REGULATORY ACCRETION: CAUSES AND POSSIBLE REMEDIES

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For almost forty years, presidents have encouraged retrospective review of regulations as a tool to curb outdated, duplicative regulations and introduce evaluation into the rulemaking process.\(^1\) Retrospective review has the potential to create a learning environment for regulation by using real-world inputs to examine the actual effects of rules ex post. By conducting these reviews, regulators learn what has and has not worked, better equipping them to craft effective regulations going forward. In addition to these benefits, retrospective review can inform regulators of the effects of existing rules, providing key information on whether regulatory programs should be changed on the margin, wholly eliminated, or expanded.

President Obama has promoted this effort by issuing three executive orders instructing agencies to formulate plans to review retrospectively their rules at set intervals to reduce regulatory burdens. Many hailed this initiative as groundbreaking; however, early evaluations of the success of this initiative have found it lacking in many regards. If these executive actions are insufficient to “institutionalize regular assessment of significant regulations,”\(^2\) then what other options do policymakers have?

In his recent Article, Reeve T. Bull “seeks to marry the recent push for retrospective review with the ongoing development of collaborative models that might supplement or replace traditional, top-down regulatory models.”\(^3\) Bull argues that the current


rulemaking process provides agencies with disincentives for effectively reviewing their own rules, and that existing proposals to create independent review bodies are deeply flawed. This Response addresses the inadequacy of the current retrospective review system, examines the key causes of this failure, and addresses Bull’s proposal to encourage private parties to initiate review via rulemaking petitions. Finally, this Response offers recommendations on how to prevent regulatory accretion going forward.

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INTRODUCTION

In his recent Article, Building a Framework for Governance: Retrospective Review and Rulemaking Petitions, Bull argues that the existing regulatory process is flawed because cognitive limitations and use of heuristics bias regulators’ responses to risk events. Because the public demands—and regulators provide—rules that do not adequately balance actual risk reductions against potential benefits, an accumulating stock of existing rules incurs burdens without providing commensurate public benefits. Despite this proliferation of regulatory activity, regulators seldom examine the effects of existing rules to see whether they are working as intended. Even though policymakers within the Executive and Legislative Branches reveal a continuing interest in retrospective review of agency rules, such review is not an institutionalized aspect of the U.S. regulatory process, and reviews that have occurred are as likely to create new burdens as to ease existing ones.

4. Id.
5. See id. at 271–76.
Bull sees this as a prime opportunity to institutionalize the use of retrospective review, which would allow existing rules to be revisited with an eye toward whether they provided actual public benefits. However, he argues that current efforts to do so by the federal government fall short.\textsuperscript{7} For example, Bull is skeptical that federal agencies have appropriate incentives to review their own rules, and therefore reforms that rely on agency initiatives may fall short of ambitious goals for retrospective review.\textsuperscript{8}

To address this issue, Bull proposes a collaborative governing system in which the federal government is prompted by private petitioners to conduct ex post evaluation of rules.\textsuperscript{9} In this way, he seeks to use the power of public participation to initiate retrospective review and propose regulatory alternatives that protect public welfare at a lower cost.\textsuperscript{10}

Bull accurately identifies regulatory accretion as a problem that new reforms should address. In this Response, we review the incentives for regulatory accretion, evaluate the likelihood that Bull’s proposed reforms will have their intended effect, and propose reforms of our own to enhance the use of ex post review and reduce regulatory accretion going forward.

