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Hearing on

The Federal Government on Autopilot: Delegation of Regulatory Authority to an Unaccountable Bureaucracy

Judiciary Committee Task Force on Executive Overreach

United States House of Representatives

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Introduction

Thank you Chairman King, Ranking Member Cohen, and Members of the Task Force for inviting me to share my research on the retrospective review of regulations, and how the review process can be improved. I am Senior Policy Analyst at the George Washington University Regulatory Studies Center, where I analyze the effects of regulation on public welfare and evaluate regulatory reforms. Recently, I researched the success of current and past retrospective review efforts and identified ways to improve these initiatives.

I appreciate the Task Force's interest in the rulemaking process, including retrospective review, and determining whether there are opportunities for Congress to improve it. My prepared statement includes the following points:

- A key component of an effective regulatory process is reviewing the effects of existing rules to evaluate whether they are accomplishing their intended goals, and to determine what effect they have on the regulated public. Retrospective review is a bipartisan reform effort that can improve both the quality of existing rules and of future rules by learning what works well in a regulatory context and what doesn't.
- Despite 40 years of bipartisan reform efforts, agencies still do not conduct effective retrospective review of their rules. More recent efforts to encourage *ex post* review have not resulted in a systematic culture of evaluation or large burden reductions for the regulated public.
- It is important to plan how to evaluate a rule at the outset of rulemaking: writing rules to facilitate later retrospective review can ensure effective data collection and encourage regulators to clearly identify (and think through) how the proposed rule will address the policy problem at hand. Agencies are not currently designing their rules at the outset to be measured, which compounds the difficulty of conducting effective retrospective review.

My recent working paper evaluating how well agencies design their rules for future review is attached as an addendum to this statement, as is my article with Susan Dudley in the *Administrative Law Review Accord* on retrospective review as a remedy for regulatory accretion.¹

¹ For additional perspectives on how retrospective review can address regulatory accretion, see Mandel & Carew, "Regulatory Improvement Commission: A Politically-Viable Approach to U.S. Regulatory Reform," Progressive Policy Institute, May 2013. http://www.progressivepolicy.org/wp-content/uploads/2013/05/05.2013-Mandel-Carew_Regulatory-Improvement-Commission_A-Politically-Viable-Approach-to-US-Regulatory-Reform.pdf

An Introduction to Retrospective Review

Retrospective review is a form of program evaluation that reviews the efficacy of a program or policy after implementation. The purpose of retrospective review is to evaluate whether a policy—in this case, a regulation—has had its intended effect, and whether it should be continued or revised. By examining the effects of existing rules, these reviews can inform policymakers on how best to allocate limited resources to accomplish broad social goals, like improved environmental quality or better human health, through regulation. Retrospective review can provide valuable feedback and learning that improves the design of future regulations.

While policymakers have the opportunity to revisit many federal programs each time federal funds are being appropriated, regulatory programs often exist in perpetuity without a statutory requirement to revisit implementation. Every year, federal agencies issue thousands of new regulations that both benefit and harm Americans. Despite the pace of regulatory activity, regulators seldom look back at existing rules to consider whether they are accomplishing their goals and resulting in the estimated public benefits and costs. That’s why President Obama, like presidents before him, encouraged federal regulatory agencies to review existing regulations and to “modify, streamline, expand, or repeal them in accordance with what has been learned.”²

Regulations often receive critical analysis *before* promulgation, usually in the form of benefit-cost analysis. This prospective analysis describes the anticipated results of a proposed rule, including unquantifiable effects. However, regulatory agencies have a mixed record on *ex post* review despite their “long track record of prospective analysis of proposed regulations that can address these questions.”³

Past Retrospective Review Efforts

For almost 40 years, presidents and Congress have directed agencies to consider the effects of regulations once they are in place;⁴ however, such retrospective analysis has received much less attention and fewer resources than those directed at *ex ante* regulatory review.⁵ In 1978,

² Executive Order 13563. “*Improving Regulation and Regulatory Review*.” January 18, 2011.

<https://www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf>

³ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. <https://www.acus.gov/report/retrospective-review-report>

⁴ Susan E. Dudley. “A Retrospective Review of Retrospective Review.” The George Washington University Regulatory Studies Center. May 2013. Page 1.

<http://regulatorystudies.columbian.gwu.edu/files/downloads/20130507-a-retrospective-review-of-retrospective-review.pdf>.

⁵ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. <https://www.acus.gov/report/retrospective-review-report>.

President Carter directed agencies to “periodically review their existing regulations to determine whether they are achieving ... policy goals.”⁶ President Reagan called on agencies to “perform Regulatory Impact Analyses of currently effective major rules,”⁷ and President Clinton’s Executive Order 12866 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.”⁸

The law also mandates the retrospective review of certain regulations. The Regulatory Flexibility Act of 1980 requires agencies to review rules with significant economic impacts on small entities every ten years.⁹ Further, although less specific, the Regulatory Right to Know Act called on the Office of Management and Budget (OMB) to report annually on benefits and costs of regulation and make recommendations for their reform.¹⁰

More recently, President Obama issued no fewer than three executive orders directing agencies to conduct retrospective analysis of existing regulations.¹¹ These executive orders instruct agencies to submit regular plans for the retrospective review of their existing significant regulations “to determine whether any such regulations should be modified, streamlined, expanded, or repealed,” and encourage independent agencies to participate in the review process.¹²

⁶ Executive Order 12044, 43 Fed. Reg. 12661 (March 24, 1978). Revoked February 17, 1981 by Exec. Order No. 12291, <http://www.presidency.ucsb.edu/ws/?pid=30539>.

⁷ Executive Order 12291, 46 Fed. Reg. 13193 (February 19, 1981). Revoked October 4, 1993, by Exec. Order No. 12866, <http://www.archives.gov/federal-register/codification/executive-order/12291.html>.

⁸ Executive Order 12866 §5(a), 3 C.F.R. 638, 644 (1994). <http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf>

⁹ *Regulatory Flexibility for Small Entities Section 610 Reviews*, The United States Environmental Protection Agency (2015), <http://www.epa.gov/reg-flex/section-610-reviews>.

¹⁰ U.S. Office of Management and Budget. *Validating Regulatory Analysis: 2005 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. (2005)

¹¹ Executive Order 13563. “*Improving Regulation and Regulatory Review*.” January 18, 2011. <https://www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf>

Executive Order 13579. “*Regulation and Independent Regulatory Agencies*.” July 11, 2011. <https://www.gpo.gov/fdsys/pkg/FR-2011-07-14/pdf/2011-17953.pdf>

Executive Order 13610. “*Identifying and Reducing Regulatory Burdens*.” May 10, 2012. <https://www.gpo.gov/fdsys/pkg/FR-2012-05-14/pdf/2012-11798.pdf>

¹² 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).

