementing one or both might reduce an agency’s aggregate rulemaking optimality. A solution based on the principles of broad optimality would look at the particular facts an agency faces. In certain cases, overly burdensome rulemaking processes might lead to foregone regulation. In others, failing to revisit regulations on the books

---

206. On the flip side, too much communication can create a lot of noise and make it harder for the public to scrutinize the agency’s true deliberative process.
208. See supra Part II.C.
might lead to obsolete regulation. A fix should then be tailored for that agency’s regulatory landscape. To the degree that it might be best for an agency to use a heuristic (such as “One-In, Two-Out”), an examination from the perspective of broad optimality might help carve out better and less crude heuristics for agency regulatory decisions.

V. WHY BROAD OPTIMALITY FAILS

Failures of broad optimality are prevalent in Agency practice. Particularly within the primordial soup of early agency decision-making, there is little structure that guides the process, and regulation choices are decided through a mix of private party influences, bureaucratic personalities, and randomness. There is plentiful evidence that agencies engage in an “incremental muddling through,” where they sift through torrents of information and are faced with endless regulatory choices. Nowhere is this worse than in pre-NPRM rulemaking.

To add to this, Congress, courts, the executive branch, and the public—the bodies to whom oversight of the agency’s activities falls—are ill-equipped to monitor and guide the agency’s muddling through. Oversight, when designed well, improves decision-making by agencies. Nonetheless, achieving broad optimality poses unique challenges for other political bodies trying to oversee agency decision-making. Ensuring broad optimality through oversight is difficult because it involves understanding hypothetical alternative courses of action—what the agency could have done—in detail. Both agencies and its overseers have a limited understanding of the problem, and little process or oversight exists to guide agencies to make better regulation choices.

Existing judicial and legislative oversight mechanisms do not adequately prevent failures of broad optimality and can make outcomes worse by incentivizing agencies to misallocate their efforts and merely focus on observable metrics. Agency procedures, because they focus on agency actions during and after the NPRM stage, also distort behavior, often away from broad optimality. In this Part, I consider in detail the reasons why agency decision-making, in practice, in the aggregate, suffers from the issues discussed in Part IV.

209. For example, where an agency faces an environment where the facts on the ground may change frequently, revisiting regulations through retrospective review might be important. On the other hand, where an agency faces a large number of static but difficult regulatory problems, avoiding regulatory ossification might be the greater priority.

210. Note the earlier discussion on decision-procedures versus criteria in Part III.A.3. Simple heuristics might be better decision-procedures for agencies, because they are easy to use, even if the ultimate aim is the broad optimality standard.

211. See Wendy E. Wagner, Administrative Law, Filter Failure, and Information Capture, 59 DUKE L.J. 1321, 1398 (2010).

212. Potter, supra note 16 (arguing that congress often “outsources” oversight of agency regulation to private interest groups).
A. Agency Behavior

Agencies and the regulators that staff them have incentives and biases that lead them to make broadly suboptimal decisions. Career regulators are often driven by ideological incentives, career incentives, professional norms, and effort-shirking.\textsuperscript{213}

Reputational concerns often motivate broad suboptimal behavior. Regulators often sub-optimally pursuing regulatory ‘pet projects’ at the expense of more effective ones.\textsuperscript{214} Similarly, reputational concerns motivate regulators to engage in ‘minimal squawk’ behavior, taking actions motivated out of a desire to avoid criticism and keep scrutinizing actors quiet.\textsuperscript{215} Regulatory capture and private influence may also explain broadly suboptimal behavior,\textsuperscript{216} especially at the pre-NPRM stage.\textsuperscript{217}

The incidence of regulatory capture or influence—where industry coopts agencies to regulate to their benefit—can also explain failures of broad optimality. A different thesis states that agencies are vulnerable by “capture” by the very groups they are mandated to regulate. According to the regulatory capture thesis, most often attributed to economist George Stigler, regulators are “acquired” by industry and then operate for its benefit.\textsuperscript{218} This can happen for many reasons, ranging from outright bribery of government officials to “revolving door” career incentives, to informational advantages held over the agency by industry players.\textsuperscript{219}

\textsuperscript{213} Scholars have suggested a framework dividing bureaucrats into four types depending on their incentives: zealots (motivated by ideology), climbers (motivated by career advancement), professionals (driven by adherence to professional norms and practices), and slackers (motivated to minimize their workload or otherwise preoccupied with non-policy agency matters). See Rachel A. Potter & Charles R. Shipan, Agency Rulemaking in a Separation of Powers System, 39 J. OF PUB. POL’Y 89 (2019).