\section{Growth of Regulation}

\subsection{Measuring Regulatory Accretion}

Since Congress created the first regulatory body almost 130 years ago,\textsuperscript{11} the number of regulatory agencies and the scope and reach of the regulations they issue has increased significantly.\textsuperscript{12} Every year federal
agencies issue thousands of new regulations,\textsuperscript{13} which now occupy more than 175,000 pages of regulatory code.\textsuperscript{14}

In his Article, Bull ascribes this “regulatory accretion”\textsuperscript{15} to several factors, including regulators’ incentives and cognitive biases (such as the “availability heuristic,” “loss aversion,” and “endowment effect”) that contribute to a “modern pattern of regulation [that] roughly follows a crisis and response model [whereby] governments adopt a laissez-faire approach until a highly visible calamity occurs, at which point the government intervenes to correct the underlying market failure that precipitated the immediate crisis.”\textsuperscript{16} Bull’s application of the insights of behavioral sciences to regulators is a welcome complement to that literature (which tends to focus on cognitive biases in individuals acting on their own behalf, but assumes them away for government actors).\textsuperscript{17} We agree that these documented cognitive biases do contribute to the problems he identifies of regulatory accretion and policies that do not effectively target priority public risks.

On the other hand, his characterization of regulation evolving in response to calamitous “market failures” resulting from laissez-faire policies strikes us as overly simplistic and not grounded in evidence. As his Article carefully notes, regulations began to emerge as a policy tool in the late nineteenth century. Those early regulations generally restricted private sector prices, wages, service quality, entry, and exit. The deregulation movement of the 1970s and 1980s called into question the “market failure” motivation for prevailing regulation,\textsuperscript{18} as theory and evidence revealed that

\begin{itemize}
  \item procurement, subsidy, and credit functions are excluded from this report,” so these figures exclude staff developing and administering regulations in the Internal Revenue Service, the Centers for Medicaid and Medicare Services, etc. \textit{Id.} at 14.
  \item \textit{Id.} at 272–73, 306.
  \item Niclas Berggren, \textit{Time for Behavioral Political Economy? An Analysis of Articles in Behavioral Economics}, 25 REV. AUSTRIAN ECON. 199, 199 (2012). This analysis finds that “20.7% of the studied articles in behavioral economics propose paternalist policy action,” but that 95.5% of these do not contain any analysis of “the potential cognitive limitations and biases of the policymakers who are going to implement paternalist policies.” Other recent research applies behavioral insights to regulators. \textit{See} J. Howard Beales III, \textit{Consumer Protection and Behavioral Economics: To BE or Not to BE?}, 4 COMPETITION POL’Y INT’L 149 (2008); James C. Cooper & William E. Kovacic, \textit{Behavioral Economics: Implications for Regulatory Behavior}, 41 J. REG. ECON. 41 (2012).
\end{itemize}
such regulation tended to keep prices higher than necessary—to the benefit of regulated industries—and at the expense of consumers. This “economic theory” of regulation posited that regulation emerged, not in response to failures of private markets, but in response to pressure from well-organized interests who could enlist the government’s police powers to gain competitive advantage.

B. Need for Retrospective Review

Bull proposes a worthy counter to the regulatory accretion he identifies: retrospective review of existing rules, which can weed out rules that are formed by flawed incentives, cognitive biases, and the pressures of regulatory capture. Regulations created under these influences tend not to balance actual risks against expected benefits, and may have the effect of concentrating market power rather than creating public welfare benefits. Revisiting these rules ex post provides decisionmakers with the opportunity to reevaluate policies based on their track record of success (or failure).

By examining the effects of existing rules, retrospective reviews can inform policymakers on how best to allocate scarce societal resources to accomplish broad social goals, such as improved air quality or wellbeing, through regulation. Ex post review can provide valuable feedback and learning that will improve the design of future regulations.

In a World Bank report on “impact evaluation,” Gertler et al. illustrate the importance of applying evaluation to policies:

In a context in which policy makers and civil society are demanding results and accountability from public programs, impact evaluation can provide robust and credible evidence on performance and, crucially, on whether a particular program achieved its desired outcomes.

This argument makes particular sense in the case of regulation. While policymakers have the opportunity to revisit on-budget programs each time federal funds are appropriated, regulatory programs often exist in

21. See Bull, supra note 3, at 265 (“Of the various regulatory reform efforts advocated by legal scholars and politicians in recent years, perhaps none holds greater promise than retrospective review of agency regulations, whereby agencies revisit existing rules to determine whether they remain appropriate in light of changed circumstances.”). Bull continues to explain how regulators’ cognitive biases, including the use of heuristics, have created swaths of regulations that do not optimally balance risk reduction and public benefits. Id. at 271–76.
perpetuity without a statutory requirement to revisit implementation. This regulatory “accretion” is the target of Bull’s proposal to initiate retrospective reviews via petitions submitted to federal agencies by private parties.