State of Retrospective Review

Despite these efforts, regulations continue to accumulate without adequate *ex post* examination¹³ and procedures for doing so have not been institutionalized to the extent that *ex ante* regulatory impact analysis has been.¹⁴ Even though policymakers within the Executive and Legislative Branches reveal a continuing interest in retrospective review of agency rules,^{15,16} 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.¹⁷

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. In addition, conducting such analysis can be difficult—especially because, as discussed later in this statement, agencies are not designing their rules at the outset to facilitate retrospective review. As noted by Reeve Bull in a recent Administrative Law Review article, the insights of behavioral economics may also help us understand why regulatory agencies may be reluctant to review and modify regulations once they are in place.¹⁸

Improving Existing Efforts

Ex post review makes it possible for 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 can hamper retrospective review. For example, after a

¹³ Reeve T. Bull, “Building a Framework for Governance: Retrospective Review and Rulemaking Petitions.” 67 *Administrative Law Review*. (2015).

¹⁴ Susan E. Dudley. *Reducing Unnecessary and Costly Red Tape through Smarter Regulations: Hearing Before the Joint Economic Committee*, 114th Congress (2013).
https://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/2013_06_26_Dudley_JEC_statement.pdf

¹⁵ In the Legislative Branch, for example, Sens. Heidi Heitkamp (D-N.D.) and James Lankford (R-Okla.) have proposed the Smarter Regulations Act of 2015 (S. 1817) on July 21, 2015, which would require agencies to draft their rules in a way to enable better review after the fact. Smarter Regulations Through Advance Planning and Review Act, S. 1817, 114th Cong. (2015), <https://www.congress.gov/bill/114th-congress/senate-bill/1817>.

¹⁶ Consumer Product Safety Commission, *Statement of Commissioner Joseph P. Mohorovic Regarding Retrospective Review in the Commission's Rulemaking Under Section 108 of the Consumer Product Safety Improvement Act of 2008 (CPSIA)* (2015), <http://www.cpsc.gov/en/About-CPSC/Commissioners/Joseph-Mohorovic/Commissioner-Mohorovic-Statement/Statements/Statement-of-Commissioner-Joseph-P-Mohorovic-Regarding-Retrospective-Review-in-the-Commissions-Rulemaking-Under-Section-108-of-the-Consumer-Product-Safety-Improvement-Act-of-2008-CPSIA/>

¹⁷ Sofie E. Miller. “EPA’s Retrospective Review of Regulations: Will It Reduce Manufacturing Burdens?” *Engage: The Journal of the Federalist Society Practice Groups*, July 2013, page 4. <http://www.fed-soc.org/publications/detail/epas-retrospective-review-of-regulations-will-it-reduce-manufacturing-burdens>

¹⁸ Reeve T. Bull, “Building a Framework for Governance: Retrospective Review and Rulemaking Petitions.” 67 *Administrative Law Review*. (2015).

regulation has been in place for 10 years it may be too late to collect data crucial to evaluating its effect. In his report for the Administrative Conference of the United States, Harvard professor 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.”¹⁹ This design flaw makes it difficult to evaluate rules after they are already in place.

Multiple government documents already instruct agencies to plan prospectively for retrospective review. In his implementing 2011 memo on retrospective review, then-Administrator of the Office of Information and Regulatory Affairs Cass Sunstein stated that “future regulations should be designed and written in ways that facilitate evaluation of their consequences and thus promote retrospective analyses and measurement of ‘actual results.’”²⁰ This emphasis is repeated in a memo Sunstein issued later that year, “Final Plans for Retrospective Analysis of Existing Rules.”

In its 2015 *Final 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 that 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.²¹

These recommendations are bolstered by the academic literature on program evaluation.^{22,23} Waiting until implementation to think about retrospective review may leave agencies without the

¹⁹ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. Page 9. <https://www.acus.gov/report/retrospective-review-report>

²⁰ United States. Office of Management and Budget. Office of Information and Regulatory Affairs. *MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES: Retrospective Analysis of Existing Significant Regulations*. By Cass Sunstein. April 25, 2011.

²¹ United States. Office of Management and Budget. *2015 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. March 10, 2016. https://www.whitehouse.gov/sites/default/files/omb/infoereg/2015_cb/2015-cost-benefit-report.pdf

²² Paul J. Gertler, Sebastian Martinez, Patrick Premand, Laura B. Rawlings, and Christel M. J. Vermeersch. “Impact Evaluation in Practice.” *The World Bank*. 2011. http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1295455628620/Impact_Evaluation_in_Practice.pdf

resources and data they need to effectively review their rules. For these reasons it is necessary to think prospectively about retrospective review and, to that end, that agencies should design their rules to better aid measurement of actual results.

Prospectively Planning to Evaluate Regulation

In 2014, the George Washington University Regulatory Studies Center evaluated all high priority proposed rules issued that year to determine whether they were designed in a manner that would make their outcomes measurable *ex post*. As a part of this evaluation, the Center assessed whether agencies included a discussion of retrospective review as required by the President's executive orders and the Sunstein memoranda. We also submitted comments to the agencies providing suggestions on how best to incorporate plans for retrospective review at the time of each proposed rule's issuance.

Based on our review of the rules proposed in 2014, agencies are not designing their rules to facilitate *ex post* measurement, and are not prospectively planning for retrospective review at the outset of rulemaking: of all proposed rules examined, not one included a plan for retrospective review.

However, even without an explicit plan, proposed rules may contain elements that could facilitate *ex post* analysis. To evaluate whether the proposed rules were “designed and written in ways that facilitate evaluation of their consequences,” we measured each one against five criteria:

- Did the Agency clearly identify the problem that its proposed rule is intended to solve, and do the policies that the Agency proposes address this problem?
- Did the Agency provide clear, measurable metrics that reviewers can use to evaluate whether the regulation achieves its policy goals?
- Did the Agency write its proposal to allow measurement of both outputs and outcomes to enable review of whether the standards directly result in the outcomes that the agency intends?
- Did the Agency commit to collecting information to assess whether its measurable metrics are being reached?
- Did the Agency provide a clear timeframe for the accomplishment of its stated metrics and the collection of information to support its findings?

In general, agencies were better at considering these elements that could support future evaluation of the effects of their rules. Agencies were best at identifying the problems that their

²³ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. Page 6. <https://www.acus.gov/report/retrospective-review-report>

rules were intended to address and worst at establishing timeframes for review and identifying linkages between proposed standards and their outcomes. Despite the importance of identifying how to measure the success of a rule, only 36% of rules included quantitative metrics, and only 22% included any plans to collect data that could be used to measure regulatory outcomes.

On all criteria, the Environmental Protection Agency, Department of Transportation, and the Department of Energy generally scored the best, and independent agencies (including the National Labor Relations Board, the Consumer Financial Protection Bureau, and the Federal Reserve Board) consistently scored the worst. While almost three quarters of executive branch rules identified a problem, only one quarter of independent agency rules did. Further, no independent agency rules met any of the other four criteria for prospectively planning for retrospective review. While the sample of independent agency rules was small, this finding—while it should be interpreted with caution—may be indicative of a broader trend for independent agency rules.²⁴

Recommendations

Based on these findings, agencies should strengthen their efforts to prospectively plan for retrospective review—especially independent agencies. In order to improve prospects for retrospective review, we recommend the following.