\textsuperscript{214} See Marissa Martino Golden, Who Controls the Bureaucracy?: The Case of Agenda Setting (Oct. 9, 2003) (Prepared for delivery at the National Public Management Research Conference, Georgetown University) (on file with author).


\textsuperscript{217} Informal contact pre-NPRM is often almost monopolized by regulated parties. See Wagner, Barnes, and Peters, supra note 211; see also Roger Noll, The Economics and Politics of Regulation, 57 VA. L. REV. 1016, 1028–30 (1971) (observing that “most of the information flowing to the agency will come from the regulated”).

\textsuperscript{218} Stigler, supra note 202.

\textsuperscript{219} For a survey of the theory and evidence on regulatory capture, see Dal Bó, supra note 216.
Agencies also face informational constraints that prevent them from achieving broad optimality. Choosing broadly optimal behavior entails a “curse of dimensionality” since the number of possible sequences of action the agency must evaluate grows exponentially with the number of individual rulemaking decisions involved.\footnote{220} Given this complexity, agencies must process a lot of information, and can make poor regulation choices because they inadequately handle the constant flow of often biased information.\footnote{221} Both the volume of information\footnote{222} and the reliance on third parties (usually regulated entities) to gather information can lead agencies astray. This is especially prevalent at the pre-NPRM stage, when many decisions germane to broad optimality are made.\footnote{223} Finally, agencies might also simply not know how to be broadly optimal, and in certain cases might have limited cognizance of broad optimality issues resulting from their behavior.\footnote{224}

Behavioral factors—including cognitive biases and constraints, culture, and ideology—can also influence agency decision-making and facilitate broad optimality shortcomings. Regulators themselves might be subject to cognitive biases\footnote{225} and constraints.\footnote{226} Evidence also suggests that agencies can display large-scale and group behavior that deviates substantially from “optimal” behavior;

\footnote{220. The problem has been analyzed in the context of interdependencies between agency rules, Shadarevian \& Delaney, supra note 8.}

\footnote{221. Bureaucrats can make poor choices because they are unaware that they could do better. In behavioral economics, unawareness refers to the lack of conception—where a decision-making agent may not even have spent thought on whether something is the case—rather than the lack of information—where an agent does not know whether something is the case. See Burkhard C. Schipper, Unawareness - A Gentle Introduction to Both the Literature and the Special Issue, 70 MATHEMATICAL SOC. SCI. 1 (2014).}

\footnote{222. Wagner, supra note 211.}

\footnote{223. Feeding an agency potentially biased information is a form of private influence or capture. Id.}

\footnote{224. For example, despite evidence of the pervasiveness of rule interdependencies, agencies appear to have limited cognizance of the problem. See Shadarevian \& Delaney, supra note 8.}

\footnote{225. See generally Mark Seidenfeld, Cognitive Loafing, Social Conformity, and Judicial Review of Agency Rulemaking, 87 CORNELL L. REV. 486 (2002) (arguing that administrative decision-making may be subject to systematic biases that can reduce the quality of decisions). See also Dudley \& Xie, supra note 72.}

\footnote{226. Agency attention constraints and “satisficing” are analyzed in Wagner, supra note 211, at 1393.
agency culture, norms (including default behavior), and ideology can substantially affect broad optimality. Perhaps most commonly, such behaviors prevent agencies from broadly considering factors relevant to rulemaking (such as alternative regulatory options or second-order effects). Behavioral factors often influence agency decision-making, resulting in decisions on regulatory priorities, proper procedure, and other factors that can negatively impact an agency’s broad optimality.

B. Oversight

Beyond the issues with agency incentives and behavioral limitations, agencies fail to live up to a standard of broad optimality because of limitations of effective oversight. The bodies responsible for overseeing agency rulemaking—Congress, the executive branch and the judiciary—themselves face limits on their abilities to engage in the complex inquiries required to ensure effective agency regulation in the aggregate. This results both from the intrinsic challenges

---


228. Agencies often follow “default” courses of action that prevent responsiveness to information. See, e.g., Natasha Sarin, Dynamic Regulation, 94 S. CAL. L. REV. 1005 (2021) (arguing that financial regulators’ default is inaction until regulatory measures of bank health signal distress).

229. Empirical political science scholars have consistently found that agencies tend to vary in their political alignments. For example, researchers have found that the DOD and DHS tend to have staff that are right-leaning, while the EPA and FTC tends to be left-leaning. See Joshua D. Clinton et al., Separated Powers in the United States: The Ideology of Agencies, Presidents, and Congress, 36 AM. J. POL. SCI. 341 (2012). See also JAMES Q. WILSON, BUREAUCRACY: WHAT GOVERNMENT AGENCIES DO AND WHY THEY DO IT (1989) (finding that agencies are less ideological than Congress). Ideological factors also likely drive “midnight” agency rulemaking, whereby agencies issue three times as many rules in the time between the presidential election and inauguration day. See SOFIE MILLER & DANIEL PEREZ, THE FINAL COUNTDOWN: PROJECTING MIDNIGHT REGULATIONS (2016).