We agree that institutionalizing retrospective review is a worthwhile policy aim that has the potential to improve regulatory outcomes and public welfare. Bull’s proposal is valuable, but its application may be limited, for reasons we discuss below.

II. EVALUATING THE STATE OF RETROSPECTIVE REVIEW

For almost forty years, presidents and Congress have directed agencies to consider the effects of regulations once they are in place; however, such retrospective analysis has received much less attention and fewer resources than those directed at ex ante regulatory review. In 1978, President Carter directed agencies to “periodically review their existing regulations to determine whether they are achieving . . . policy goals.” President Reagan called on agencies to “perform Regulatory Impact Analyses of currently effective major rules,” and President Clinton’s Executive Order 12,866 directs each agency to “periodically review its existing significant regulations to determine whether any such regulations should be modified or eliminated so as to make the agency’s regulatory program more effective in achieving the regulatory objectives, less burdensome, or in greater alignment with the President’s priorities and . . . principles.”

Congress has also legislated retrospective review of regulations. The Regulatory Flexibility Act of 1980 requires agencies to review rules with significant economic impacts on small entities every ten years. The Regulatory Right to Know Act called on the Office of Management and Budget (OMB) to report annually on the benefits and costs of regulation and on recommendations for reform. More recently, retrospective review has found a proponent in President Barack Obama, who issued three executive orders during his first term directing agencies to conduct retrospective analysis of existing regulations.

23. Dudley, supra note 1, at 1.
On January 18, 2011, President Obama signed Executive Order 13,563, *Improving Regulation and Regulatory Review*, which instructs Executive Branch agencies to develop and submit to the Office of Information and Regulatory Affairs (OIRA) retrospective review plans “under which the agency will periodically review its existing significant regulations to determine whether any such regulations should be modified, streamlined, expanded, or repealed so as to make the agency’s regulatory program more effective or less burdensome in achieving the regulatory objectives.”

A few months later, President Obama issued Executive Order 13,579, which encourages independent regulatory agencies to develop and make public plans for retrospective review, and Executive Order 13,610, which emphasized that “further steps should be taken . . . to promote public participation in retrospective review.” These actions reinforce the bipartisan support for ex post review and the importance of establishing a culture of retrospective review within federal agencies.

**B. Incentives and Constituencies for Retrospective Review**

Despite these directives to conduct regulatory evaluation, procedures for doing so have not been institutionalized to the extent that ex ante regulatory impact analysis has been. This is likely partly due to incentives; OMB serves a gatekeeper role for new regulations, which compels regulating agencies to present analysis consistent with executive order requirements before they can issue new rules. On the other hand, once a regulation is issued, the consequence of not conducting ex post analysis is less problematic from the agency’s perspective in that the regulation will remain on the books. As noted above, Bull recognizes this and applies the insights of behavioral economics to understand why regulatory agencies may be reluctant to review and modify regulations once they are in place.

Bull is less attentive to the fact that, compounding this asymmetric incentive structure, regulated parties may be more motivated to prevent a potentially burdensome regulation from being implemented than to lobby

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32. Executive Orders governing regulatory oversight have generally not covered “independent regulatory agencies” (such as the Federal Communications Commission, the Securities and Exchange Commission, and the Consumer Product Safety Commission (CPSC)).
for regulation to be removed. Once a regulation is in place, it confers a competitive advantage on some parties, including those who have invested in compliance. Incumbents and other beneficiaries are thus less likely to support evaluation that may lead to changes or repeal.

This not only contributes to the lack of attention to retrospective review, but also raises questions about the effectiveness of Bull’s proposed solution, which relies on private interests initiating the review process via rulemaking petitions. Private parties are likely to petition only if it serves their private interest, which may not coincide with the public interest. As a result, it is important to identify alternative reforms that have the potential to institutionalize retrospective review without relying on the mixed incentives of private parties—or agencies—alone.