- Agencies should clearly identify and quantify the directional goals of their rules. Being clear about how to measure a rule’s goals increases transparency by letting the public know which benefits to expect in return for the opportunity costs incurred by new regulation.
- Agencies should plan prospectively for information collection that will support *ex post* measurement, and make use of existing agency data to measure outcomes. Without data on key outcomes, there is no way to measure a rule’s results. By planning ahead for information collection, agencies can pave the way for future review.
- Agencies should establish clear linkages between proposed standards and expected outcomes. Given the enormous benefits—and, sometimes, enormous costs—that are on the line, agencies should prioritize establishing how the standards it proposes causes the benefits that are meant to result.

These changes would provide agencies and the public with better information about the effects of regulation and how to structure future regulatory programs to achieve better results while reducing burdens on the regulated community.

²⁴ Arthur Fraas & Randall Lutter, “On the Economic Analysis of Regulations and Independent Regulatory Commissions.” *Administrative Law Review*, Vol. 63 pp. 213 - 241, Special Edition. 2011.

Learning from Experience: Retrospective Review of Regulations in 2014

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ABSTRACT

Through a series of Executive Orders, President Obama has encouraged federal regulatory agencies to review existing regulations “that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned.” Evaluating whether the intended outcomes of regulations are met *ex post* can be challenging, so multiple government guidelines instruct agencies to incorporate retrospective review plans into their proposals during the rulemaking process. To support this effort, the George Washington University Regulatory Studies Center examined significant regulations proposed in 2014 to assess whether they included plans for retrospective review, and provided recommendations for how best to do so. This paper finds that, despite these guidelines, agencies are not planning prospectively for *ex post* analysis of their rules and provides agencies with three recommendations to facilitate transparency, public accountability, and measurement of their rules’ success.

¹ This comment reflects the views of the author, and does not represent an official position of the GW Regulatory Studies Center or the George Washington University. The Center’s policy on research integrity is available at <http://regulatorystudies.columbian.gwu.edu/policy-research-integrity>.

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Learning from Experience: Retrospective Review of Regulations in 2014³

October, 2015

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Background

In 2014, the George Washington University Regulatory Studies Center launched a yearlong effort to evaluate high priority proposed rules to determine whether it was designed in a manner that would make its outcomes measurable *ex post*. As a part of this Retrospective Review Comment Project, the Regulatory Studies Center examined significant proposed regulations to assess whether agencies included a discussion of retrospective review, and submitted comments on the rulemaking record providing suggestions on how best to incorporate plans for retrospective review at the time of the rule's issuance.

While agencies commonly use prospective evaluation to estimate what the effects of their regulations will be (typically in the form of a benefit-cost analysis), they do not typically use this analysis to measure the effects of their rules after implementation, or to design their rules to aid retrospective review.

As discussed in more detail below, to facilitate meaningful retrospective review after the promulgation of a final rule, multiple government guidelines instruct agencies to incorporate retrospective review plans into their proposals during the rulemaking process. However, based on our review of the rules proposed in 2014, agencies are not designing their rules to facilitate *ex post* measurement, and are not prospectively planning for retrospective review at the outset of rulemaking.

Retrospective Review

Retrospective review is a form of program evaluation that reviews the efficacy of a program or policy after implementation. The purpose of retrospective review is to evaluate whether a

³ This paper was originally presented as a draft title "Evaluating Retrospective Review of Regulations in 2014" at the Society for Benefit-Cost Analysis Conference, "Panel A.8: Retrospective Review of Federal Regulations," in February 2015.

⁴ The George Washington University Regulatory Studies Center appreciates the generosity of Mr. Bartley Madden, whose gift in 2014 supported the Retrospective Review Project.

policy—in this case, a regulation—has had its intended effect, and whether it should be continued or expanded. By examining the effects of existing rules, these reviews can inform policymakers on how best to allocate scarce societal resources to accomplish broad social goals, like improved air quality or wellbeing, through regulation. Retrospective review can provide valuable feedback and learning that will improve the design of future regulations.

In a World Bank report on impact (program) 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.⁵

This argument makes especial sense in the case of regulation. While policymakers have the opportunity to revisit on-budget programs each time federal funds are being appropriated, regulatory programs often exist in perpetuity without a statutory requirement to revisit implementation.

Regulations often receive critical analysis *before* promulgation, usually in the form of benefit-cost analysis. This prospective analysis details the anticipated results of a proposed rule, including costs, benefits, and unquantifiable effects. While agencies often provide a wealth of information on the anticipated effects of their rules, they seldom return to a rule to evaluate whether the benefits and costs they anticipated actually materialized. In his report to the Administrative Conference of the United States (ACUS), Joseph Aldy writes that federal regulatory agencies have a mixed record on *ex post* review, despite their “long track record of prospective analysis of proposed regulations that can address these questions.”⁶

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.

⁵ Paul J. Gertler, Sebastian Martinez, Patrick Premand, Laura B. Rawlings, and Christel M. J. Vermeersch. “Impact Evaluation in Practice.” *The World Bank*. 2011. http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1295455628620/Impact_Evaluation_in_Practice.pdf

⁶ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. <https://www.acus.gov/report/retrospective-review-report>

Executive Orders

On January 18, 2011, President Obama signed Executive Order 13563, *Improving Regulation and Regulatory Review*, which reaffirmed the regulatory principles and structures outlined in President Clinton's Executive Order 12866. In addition to the regulatory philosophy laid out in EO 12866, EO 13563 instructs agencies to

consider how best to promote retrospective analysis of rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned. Such retrospective analyses, including supporting data, should be released online whenever possible.

EO 13563 additionally 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.”

On July 14, 2011, President Obama took another step toward retrospective review when he issued Executive Order 13579 encouraging independent regulatory agencies to develop and make public plans for retrospective review of their regulations.⁷

Following these two Executive Orders, OIRA Administrator Cass Sunstein issued guidance to the heads of executive branch agencies and independent regulatory commissions with instructions for implementation of the Executive Order’s requirements. The memorandum emphasizes the importance of “maintaining a consistent culture of retrospective review and analysis” in government.⁸ The guidance instructs agencies to use the principles established in EO 13563 §1 – 5 to orient their thinking during the process of retrospective analysis and specifies elements their review plans should include, and timelines for sharing them with the public.

On May 10, 2012, President Obama issued Executive Order 13610, *Identifying and Reducing Regulatory Burdens*, which emphasized that “further steps should be taken, consistent with law, agency resources, and regulatory priorities, to promote public participation in retrospective

⁷ 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).

⁸ United States. Office of Management and Budget. Office of Information and Regulatory Affairs. *MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES: Retrospective Analysis of Existing Significant Regulations*. By Cass Sunstein. April 25, 2011.
<https://www.whitehouse.gov/sites/default/files/omb/memoranda/2011/m11-19.pdf>

review, to modernize our regulatory system, and to institutionalize regular assessment of significant regulations.”⁹

This *ex post* review makes it possible for 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 can hamper retrospective review designs. For example, after a regulation has been in place for 10 years it may be too late to collect data crucial to evaluating its success. In his ACUS report, 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.”¹⁰

Waiting until implementation to think about retrospective review may leave agencies without the resources and data they need to effectively review their rules. For these reasons, we argue that it is necessary to think prospectively about retrospective review and, to that end, that agencies should design their rules to better aid measurement of outputs and outcomes.