230. At their most extreme, cultural and ideological factors can manifest in agency groupthink. See Stephanie Stern, Cognitive Consistency: Theory Maintenance and Administrative Rulemaking, 63 U. PIT. L. REV. 589 (2002) (exploring how groupthink can create a cognitive “lock-in” that prevents agencies from being responsive to information, including public comments); see also Irving L. Janis, GROUPTHINK: PSYCHOLOGICAL STUDIES OF POLICY DECISIONS AND FIASCOS 244 (1982). Similarly, such factors can result in group polarization, where group interactions can produce significant errors and even actions that are more extreme or erroneous than those of individual members. See Seidenfeld, supra note 225; Cass R. Sunstein, Deliberative Trouble? Why Groups Go to Extremes, 110 YALE L.J. 71 (2000); Cass R. Sunstein & Reid Hastie, Four Failures of Deliberating Groups, (Chicago John M. Olin Law and Economics Working Paper No. 401).

231. The failure to consider relevant factors can be driven by ideology, strong adherence to norms, informational overload, or an overconfidence bias. For example, evidence suggests regulators failed to appreciate and plan for the second-order effects of mandating seatbelts, with drivers taking greater risks when they were strapped in. See Slavisa Tasic, The Illusion of Regulatory Competence, 21 CRITICAL REV. 423 (2009); Sam Peltzman, The Effects of Automobile Safety Regulation, 83 J. POL. ECON. 677 (1975).
of “broad” oversight—oversight of the body of agency rulemaking decisions aimed at ensuring broad optimality—and from the practical limitations of the various bodies responsible for oversight.

Monitoring an agency when they fail to promulgate a rule is inherently difficult. When an agency passes a regulation, it is possible for an external body—be it OIRA, congressional oversight committees or non-governmental organizations—to scrutinize the agency’s published analysis, determine whether it was proper, and adjudicate on whether the regulation was desirable.232 By contrast, there is no clear way to oversee the informal ways in which agencies narrow down the rules they consider from the vast universe of possible rules.233 The sheer informational workload of determining which alternative sequence of decisions an agency should take—especially given the “curse of dimensionality” with regards to agency decisions234—might render a monitor unable to identify failures of broad optimality.235 Moreover, foregone regulations do not leave an easily scrutable paper trail. When an agency dismisses or delays a potential regulation, it does not produce anywhere near the same amount of paperwork as it would if it were passing a regulation.236 Finally, these difficulties are exacerbated by the fact that, when it comes to the agency’s field of regulation, the agency has significant informational advantages over the executive, judicial, and legislative branches of government.

The various bodies charged with oversight of agency rulemaking—the executive, judicial, and legislative branches of government—each face their own shortcomings when it comes to ensuring broad optimality. While the executive branch has several means to impose constraints on its own agencies,237 it rarely

232. Agencies are required to produce analyses of “economically significant” rules. See Exec. Order No. 12,866, supra note 13. For other legislative rules, the agency must explain the rationale for rules in conducting notice-and-comment rulemaking. 5 U.S.C. § 553 (“After consideration of the relevant matter presented, the agency shall incorporate in the rules adopted a concise general statement of their basis and purpose”). Beyond that, other bodies, such as courts, may often have access to the full administrative record used by the agency decision-makers when undertaking a rulemaking. See Citizens to Pres. Overton Park, Inc. v. Volpe, 401 U.S. 402, 420 (1971) (“[Review of the agency decision] is to be based on the full administrative record that was before the Secretary at the time he made his decision.”).

233. This is like issues courts have with reviewing agency inaction. See Sidney A. Shapiro, Rulemaking Inaction and the Failure of Administrative Law, 68 DUKE L. J. 1805, 1819 (“Lacking a rulemaking record, it is difficult for a plaintiff to contest the agency explanation.”).

234. See Shadarevian & Delaney, supra note 8, and discussion in Part V.A.

235. See Wagner, supra note 211, at 1393.

236. Early-stage discussions and proposals may not trigger agency recordkeeping requirements, since generally agencies only have to maintain records if a meeting is important or a substantive decision has been made. See 36 C.F.R. § 1222.22.