C. Diagnosing the Problem with Retrospective Review

Ex post review enables the government and the public to measure whether a particular rule has had its intended effect. However, waiting until after a regulation is already drafted, finalized, and implemented before planning ex post measurement can hamper retrospective review designs. For example, after a regulation has been in place for ten years, it may be too late to collect data crucial to evaluating its success.

In his report for


[Dimon] even pointed out that while margins may come down, market share may increase due to a ‘bigger moat’—We were surprised that regulatory risk was not mentioned as one of the key risks. In Dimon’s eyes, higher capital rules, Volcker, and OTC derivative reforms longer-term make it more expensive and tend to make it tougher for smaller players to enter the market, effectively widening JPM’s ‘moat.’ While there will be some drags on profitability—as prices and margins narrow—efficient scale players like JPM should eventually be able to gain market share. This last part is really interesting, and will be used by people who think that ultimately regulation serves to benefit, not encumber, existing players.


37. This is especially true due to the requirements of the Paperwork Reduction Act (PRA), which requires that OMB approve agency information collection in advance. OMB’s regulations implementing the PRA require agencies to:

Ensure that each collection of information . . . [i]nforms and provides reasonable notice to the potential persons to whom the collection of information is addressed of . . . [a]n estimate, to the extent practicable, of the average burden of the collection (together with a request that the public direct to the agency any comments concerning the accuracy of this burden estimate and any suggestions for reducing this burden).

5 C.F.R. § 1320.8(b)(3)(iii) (2015). Pursuant to the PRA, agencies must gain approval from OMB before collecting information from ten or more members of the public, which is—
the Administrative Conference of the United States, Joseph Aldy notes that while they are “subject to rigorous ex ante analysis,” economically significant rules “are not designed to produce the data and enable causal inference of the impacts of the regulation in practice.”

In its 2015 Draft Report to Congress on the Benefits and Costs of Federal Regulations, OMB states that such retrospective analysis can serve as an important corrective mechanism to the flaws of ex ante analyses. According to the Draft Report:

The result [of systematic retrospective review of regulations] should be a greatly improved understanding of the accuracy of prospective analyses, as well as corrections to rules as a result of ex post evaluations. A large priority is the development of methods (perhaps including not merely before-and-after accounts but also randomized trials, to the extent feasible and consistent with law) to obtain a clear sense of the effects of rules. In addition, and importantly, rules should be written and designed, in advance, so as to facilitate retrospective analysis of their effects, including consideration of the data that will be needed for future evaluation of the rules’ ex post costs and benefits.

OMB’s recommendations are bolstered by the academic literature on program evaluation. Randomized controlled trials are well-regarded tools used by program evaluators to understand the effect of different treatments on outcomes. However, as we discuss further below, where randomized trials are not feasible, pilot studies or approaches that allow for variation in regulatory treatments can serve as “quasi-experiments” that provide valuable information for evaluating outcomes and their causal links.

In their World Bank report, Gertler et al. conclude that the appropriate methods for conducting program evaluation, or retrospective review, should be identified “at the outset of a program, through the design of prospective impact evaluations that are built into the project’s implementation.” This allows evaluators to fit their evaluation methods to the program being reviewed, and to plan for review itself through the design and implementation of the program (or regulation).

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42. GERTLER ET AL., supra note 22, at xiii–xiv.
43. In his report to ACUS, Joseph Aldy also reinforces the importance of planning for retrospective review at the beginning of the rulemaking process:
One simple way for an agency to internalize review at the outset of a regulatory program is by writing the rules themselves to better enable ex post measurement, stating the problem that the rule is intended to address, and identifying quantifiable metrics that can be used to measure the effects of such a rule. The benefit of this approach is that it trains regulators to think prospectively about how to measure progress toward a regulatory goal and how to collect data to ensure accurate measurement. This approach has supporters both in Congress and in the Executive Branch.