Incorporating Retrospective Review into NPRMs

In his implementing memo on retrospective review, Sunstein states that “future regulations should be designed and written in ways that facilitate evaluation of their consequences and thus promote retrospective analyses and measurement of ‘actual results.’”¹¹ This emphasis is repeated in his June 14, 2011 memo, “Final Plans for Retrospective Analysis of Existing Rules.”

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

⁹ Executive Order 13610, “Identifying and Reducing Regulatory Burdens.” May 10, 2012.

¹⁰ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. Page 9. <https://www.acus.gov/report/retrospective-review-report>

¹¹ United States. Office of Management and Budget. Office of Information and Regulatory Affairs. *MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES: Retrospective Analysis of Existing Significant Regulations*. By Cass Sunstein. April 25, 2011.

analysis of their effects, including consideration of the data that will be needed for future evaluation of the rules' ex post costs and benefits.¹²

These recommendations are bolstered by the academic literature on program evaluation. 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.”¹³ This allows evaluators to better 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). In his report to ACUS, Aldy also reinforces the importance of planning for retrospective review at the beginning of the rulemaking process:

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.¹⁴

In line with the requirements of EO 13563, OMB’s implementation memo, the 2014 Report to Congress, and the principles of designing effective impact evaluation, it is clear that agencies should incorporate specific plans for retrospective review and *ex post* evaluation into the text of their final rules.

Despite these requirements, our review reveals that agencies are not preparing new regulations with *ex post* review in mind. Of the 22 regulations we examined in 2014, none included a plan to conduct retrospective review of the rule after implementation. However, even without an explicit plan, proposed rules may contain elements that could facilitate *ex post* analysis (discussed in the next section, *Methodology*). In comments filed on the rulemaking record we addressed the adequacy of those elements for facilitating *ex post* learning.

¹² United States. Office of Management and Budget. *2015 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*. October 16, 2015.

¹³ Paul J. Gertler, Sebastian Martinez, Patrick Premand, Laura B. Rawlings, and Christel M. J. Vermeersch. “Impact Evaluation in Practice.” *The World Bank*. 2011.
http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1295455628620/Impact_Evaluation_in_Practice.pdf

¹⁴ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. Page 6. <https://www.acus.gov/report/retrospective-review-report>

Methodology

Selecting Rules for Review

The goal of this project was to assess how well agencies planned prospectively to review their most significant rules. Thus our sample began with *economically significant* rules, as defined by Executive Order 12866. These are regulatory actions issued by executive branch agencies that are expected to have “an annual effect on the economy of \$100 million or more, or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities.” OMB uses this threshold to determine which rules are economically significant, as opposed to other types of significance. For example, a rule not meeting the \$100 million impact threshold is a “significant” rule if it raises novel legal or policy issues.

Our sample covers proposed regulations published in the Federal Register during calendar year 2014 for which comments were due in 2014. The sample excludes economically significant proposed rules that were supplemental notices of proposed rulemaking.

Our sample also excludes “transfer rules,” which transfer benefits or monies from one group or entity to another.¹⁵ For example, the Department of Health and Human Services (HHS) proposed 14 economically significant transfer rules within the parameters of our study, but because these rules defined benefit payments and services rendered, they were excluded from this research. Another rule, in which the Department of Education (ED) proposed to amend requirements for a school grant program, also fell under the category of “transfer rules” and was not assessed in this analysis. Instead, our focus was on rules that were likely to have a significant impact on private entities.

The sample does include some notable rules that agencies classified as “significant” but not as “economically significant.” For example, EPA did not classify its proposed rule setting carbon dioxide emissions standards for new power plants as “economically significant.” We still included this rule in our review because the rule was a component of the agency’s historic Clean Power Plan to regulate carbon emissions. Four additional “other significant” rules were also selected for inclusion in this review due to high priority or interest.

Independent Agency Rules

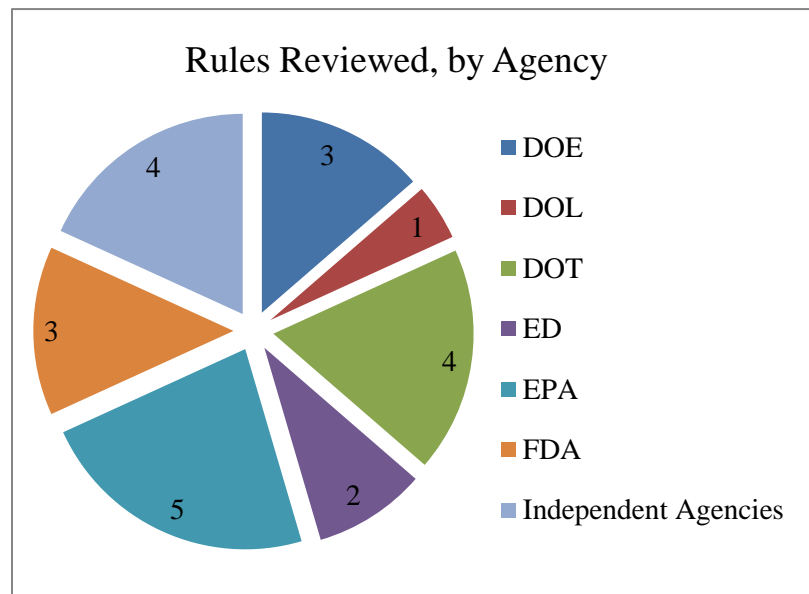
Relying exclusively on rules that meet the EO 12866 definition of “economically significant” would only cover executive branch agencies and would exclude independent regulatory agencies

¹⁵ See discussion of transfer payments in OMB Circular A-4: United States. Office of Management and Budget. TO THE HEADS OF EXECUTIVE AGENCIES AND ESTABLISHMENTS: Regulatory Analysis. September 17, 2003. Page 38.

like the Consumer Financial Protection Bureau (CFPB), the Securities and Exchange Commission (SEC), and the National Labor Relations Bureau (NLRB). The Congressional Review Act established a roughly equivalent definition for “major” rules that encompasses independent agency rules; however, rules are only determined to be “major” after they are finalized, so this definition was not useful for identifying which *proposed* rules to examine.

Due to these limitations, we identified which independent agency rules to examine based on staff evaluation of the potential significance of the rule. Staff evaluation was based on assessment of the proposed rule text and accompanying news from media outlets and trade associations about the import of the proposal, along with weighing staff expertise on relevant issues in rulemaking. For example, our sample includes the NLRB’s proposed Representation Case Procedures rule because it was identified as a significant proposal by news outlets and received sustained coverage.

Ultimately, we examined twenty-two separate proposed rules, including four independent agency rules. Three of the independent agency rules we examined were proposed by financial regulatory agencies, and the fourth was issued by the NLRB. The chart below displays the composition of the rules we examined by promulgating agency.



Identifying information for each of the rules reviewed is listed in the Appendix to this paper.

Findings

To evaluate whether the proposed rules were “designed and written in ways that facilitate evaluation of their consequences,” we measured each one against five criteria:

- Did the Agency clearly identify the problem that its proposed rule is intended to solve, and do the policies that the Agency proposes address this problem?
- Did the Agency provide clear, measurable metrics that reviewers can use to evaluate whether the regulation achieves its policy goals?
- Did the Agency write its proposal to allow measurement of both outputs and outcomes to enable review of whether the standards directly result in the outcomes that the agency intends?
- Did the Agency commit to collecting information to assess whether its measurable metrics are being reached?
- Did the Agency provide a clear timeframe for the accomplishment of its stated metrics and the collection of information to support its findings?