237. The executive branch generally has unrestricted ability to hire and fire the heads of agencies and can exercise control by issuing directives to agencies through executive order. Often, these executive orders will instruct agencies to follow certain processes for rulemaking. See, e.g., Exec. Order No. 12,866, supra note 13; Exec. Order No. 13,563, supra note 89. The executive has used this power to influence agency agenda-setting. See infra note 257. The
uses those means to ensure broad optimality. Formal OIRA review of agency rules is also limited as a means to ensure broad optimality; by the time a draft rule is potentially subject to OIRA review, it is already at an advanced stage, when often an early-stage fix is needed. Congress can also exercise oversight through several means but is also not ideally situated to ensure broad optimality. Congress has both statutory (prescribing agency authority, and procedures and non-statutory tools to manage and oversee agencies. However, such tools are limited in their ability to ensure broad optimality. Due to the constitutional limits presented by the bicameralism and presentment clauses, the non-statutory tools available to Congress are often soft and have limited ability to impose a particular vision for how rulemaking outcomes should transpire. Moreover, where Congress’s influence is likely to be overtly political, there can be too much oversight by Congress, preventing agencies from using the full extent of their expertise and information in making rules.

—

executive can also exert soft influence on its agencies through memoranda and direct discussions with agency personnel. For discussion of presidential control of agencies, see Elena Kagan, *Presidential Administration*, 114 Harv. L. Rev. 2245 (2001).

238. In crafting legislation, Congress has the power to determine what kind of rulemaking authority the agency has, the freedom it has in choosing how to go about achieving a regulatory goal, and the degree of discretion it has in setting its agenda.

239. Important structural choices Congress makes include: (i) choosing whether the agency head serves at the pleasure of the President or whether they can only be fired for ‘good cause’; (ii) creating offices within the agency; and (iii) choosing whether a commission or a single head will lead the agency. Such choices can greatly influence the way agencies end up working, and their approach to rulemaking. For example, agencies with many independent departments and offices within it—such as the SEC—are likelier to have a different approach to the interdependencies between rules coming from different departments relative to a less “balkanized” agency.

240. The APA itself is an example of procedure-based control, but Congress can also specify procedures for specific agencies, and often does so within the statutes that create the agencies.

241. For many high-ranking executive branch positions, Senate confirmation—in the Constitution, “advice and consent”—is required. See U.S. Const. art. II, § 2, cl. 2. The Constitution also expressly grants powers to impeach and remove federal officers. See U.S. Const. art. II, §4. Regarding non-statutory tools, Congress has broad powers of investigation and inquiry, including through subpoenas issued congressional committees. See *McGrain v. Daugherty*, 273 U.S. 135 (1927) (establishing that the “power of inquiry” is an essential and appropriate auxiliary to the legislative function).


Finally, the judicial branch faces severe limits when it comes to ensuring broad optimality. For the judicial branch to act, the claim must be justiciable,\textsuperscript{244} entailing that a plaintiff has standing,\textsuperscript{245} and brings a claim that is ripe,\textsuperscript{246} not moot,\textsuperscript{247} and that does not present a political question.\textsuperscript{248} This limits the applicability of judicial review,\textsuperscript{249} and requires that a plaintiff successfully build a case against an agency that has behaved sub-optimally.\textsuperscript{250} Often, failures of broad sub-optimality do not create a justiciable claim, and even if they do, plaintiffs may lack the resources or knowledge to bring it.\textsuperscript{251} Moreover, under the standards for judicial review of agency action laid out by the APA,\textsuperscript{252} most elements of informal or early-stage decision-making are not reviewable by courts,\textsuperscript{253} despite their importance to rulemaking outcomes.\textsuperscript{254} Like with the legislative branch, the judicial branch has inherent limits. More so than on questions of narrow optimality, evaluating an agency’s broad optimality is a task that takes great expertise on the regulatory matters at hand, an expertise that courts and generalist judges often lack.\textsuperscript{255} In fact, judicial oversight can reduce an agency’s proximity to broad optimality. This happens for two reasons. First, because a court has a bias towards
demanding additional procedure, and generally only sees a single rule in a particular controversy, there is a tendency to demand an overly stringent analysis of a rule. Second, because as previously discussed, agencies are particularly averse to negative outcomes in litigation,\textsuperscript{256} they are overly responsive to the threat of judicial review and may end up over-expending on regulatory analysis (relative to an optimum) if it will reduce their chances of being successfully taken to court.