Despite the obvious benefit of doing so, regulators do not write their rules to enable measurement ex post. In a recent evaluation of twenty-two high-priority rules proposed in 2014, Sofie E. Miller found that none included a plan to measure its effects after the fact. Even if regulators do

Well-designed regulations should enable retrospective analysis to identify the impacts caused by the implementation of the regulation. For a given select, economically significant rule, agencies should present in the rule’s preamble a framework for reassessing the regulation at a later date. Agencies should describe the methods that they intend to employ to evaluate the efficacy of and impacts caused by the regulation, using data-driven experimental or quasi-experimental designs where appropriate.

ALDY, supra note 24, at 6.

44. Recognizing this need, Senators Heidi Heitkamp (D-N.D.) and James Lankford (R-Okla.) have proposed the Smarter Regs Act of 2015 on July 21, 2015, which would require agencies to draft their rules in a way to enable better review after the fact. S. 1817, 114th Cong. (2015).

45. CPSC Commissioner Joseph P. Mohorovic stated the following:

Recently, I have been dismayed to see that one aspect of rule review I find especially promising—that of incorporating or embedding review criteria into rules during their formation—seems to be getting too little attention from the American administrative state. Indeed, one review by Sofie Miller of the Regulatory Studies Center at The George Washington University found quite simply that ‘agencies are not preparing new regulations with ex post review in mind.’ I would like to see CPSC lead our peer agencies in changing that culture. . . . The idea behind incorporating retrospective review models into rules from the outset—a prospective retrospective—is that designing a rule with an eye to how it would be evaluated in the future can improve the quality of evaluation and make the future iteration of the agency more likely to conduct that evaluation in the first place. Moreover, including review models into rules during their formation will help promote a culture of review and candid reflection throughout the agency.


not prospectively write a specific plan for retrospective review into their rules, simply including information on the most important components of measurement—e.g., what the rule is meant to accomplish and how progress toward that goal should be measured—would contribute greatly to their ability to evaluate results. Yet, Miller’s research finds that agencies do not fare particularly well on these measures either, indicating that prospective planning for retrospective review is an area ripe for growth (especially for independent agencies).17

III. COLLABORATIVE GOVERNMENT AND REGULATORY INERTIA

Bull argues that agencies are not well-positioned to make breakthroughs in retrospective review because they (1) are invested in perpetuating their regulatory systems;48 (2) have insufficient resources to invest in review;49 and (3) are not well-positioned to see how their rules interact with other agency rules.50 In the place of federal agencies, Bull envisions private entities gaining a broader role in initiating retrospective review by making use of petitions.51

Bull does not envision a statutory change to enable this action: the Administrative Procedure Act already provides private entities with the right to petition federal agencies, though agencies are not required to take action on the petitions.52 Instead he envisions private entities—namely, corporations—changing course and using petitions in a constructive manner to initiate retrospective review of existing rules.53

Bull’s collaborative governance proposal may yield better outcomes in some situations than others. In particular, if the objective of retrospective review is to streamline overly burdensome regulations, a petition process

47. Sofie E. Miller’s analysis finds that 64% of the rules examined included any statement of the problem the agency intended its regulation to address, but that only 36% of rules included any quantifiable, directional metrics by which to measure the rule’s effectiveness. See id. at 10–13. Miller further finds that only 23% of the rules examined include any reference to information collection to facilitate data gathering relevant to rulemaking outcomes. For independent agencies, the outlook is worse, with 0% of rules examined including metrics or data collection provisions. See id. at 17–18.
49. Id. at 282.
50. Id. at 282–83.
51. See id. 293–305.
52. 5 U.S.C. § 553(e) provides the public with the right to petition agencies for rulemaking; however, the Administrative Procedure Act does not specify how agencies are required to respond to these petitions, other than in a timely manner. See 5 U.S.C. § 555(b) (2012). For further reading see ACUS, RECOMMENDATION 2014-6, PETITIONS FOR RULEMAKING (2014), https://www.acus.gov/sites/default/files/documents/Final%2520Petitions%2520for%2520Rulemaking%2520Recommendation%252014%255D.pdf.
53. See Bull, supra note 3, at 306–09.
could be effective. For example, he suggests that petitions might propose “collaborative programs such as private standard-setting and first or third party certification of regulatory compliance.”\textsuperscript{54} Experience with compliance likely will indicate whether alternative approaches for ensuring regulatory goals are met.