To evaluate whether the agency met each of the above standards, we reviewed the preamble of the proposed rule. In some cases, we also evaluated the proposal’s regulatory impact analysis (RIA) for further clarification, although typically our evaluation was limited to text published in the Federal Register. For each of the rules examined, we filed a public comment with the agency, providing an assessment of how well the proposed rule fared on each of the metrics, and offering recommendations for how the agency could improve its capacity for retrospective review by planning prospectively to measure the effects of its rule.

Overall, agencies fared best at identifying the problem their rule is intended to address: almost two thirds of the rules evaluated met this criteria. Most of the rules we reviewed in 2014 did not perform well on the other criteria, however. For example, just over one third of the rules included any metrics to evaluate the rules’ success, and less than one quarter of rules included any information collection to facilitate measurement. None of the rules examined included any discussion of linkages between proposed standards and intended outcomes or a potential timeframe for review. Our findings are expressed in the table below.

Percent of Rules that Met Criteria for Prospective Retrospective Review	
Problem identified	64%
Metrics	36%
Measuring linkages	0%
Information collection	23%
Timeframe	0%

The reasoning behind each of the criteria and more information on how agency rules were measured are explained in the sections below.

Identifying the Problem

Problem identification is crucial to the formulation of any policy. Without knowledge of the problem that the agency is trying to address, the public cannot assess whether the policy or regulation at hand has had the intended effect, which is key in retrospectively evaluating regulation.

Overall the rules issued in 2014 fared best on this metric: 64% of the rules reviewed identified the problem they were attempting to solve. This is likely because problem identification was institutionalized in 1993 by President Clinton's Executive Order 12866. The first of the "Principles of Regulation" in EO 12866 makes it clear that, as a first step, agencies must be able to identify the problem that justifies government action through regulation:

Each agency shall identify the problem that it intends to address (including, where applicable, the failures of private markets or public institutions that warrant new agency action) as well as assess the significance of that problem.

Problem identification practices vary from agency to agency. For example, in proposed rules establishing energy conservation standards for appliances, the Department of Energy (DOE) consistently identifies the problem its rule is intended to address in a specific section of the rule preamble, entitled "Review Under Executive Orders 12866 and 13563."¹⁶ In its proposed rules, DOE specifically outlines in that section how agencies are compelled to state the problem they seek to address, and lists the problems that DOE is attempting to solve. However, other agencies do not typically report the problem being regulated with as much consistency as DOE. For example, while the Environmental Protection Agency (EPA) does not devote an entire section to problem identification in its preamble for proposed emissions standards for wood heaters, the agency does reiterate throughout that "pollution from wood heaters is a significant national air pollution problem and human health issue."¹⁷ These statements are clear enough that they indicate the agency in question has actually identified a problem for its regulation to address.

However, many agencies still fell short of this basic standard. For example, in an RIA underpinning a proposed rule for the sanitary transportation of food, the Food and Drug Administration (FDA) cited the enabling statute as the need for its rule. While the FDA is certainly compelled by statute to issue regulations for the sanitary transportation of food, the agency should be able to identify an actual problem in society that its rule is intended to address. It should be no surprise that every agency that failed to identify a problem also failed to illustrate the metrics that could be used to assess whether that problem was solved following regulation.

¹⁶ See, for example, 78 FR 64132.

¹⁷ 79 FR 6329

Additional complications arise for agencies that do not provide a clear problem statement. For example, while the National Labor Relations Bureau (NLRB) repeatedly referenced the *goals* of its proposed Representation Case Procedures rule, and the problem(s) its rule is/are intended to address could ostensibly be inferred from those goals, the Bureau does not offer enough information on the current state of the issue for an observer to know whether a problem exists. As explored in the next section, there is not always a clear relationship between desired outcomes of a rule and the problem a rule is intended to address. Because of this difficulty, inferring the problem from the rule's goals would assume that the goals of the regulation were directly related to that problem (an assumption that is not always true).

Problems Disconnected from Standards

As noted above, while many agencies successfully identified a problem that their regulation was intended to address, in many cases the problem identified was not related to the rules the agency proposed. For example, in many of DOE's proposed energy efficiency standards, the department identifies inadequate or asymmetric information about potential energy savings as the problem to be addressed.

However, the standards themselves do not address information provision in any way; instead, these rules ban products from the marketplace. In such cases, either DOE has identified the wrong problem, or DOE's problem is not addressed by its standards. Both cases are worrying, and impede the purposes of retrospective review by disconnecting the actual effects of a rule from its intended (or stated) purpose.

The same issue arose in the evaluation of an EPA rule establishing greenhouse gas (GHG) emission standards for new power plants. The problem that EPA identified was the threat GHG emissions pose to the American public's health and welfare when they contribute to climate change. However, EPA's analysis assumes that no additional coal-fired power plants will be built, in which case the rule poses no costs and no benefits to the public.

This assumption presents some difficulty for evaluating the success of EPA's rule, and contradicts some of the outcomes that EPA states will result from its standards. For example, if this assumption is correct, then the rule will not result in any reduction in CO₂ emissions from coal-fired or natural gas-fired power plants. This is problematic because the entire reason EPA proposed the rule was to address these stationary source emissions, and if market factors are already addressing these emissions satisfactorily, there is no remaining problem for this standard to address.

It is worth evaluating whether the standards that agencies propose are responsive to the problems they identify. However, this paper does not address that issue, other than to mention it as a caveat when interpreting the significance (or lack thereof) of the number of regulations in which agencies successfully identified a problem.

Measurement Criteria

In order to measure the success of any rule following implementation, it is necessary for the agency to clearly define what constitutes a “success.” Any stated metrics of success should be linked to the problems identified, and measure the extent to which the proposed requirements actually reduce the problems identified. In none of the rules reviewed did agencies state a clear list of metrics to use for evaluating whether the rule had succeeded *ex post*. However, in many cases, potential measures or intended directional behaviors could be inferred from agency analyses and regulatory texts (e.g. decreases in litigation, decreases in emissions, etc.).

Some regulatory outcomes were more measurable than others, but in very few cases did the agency provide objective measures that could be used to evaluate the success of its rule. When agencies did list quantifiable measures, we scored the rule as providing metrics, even if the agency did not list measures for each of the criteria. Despite the leniency of this measure, only 8 of the rules evaluated (36%) were scored as including measurement criteria.

Agencies that successfully identified quantifiable goals for their regulations include DOE, and within the Department of Transportation (DOT), the National Highway Traffic Safety Administration (NHTSA) and the Pipeline and Hazardous Material Safety Administration (PHMSA). This concentration may indicate that DOT has an advantage over other agencies for the purposes of defining and measuring metrics for its rules.