C. Procedure

Procedure as currently structured may also be exacerbating shortcomings of broad optimality. Because of the prevailing focus on narrow optimality, current procedures afford agencies too much flexibility in determining how they narrow down rules before they reach the NPRM stage, while simultaneously proving too burdensome afterwards. First, an agency’s procedural requirements are mostly triggered by its issuance of an NPRM, meaning that many decisions relevant to rulemaking (and broad optimality), such as agenda-setting, do not incur procedural requirements. Procedures exist that mandate agencies to engage in regulatory planning,\textsuperscript{257} but these procedures are inadequate.\textsuperscript{258} As a result, early agency research and rule selection happens in darkness.\textsuperscript{258} Once an NPRM is issued, however, agencies incur a monolithic set of procedures,\textsuperscript{259} with agencies lacking the discretion to accelerate, expedite or abbreviate rulemaking requirements even when doing so might be optimal because it frees up resources.\textsuperscript{260} Either an agency triggers the entire machinery, in the required sequence (including the RIA, notice and comment and the restriction that the final rule is a logical outgrowth), or the agency triggers virtually nothing. The current procedural structure, including the

\textsuperscript{256} See Leaver, supra note 215, at 572-607.
\textsuperscript{257} Agencies must prepare an agenda of all regulations under development or review, for publication in a semi-annual Unified Regulatory Agenda in the Federal Register. An agency must also provide information on the ‘most important significant’ regulations for publication in the semi-annual Regulatory Plan. Agencies must publish semiannual ‘regulatory flexibility’ agendas identifying rules with ‘significant economic impact’ on small entities. Of these agenda-based processes, Cary Coglianese and Daniel Walters write that “these several planning mechanisms appear to have been implemented too often in a rote fashion.” See Coglianese & Walters, supra note 16, at 880.
\textsuperscript{258} See supra Part IV.B.1.
\textsuperscript{259} See the requirements in § 553(b)(3)(B). See also discussion in Part II.B.
\textsuperscript{260} Existing exceptions to the full notice-and-comment procedure are vague or exist for other reasons, such as exemptions for issuance of loans, grants, and subsidies and for non-binding or interpretive rules. § 553(b)(3)(B). The most general exception, the “good cause” exception was likely not intended by Congress to apply to such a case, since it refers to minor or technical matters. Report of the Committee on the judiciary, Senate, on S. 7, A Bill to Improve the Administration of Justice by Prescribing Fair Administrative Procedure, H. R. Rep. No. 1980, 79th Cong., 2d Sess. 7 (1945), https://perma.cc/H6AW-HVRB; see also Raso, supra note 84, at 86 (“[T]he APA does not provide a prescriptive definition for when agencies may avoid notice-and-comment. Instead, the APA is vague at key junctures, including the definition of what constitutes good cause.”).
lack of pre-NPRM process, means that agencies often distort their behavior to avoid regulatory scrutiny.\textsuperscript{261}

CONCLUSION

Agency rulemaking was the state’s answer to the problem of balancing the need for increasingly complex and technical regulation with the need for a democratic process. As the issues regulators faced increased in complexity, the solution was to impose increasing levels of procedure to ensure agencies were behaving optimally. However, this standard was “narrow”, in that it only asked the question of whether agencies were making the best decision when comparing a regulation to its alternatives, or to doing nothing. This Article has proposed and defended a standard of “broad optimality” which instead looks at the optimal regulatory sequence of decisions. This Article further categorized failures of broad optimality and analyzed how agencies can be broadly suboptimal in significant ways even when following procedures that ensure narrow optimality.

The discussion has profound implications for how we should design agency procedure and oversight. Critiques of agency rulemaking have emerged that address shortcomings in broad optimality but fail to give an account of what optimal agency behavior should look like. Moreover, current mechanisms for oversight and procedures required of agencies may worsen the broad optimality problem, because they distort agency incentives and induce them to focus too much on the post-NPRM record, as opposed to the overall agenda-setting and decision-making of agencies. Once we start thinking in terms of broad optimality, it becomes clear that simply arguing about how much procedure agencies should face before passing a rule is overly reductionist. For example, if we are primarily concerned about rules having interdependent effects that are different than their individual effects, this counsels in favor of more process, since we also need to do the due diligence of looking at the net benefits of groups of rules. On the other hand, if we are in a field of regulation where the primary concern is that there is a risk of foregone beneficial regulation, then perhaps we are concerned that there is too much procedure handcuffing agency. There may be important trade-offs between precision and expeditiousness in rulemaking process. A discussion based on broad optimality thus brings nuance to a debate that has so far lacked it. The implications for oversight of agencies and agency procedure are discussed.

\textsuperscript{261} By the time an NPRM is issued, much of the meaningful decision-making has occurred, since agencies are concerned about their ability to defend the NPRM. See Wagner, Barnes & Peters, supra note 192, at 110, 144 (“[I]f a rule is to survive judicial review, it must be essentially in final form at the proposed rule stage.”).