Both OIRA\textsuperscript{55} and the Small Business Administration Office of Advocacy have solicited petitions for regulatory reform.\textsuperscript{56} For example, in its 2001 draft report to Congress on the benefits and costs of regulation, OIRA asked for “suggestions where the public interest would be served by updating, revising, or rescinding Federal regulations.”\textsuperscript{57} A review of the number and types of petitions received under these initiatives, the identity of the petitioners, the nature of their recommendations, and their ultimate disposition would be useful for understanding how effective a greater emphasis on retrospective evaluation driven by petitions might be.

A cursory review of the process suggests that the focus of the petitions was on reducing regulatory burden, which is often a stated goal of such review. However, if another objective of retrospective review is to evaluate whether regulatory objectives are actually being achieved and to learn from experience so as to improve regulation going forward, the petition process may be less likely to have meaningful impacts. We offer suggestions for institutionalizing retrospective evaluation that involves learning from experience below.

But even in the situations Bull cites favorably, a petition process should be used with caution. He presents convincing arguments for why regulators lack incentives to review and revise their regulations, but his Article is less appreciative of the possibility that the regulated parties on whom his proposal depends may also face disincentives to change the status quo. He suggests that, unlike agencies, corporations have no vested interest in preserving the existing regulatory regime.\textsuperscript{58} But this is often not true: regulations can confer competitive advantages on private parties, benefiting certain technologies or practices or imposing complex requirements that are harder for some firms to manage than others. Furthermore, once firms have made investments to comply with regulation, they gain no benefits when those requirements are removed; indeed, keeping the requirements in place acts as a barrier to entry for potential competitors. Given these

\textsuperscript{54} See id. at 265–66.
\textsuperscript{55} See generally OMB, \textit{Progress in Regulatory Reform} 58 (2004).
\textsuperscript{57} OIRA, OMB, \textit{Making Sense of Regulation} 7 (2001).
\textsuperscript{58} Bull, supra note 3, at 286.
incentives, it is not surprising that private entities are often much more concerned with ensuring that forthcoming regulations are not unnecessarily onerous than addressing existing regulatory burdens via retrospective review.\footnote{59}

A related concern with the petition process is that, to the extent that companies or industries do engage, their motivation may be to gain competitive advantage. Recognizing this, Bull suggests that regulators actively work to engage other parties representing non-industry interests in the review.\footnote{60} But this neglects the Stiglerian insight that the public interest, being diffuse, is not easily represented in a regulatory proceeding.\footnote{61} Indeed, narrow, private interests are often presented using public interest arguments.\footnote{62}

This more nuanced consideration of motivations for engaging in the regulatory process should give pause to a heavy emphasis on collaborative governance as a main mechanism for reform after regulations are in place. Once in effect, a regulation creates vested interests who may be better organized and have more at stake in continuing or expanding regulation than reformers have to reform it.


What all of these efforts have shown is that retrospective review of existing regulations is a challenging task, and one not readily susceptible to across-the-board, 'one-size-fits-all' approaches. Such reviews are not necessarily equally useful for all types of rules. For example, where rules involved high-sunk costs and high-transition costs, consideration of changes can itself be unhelpful. Moreover, new costs often have greater impacts than those from longstanding rules, to which regulated parties have already adapted. Nor should efforts to review old regulations distract from the vital need to focus on current and newly proposed rules—and a valid assessment of their costs and benefits—because the burdens associated with new rules are so often greater than those from the past.