As an example of a proposed rule that included quantifiable metrics, DOT projects that its rule requiring electronic logging of hours driven by truckers could prevent between 1,425 to 1,714 crashes, and save between 20 and 24 lives per year.¹⁸ In addition, DOE expects its rule setting efficiency standards for commercial ice makers to save 0.286 quads of cumulative energy over the first 30 years of compliance.¹⁹ These metrics indicate both the direction and the magnitude of change that the agency anticipates.

Measure Linkages

As agencies commit to measuring the effects of their rules, they should also be aware of mediating factors that may have accomplished goals in the absence of the rule, or undermined achievement of the stated metrics. Understanding the counterfactual and determining linkages between the rule and the measured outcomes is necessary to ensure that the policy itself resulted in the desired outcomes, rather than other factors beyond the agencies’ control.

As Aldy writes in his ACUS report, “Most economically significant regulations, while subject to rigorous *ex ante* analysis, are not designed to produce the data and enable causal inference of the

¹⁸ 79 FR 17659

¹⁹ 79 FR 14849

impacts of the regulation in practice.”²⁰ Designing regulations to produce this information can give us important information about whether the outcomes we are seeking are caused by the regulation in question, rather than other factors. This helps us to avoid ineffective policies and to achieve outcomes that cause increases in social welfare.²¹

In their World Bank report, Gertler et al. emphasized the importance of identifying causal pathways, rather than simply assuming that government programs result in outcomes:

Finally, we strongly encourage policy makers and program managers to consider impact evaluations in a logical framework that clearly sets out the causal pathways by which a program works to produce outputs and influence final outcomes, and to combine impact evaluations with monitoring and complementary evaluation approaches to gain a full picture of performance.²²

However, none of the regulations examined included a mechanism to assess causal effects. This is no surprise: establishing linkages between regulations and their intended outcomes is a lofty goal. Yet, agencies’ *ex ante* regulatory impact analysis often predict that lofty health and safety outcomes will result from their standards. Given the enormous benefits—and, sometimes, enormous costs—that are on the line, agencies should prioritize establishing strong linkages between the rules they issue and the benefits that are meant to result.

While no agencies included linkages, some rules included a striking absence of linkages to such an extent that they are worth noting here as cautionary tales. EPA’s proposed rule establishing GHG emission standards for new power plants is a case in point of the agency neglecting to account for factors outside the agency’s control when assessing regulatory benefits. For example, as mentioned previously, EPA’s assumed counterfactual was that no additional coal-fired power plants would have been built in the absence of the rule, primarily due to market factors such as the falling price of natural gas and the resulting transition from coal to gas. However, if this is true, EPA can establish no linkage between its rule and its goal of reducing GHG emissions from coal fired power plants.

²⁰ Joseph 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.” *A report for the Administrative Conference of the United States*. 2014. Page 9. <https://www.acus.gov/report/retrospective-review-report>

²¹ Susan Dudley suggests that agencies design regulations “in ways that allow variation in compliance ...to go beyond observing mere associations and gather data necessary to test hypotheses of the relationship between regulatory actions, hazards, and risk.” “Regulatory Science and Policy, A Case Study of the National Ambient Air Quality Standards.” GW Regulatory Studies Center Working Paper. September 9, 2015.

²² Paul J. Gertler, Sebastian Martinez, Patrick Premand, Laura B. Rawlings, and Christel M. J. Vermeersch. “Impact Evaluation in Practice.” *The World Bank*. 2011. http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1295455628620/Impact_Evaluation_in_Practice.pdf

Information Collection

A crucial component of effective program evaluation is access to relevant data. Because we are ostensibly measuring changes in policy outcomes and social welfare, we must decide which measures to use (*Measurement Criteria*) and how to calculate changes in these measures over time (*Information Collection*). To gauge whether agencies planned adequately for information collection, we looked at agencies' plans to collect information on metrics relevant to rule outcomes or plans to use existing information to assess outcomes. For example, ED's proposed gainful employment rule required regulated parties to collect and provide information on metrics for some of the directional goals of the rule (despite the fact that the agency failed to provide objective, quantifiable measures for the purposes of the *Measurement Criteria*).²³

Agencies do face certain constraints for data collection. OMB's regulations implementing the Paperwork Reduction Act (PRA) require agencies to "ensure that each collection of information ...informs and provides reasonable notice to the potential persons to whom the collection of information is addressed of ... an 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)."²⁴ Pursuant to the PRA, agencies must gain approval from OMB before collecting information from 10 or more members of the public, which is—in part—why it is so important for agencies to plan their data collection efforts in advance.

Overall, agencies did not fare well on this metric: only 23% of the rules analyzed included any reference to information collection or existing resources to measure the rule's success. Agencies in DOT consistently did a better job of collecting information on outcomes than other agencies, and independent agencies fared worst of all.

There are two factors that contributed to DOT's success. First, DOT already has several existing databases that track the outcomes it is interested in, such as vehicle collisions and airline delays. This way, even though DOT did not commit to collecting new information in its 2014 rules, the agency can utilize existing information collection resources to evaluate the success of its rules. Second, the desired outcomes of DOT regulations (e.g. improved vehicle safety) are generally easier to measure than those of other agencies, especially independent agencies.

Despite the fact that PHMSA did not request new information to enable measurement of its hazardous train rule, the agency did seek comment on "potential data and information gathering activities that could be useful in designing an evaluation and/or retrospective review of this rulemaking."²⁵ While PHMSA ultimately fell short of the information collection standard for this

²³ 79 FR 16472

²⁴ 5 CFR Part 1320.8(b)(3)(iii)

²⁵ 79 FR 45063

evaluation, the agency should be commended for its forward-looking approach to information collection.

Consistent with the requirements of the PRA, agencies should make efforts at the outset of the regulatory process to collect the information needed to measure their rules' success.

Timeframe

Many agencies indicate the timeframe over which the costs and benefits of their rules are expected to materialize in the preambles of their rules. Many agencies use long time horizons, such as 30-years, to tally benefits and costs. However, many of the costs and benefits of these rules will become tangible in smaller time increments, such as five years after implementation for standards with upfront capital requirements (such as appliance efficiency standards) or two years for standards intended to result in immediate, next-year outcomes (such as safety standards for fresh produce).

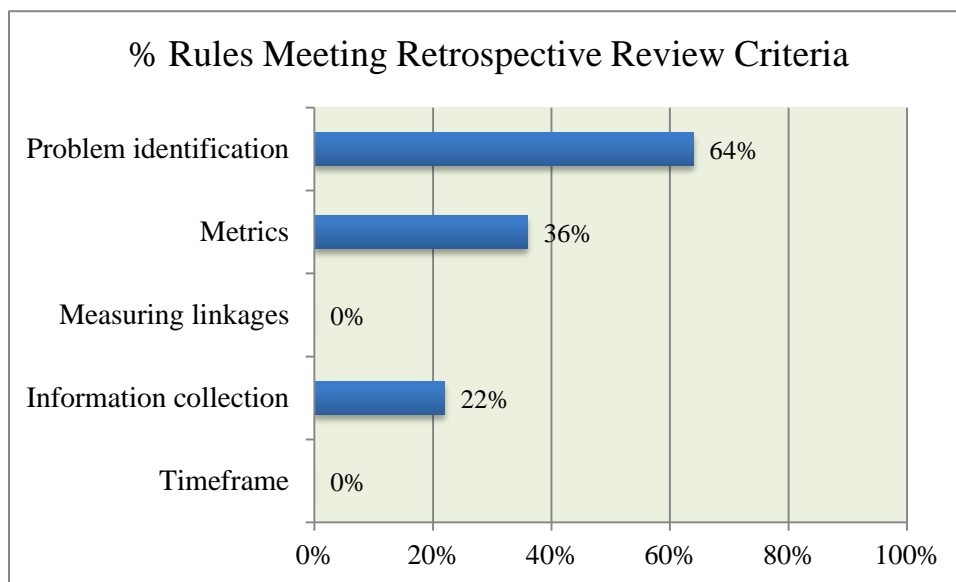
Agencies should make clear when the outcomes they value will begin to become apparent, and plan accordingly to measure those outcomes by inserting the timeframe for review in the preamble of their proposed and final rules. In our evaluation, none of the rules examined included a timeframe for retrospective review, or indicated any point in time at which the effects of their standards would become evident.