\footnote{60. See Bull, supra note 3, at 314.}  \footnote{61. See Stigler, supra note 20 at 10–12.}  \footnote{62. See generally ADAM SMITH & BRUCE YANDLE, BOOTLEGGERS & BAPTISTS vii–viii (2014).}
IV. IDENTIFYING SOLUTIONS: ADDRESSING AND PREVENTING REGULATORY ACCRETION

A. Institutionalizing Retrospective Review

Bull is correct that regulatory programs are rarely subjected to rigorous evaluation and feedback. Most regulatory analyses rely on models and assumptions to make predictions about the risk reduction benefits that will accrue from a specific intervention, but rarely are those hypotheses evaluated based on real world evidence.63 Institutionalizing a requirement to evaluate whether the predicted effects of the regulation were realized would provide a powerful incentive to improve ex ante regulatory impact analyses, as well as improving regulations that are in place.64

President Obama’s executive orders ask agencies to review their regulations “to determine whether [they] should be modified, streamlined, expanded, or repealed so as to make the agency’s regulatory program more effective or less burdensome in achieving the regulatory objectives”65 however, because these and previous retrospective review guidelines did not change underlying incentives, they have had limited success.66 For example, as we have noted elsewhere,67 Section 812 of the Clean Air Act Amendments of 1990 (the Act) requires the Environmental Protection Agency (EPA) to assess the benefits and costs of the Act periodically,68 but these assessments have “relied on the same modeling [EPA] used for ex ante analysis, so [they have] not provided information necessary to validate estimates or underlying risk assessment assumptions and procedures.”69 They do not measure population changes with respect to the predicted outcome following the regulatory intervention. For example, they do not compare actual reductions in cancer rates to predicted reductions to determine if actual experience corroborates or challenges the hypothetical benefits. Statistical tools can test “how changes in inputs (such as exposure) propagate through a network of validated causal mechanisms to cause


64. See DUDLEY, supra note 1, at 2.


66. Dudley Statement, supra note 34.

67. See DUDLEY, supra note 63, at 35.


69. See DUDLEY, supra note 63, 35–36.
resulting changes in outputs (such as health effects).”\textsuperscript{70}

Bull’s proposal is constructive; soliciting greater public input may be effective in identifying and amending some regulations that are unnecessarily burdensome. However, relying solely on a petition process after regulations are implemented may not incentivize real reform to the regulatory system. More fundamental changes to how regulation is conducted in the United States are necessary if regulations are to target real risks that cannot be addressed privately in a cost-effective manner.

\textit{B. Stemming the Tide of Regulatory Accretion}

Bull’s Article examines how suboptimal targeting of risk by federal agencies can lead to regulatory accretion, and he offers a constructive suggestion for responding to unnecessarily burdensome regulations after they are in place.\textsuperscript{71} We argue below that if agencies planned better before issuing new regulations, fewer regulatory petitions would be needed.

Designing regulations from the outset in ways that allow variation in compliance could be a valuable way to understand the relationship between regulatory actions, hazards, and risks. A pilot study or “an experiment in which certain regulations would be imposed on some factories and not on others offers the real prospect of determining whether those regulations are useful.”\textsuperscript{72} Such quasi-experimental (QE) approaches would facilitate learning from experience in a way that implementing large-scale, irreversible regulatory programs would not.

Agencies should be required to include in proposed regulations a framework for empirical testing of assumptions and hypothesized outcomes. To incentivize more robust evaluation, they could be required to test the validity of risk-reduction predictions before commencing new regulation that relies on models. For example, for regulations aimed at reducing health risks from environmental factors, QE techniques should be used to gather and analyze epidemiology data and health outcome trends in different regions of the country and compare them against predictions.\textsuperscript{73}

Congress and OMB should reallocate resources from ex ante analysis to


\textsuperscript{71} \textit{See} Bull, \textit{supra} note 3, at 269–70.

\textsuperscript{72} \textit{John O. McGinnis, ACCELERATING DEMOCRACY} 112 (2013).