While some rules include extended timeframes to measure costs and benefits, these timeframes aren't helpful for the purposes of retrospective review. For instance, DOE estimates costs and benefits after 30 years of implementation; however, after 30 years of implementation, there are few gains to be made from revising existing standards, as capital purchases have already been made and utilized for decades. Instead, it may make sense to begin review once the market begins to respond to a new standard so that the agency can assess whether key assumptions—such as number of shipments, projected price increases/decreases, energy costs, etc.—are reacting as the agency anticipated. This will allow agencies to adjust the assumptions they use in their *ex ante* analyses to improve the impact analysis that informs regulatory decisions at the outset.

Overview & Recommendations

Retrospective review is important to ensure that government programs are achieving their intended goals. By examining the effects of existing rules, these reviews can inform policymakers on how best to allocate scarce societal resources to accomplish broad social goals, through regulation. Retrospective review can also provide valuable feedback and learning that will improve the design of future regulations.

Our analysis finds that, contrary to existing government guidelines, agencies are not doing a good job of planning prospectively for retrospective review. Of the 22 rules we examined, not a single one included a plan for review. Agencies did a slightly better job of including five smaller components that could enable agencies to evaluate the effects of their rules: identifying the problem the rule seeks to address, including metrics that can be used to measure the success of the rule, linking proposed standards to desired outcomes, collecting information to measure effects, and committing to a timeframe for reviewing outcomes.



Agencies were best at identifying problems, and worst at establishing timeframes and identifying linkages between proposed standards and their outcomes. On all criteria, EPA, DOT, and DOE generally scored the best, and independent agencies (including NLRB, the Consumer Financial Protection Bureau, and the Federal Reserve Board) consistently scored the worst. While almost three quarters of executive branch rules identified a problem, only one quarter of independent agency rules did. Further, no independent agency rules met any of the other four criteria for prospectively planning for retrospective review. While the sample of independent agency rules was small, this finding—while it should be interpreted with caution—may be indicative of a broader trend for independent agency rules.²⁶

²⁶ Arthur Fraas & Randall Lutter, “On the Economic Analysis of Regulations and Independent Regulatory Commissions.” *Administrative Law Review*, Vol. 63 pp. 213 - 241, Special Edition. 2011.

% Independent Agency Rules v. Executive Branch Rules					
	Problem Identification	Metrics	Measuring Linkages	Information Collection	Timeframe
Independent Agencies	25%	0%	0%	0%	0%
Executive Branch Agencies	72%	44%	0%	28%	0%

Based on these findings, agencies should strengthen their efforts to prospectively plan for retrospective review—especially independent agencies. In order to improve prospects for retrospective review, we recommend the following.

- Agencies should always identify quantifiable and directional goals of their rules. This information is crucial for assessing whether a rule has fallen short of, met, or exceeded its intended target. Independent agencies especially should make efforts to outline what they intend for their rules to accomplish. This transparency allows the public to know which benefits to expect in return for the opportunity costs incurred by new regulation, and what observers should strive to measure to assess the success of a rule.
- After determining the goals of their rules, agencies should proactively consider how to gather the information necessary to understand whether these goals are met. Considering information collection issues well in advance is necessary due to the requirements of the PRA. However, in many instances, it may be possible for an agency to rely on an existing information collection or agency database to aggregate the data necessary to evaluate a rule *ex post*. In these cases, agencies should assess existing data resources during the rule drafting stage and commit to evaluating relevant database information on a recurring basis.
- Given the enormous estimated benefits—and, sometimes, enormous costs—that result from federal regulation, agencies should prioritize establishing strong linkages between the rules they issue and the benefits that are meant to result. This includes a consideration of mediating factors that may have accomplished goals in the absence of the rule, or undermined achievement of the stated metrics. Understanding the counterfactual and determining linkages between the rule and the measured outcomes is necessary to understand why an outcome was not achieved or to ensure that the policy itself resulted in the desired outcomes, rather than other factors beyond the agencies’ control.

Appendix

Rules Analyzed as Part of the Retrospective Review Comment Project ²⁷							
Agency RIN	Regulation	Review Plan	Problem(s) Identified	Metrics	Measure Linkages	Info Collection	Time-frame
NLRB 3142-AA08	Representation Case Procedures	No	No ²⁸	No	No	No	No
NHTSA 2127-AK95	Federal Motor Vehicle Safety Standards; Child Restraint Systems, Child Restraint Systems-Side Impact Protection, Incorporation by Reference	No	Yes	Yes	No	Yes <i>Relevant agency database already exists</i>	No
EPA 2060-AP93	Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces, and New Residential Masonry Heaters	No	Yes	Yes ²⁹	No ³⁰	No	No
EPA 2060-AQ91	Standards of Performance for Greenhouse Gas Emissions from New Stationary Sources: Electric Utility Generating Units	No	Yes	No	No	Yes ³¹	No

²⁷ Read the retrospective review comments filed as part of this project on the George Washington University Regulatory Studies Center’s website: <http://regulatorystudies.columbian.gwu.edu/retrospective-review-comment-project>

²⁸ The problems this regulation is meant to address are not clearly stated by the agency. They may be inferred from the goals of the regulation that the agency outlines in 79 FR 7336, but that would assume that the goals of the regulation were directly related to the problem at hand (an assumption that is not always true, as shown earlier in this paper).

²⁹ EPA receives a qualified “yes” on this metric. The agency estimates its rule will reduce particulate matter emissions by 4,825 tons and volatile organic compound emissions by 3,237 tons (79 FR 6348, *Table 7—Estimated Annual Average (2014-2022) Air Quality Impacts*). However, as further explained in footnote 30, EPA does not have any accompanying estimate for human health impacts as a result, so the actual health effects in which EPA is interested are not measureable.

³⁰ EPA’s standard is intended to reduce particulate matter (PM) emissions from wood stoves to improve human health by reducing premature mortality. However, EPA does not have any projection for the decreases in mortality it anticipates as a result of these (quantifiable) emissions reductions. Instead, EPA’s estimates are based on a national benefit-per-ton of PM reduced, which uses a benefits transfer method that in turn relies on estimated willingness-to-pay for statistical reductions in premature mortality. EPA does not establish the link between its emission reductions and the health effects it intends to result from its rule.