\textsuperscript{73} \textit{See} Cox, \textit{supra} note 70, at 3 (critiquing “EPA’s proposed determination that existing ozone [National Ambient Air Quality Standards] are not requisite to protect public health” because the EPA did not use “reliable scientific methods of causal analysis and prediction”); Dominici et al., \textit{supra} note 41, at 257–59 (arguing that quasi-experimental techniques are needed to understand better the relation between human health and regulation of air pollution from particles).
allow agencies to gather the information and evaluation tools necessary to validate ex ante predications. Shifting resources from ex ante analysis to ex post review would not only help with evaluation, but would improve our ex ante hypotheses of regulatory effects.\textsuperscript{74}

One of the biggest hurdles to successful retrospective review of regulations is the simple fact that rules are difficult to review—and especially so because they are not written to facilitate measurement ex post. It is inherently difficult to assess the impacts of a rule that does not specify what problem it is meant to address or how to measure its effects quantitatively. Recent research indicates that agencies do not fare well on these criteria: in one study, 64\% of rules examined clearly defined the problem, and only 36\% included directional, quantitative metrics.\textsuperscript{75} For rules proposed by independent regulatory agencies, the outlook is bleaker.\textsuperscript{76}

Reforming the rule-writing process has the potential to focus regulators’ attention on the intended outcomes of a rule and encourage data-gathering to substantiate any progress toward those outcomes, both crucial precursors of retrospective review.\textsuperscript{77} Recognizing this need, Senators Heidi Heitkamp (D-N.D.) and James Lankford (R-Okla.) have proposed the Smarter Re\textsuperscript{gs} Act of 2015,\textsuperscript{78} which would require agencies to include in major rules a framework for reassessing the rule, including the timeframe for reassessment,\textsuperscript{79} the metrics that should be used to gauge efficacy,\textsuperscript{80} and a plan to gather relevant data to compile these metrics.\textsuperscript{81}

\textbf{CONCLUSION}

Bull’s Article addresses a serious problem within the federal rulemaking process—the accretion of regulation with little evaluation of whether existing regulations are actually achieving their goals. Every year, federal agencies issue thousands of new regulations that they estimate will result in billions of dollars in both benefits and costs for Americans.\textsuperscript{82} Despite this


\textsuperscript{75} \textit{Miller}, supra note 46, 10–13.

\textsuperscript{76} \textit{Id.} at 17–18.

\textsuperscript{77} \textit{Id.} at 16–18.

\textsuperscript{78} S. 1817, 114th Cong. (2015).

\textsuperscript{79} \textit{Id.} § 2(f)(1)(D).

\textsuperscript{80} \textit{Id.} § 2(f)(1)(B).

\textsuperscript{81} \textit{Id.} § 2(f)(1)(C).

\textsuperscript{82} See OIRA, OMB, 2015 DRAFT REPORT TO CONGRESS ON THE BENEFITS AND
proliferation of regulatory activity, regulators seldom look back at existing rules to see whether they are, in fact, working as intended. That may be because agencies do not write their rules to enable measurement of results, and public policy and accountability suffer as a result.

Pointing to the problem of agency incentives and heuristics, Bull proposes a “collaborative governance” approach where non-governmental entities would petition for regulatory changes. He rightly acknowledges advantages that parties with on-the-ground knowledge would have in improving how regulations are implemented. But he neglects incentives of petitioners, ensuring with difficulty that the public interest is represented. His proposal also would focus on reducing excessive burdens of regulation, but perhaps not on improving regulatory outcomes. This is a larger objective and would require more fundamental institutional reforms that alter the way regulations are developed and enforced so that all concerned are continually learning from experience and focusing resources on effectively achieving the highest priority outcomes.

Because federal regulation is intended to accomplish such big goals—sometimes at a very high cost—it is important to review the rules on the books to see if they achieve the objectives that agencies claim. But it is hard to evaluate the effects of regulation if agencies do not write their rules to facilitate retrospective review.

Waiting until implementation to think about retrospective review may leave agencies without the resources and data they need to effectively evaluate their rules. For these reasons, it is necessary to think prospectively about retrospective review and, to that end, agencies should design their rules to facilitate experimentation and learning from experience, with clear metrics to aid the measurement of outputs and outcomes.