³¹ EPA has an existing *Greenhouse Gas Reporting Program* (GHGRP) that tracks emissions from facilities and direct emitters of greenhouse gases, including CO₂. In addition, EPA’s annual report, *Inventory of U.S.*

Rules Analyzed as Part of the Retrospective Review Comment Project²⁷

Agency RIN	Regulation	Review Plan	Problem(s) Identified	Metrics	Measure Linkages	Info Collection	Time-frame
DOT 2126-AB20	Electronic Logging Devices and Hours of Service Supporting Documents	No	Yes	Yes ³²	No	No	No
DOE 1904-AC39	Energy Conservation Program: Energy Conservation Standards for Automatic Commercial Ice Makers	No	Yes	Yes ³³	No	No	No
ED 1840-AD15	Program Integrity: Gainful Employment	No	Yes	No ³⁴	No	Yes ³⁵	No
FDIC, CFPB, et al. 2590-AA61	Minimum Requirements for Appraisal Management Companies	No	No	No	No	No	No
FDA 0910-AG98	Sanitary Transportation of Human and Animal Food	No	No ³⁶	No ³⁷	No	No	No

Greenhouse Gas Emissions and Sinks, provides estimates of “the total national greenhouse gas emissions and removals associated with human activities across the United States.”

<http://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2015-Main-Text.pdf>

While EPA does not commit to measuring success using these available sources of information, the agency could make use of these resources to retrospectively review the success of its rules.

³² DOT projects that its rule could prevent between 1,425 to 1,714 crashes, and save between 20 and 24 lives per year (79 FR 17659)

³³ DOE expects its rule to save 0.286 quads of cumulative energy over the first 30 years of compliance (79 FR 14849).

³⁴ ED lists directional goals of its rule, but does not provide quantification to measure progress toward these goals (79 FR 16607).

³⁵ Although ED does not provide objective, quantifiable measures, it does institute paperwork collection for some of the directional goals the agency states (79 FR 16472).

³⁶ In its PRIA, FDA states the statutory authority as the need for the rule rather than stating a problem: <http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/UCM416399.pdf>

³⁷ In its PRIA, FDA states: “We lack sufficient data to quantify the potential benefits of the proposed rule. The causal chain from inadequate food transportation to human and animal health and welfare can be specified but not quantified. Because no complete data exist to precisely quantify the likelihood of food becoming adulterated during its transport, we are unable to estimate the effectiveness of the requirements of the proposed rule to reduce potential adverse health effects in humans or animals.”

Rules Analyzed as Part of the Retrospective Review Comment Project²⁷

Agency RIN	Regulation	Review Plan	Problem(s) Identified	Metrics	Measure Linkages	Info Collection	Time-frame
DOE 1904-AC43	Energy Conservation Program: Energy Conservation Standards for General Service Fluorescent Lamps and Incandescent Reflector Lamps	No	Yes	Yes ³⁸	No	No	No
Fed Board 7100-AE 18	Concentration Limits on Large Financial Companies	No	No	No	No	No	No
FDA 0910-AG38	Deeming Tobacco Products to be Subject to the Federal Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Regulations on the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Products	No	Yes ³⁹	No	No	No	No
EPA 2070-AJ22	Agricultural Worker Protection Standard Revisions: Pesticides	No	Yes	No ⁴⁰	No	No	No
ED 1840-AD16	Violence Against Women Act	No	No ⁴¹	No	No	No	No

³⁸ DOE expects its standards for GSFLs to save 3.5 quads of cumulative energy over the first 30 years of compliance (79 FR 24071).

³⁹ FDA Preliminary Regulatory Impact Analysis, *Deeming Tobacco Products to be Subject to the Food, Drug, and Cosmetic Act, as Amended by the Family Smoking Prevention and Tobacco Control Act; Regulations Restricting the Sale and Distribution of Tobacco Products and Required Warning Statements for Tobacco Product Packages and Advertisements*, April 2014, page 9: “Deeming all tobacco products, except accessories of a proposed deemed tobacco product, to be subject to chapter IX of the FD&C Act would enable FDA to tackle more fully the problem of youth initiation of tobacco product use.”

<http://www.fda.gov/downloads/AboutFDA/ReportsManualsForms/Reports/EconomicAnalyses/UCM394933.pdf>

⁴⁰ EPA uses a breakeven analysis to estimate how many pesticide-related chronic illnesses would need to be avoided to justify the costs of the rule. Because this is the case, there is no estimate of how many chronic illnesses the rule will actually prevent, and thus to metric to assess whether the rule accomplishes its goal (which may not be to create net benefits).

⁴¹ ED identifies the need for the rule as statutory authority rather than a problem to be solved: “In this case, there is indeed a compelling public need for regulation. The Department’s goal in regulating is to incorporate the provisions in VAWA into the Department’s Clery Act regulations.” (79 FR 35448)

Rules Analyzed as Part of the Retrospective Review Comment Project²⁷

Agency RIN	Regulation	Review Plan	Problem(s) Identified	Metrics	Measure Linkages	Info Collection	Time-frame
FDA 0910-AF22	Food Labeling: Revision of the Nutrition and Supplement Facts Labels	No	Yes	No	No	No	No
DOL 1235-AA10	Establishing a Minimum Wage for Contractors	No	No	No ⁴²	No	No	No
DOT 2105-AE11/ 2105-AE31	Transparency of Airline Ancillary Fees and Other Consumer Protection Issues	No	No	No	No	Yes <i>Relevant agency database already exists</i>	No
PHMSA 2137-AE91	Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains	No	Yes	Yes	No	No ⁴³	No
CFPB 3170-AA10	Home Mortgage Disclosure (Regulation C)	No	Yes	No	No	No	No
EPA 2040-AF30	Definition of “Waters of the United States” Under the Clean Water Act	No	No	No	No	No	No

⁴² DOL states only directional goals, such as increased productivity and reduced turnover, and does not provide quantification. 79 FR 34596

⁴³ While PHMSA does not include specific information collections to evaluate the rule, the agency does seek comments from the public on “potential data and information gathering activities that could be useful in designing an evaluation and/or retrospective review of this rulemaking.” (79 FR 45063)

Rules Analyzed as Part of the Retrospective Review Comment Project²⁷

Agency RIN	Regulation	Review Plan	Problem(s) Identified	Metrics	Measure Linkages	Info Collection	Time-frame
EPA 2060-AR33	Carbon Pollution Emission Guidelines for Existing Stationary Sources – Electric Utility Generating Units	No	Yes ⁴⁴	Yes ⁴⁵	No	Yes ⁴⁶ <i>Relevant agency database/reports already exist</i>	No
DOE 1904-AC95	Energy Conservation Program: Energy Conservation Standards for Small, Large, and Very Large Air-Cooled Commercial Package Air Conditioning and Heating Equipment	No	Yes	Yes	No	No	No

⁴⁴ EPA relies on the public health impacts from the 2009 endangerment finding to justify new regulatory action. (79 FR 34841)

⁴⁵ In the text of its RIA, EPA provides state-by-state estimates of the carbon emissions reductions it anticipates its rule to have. EPA also proposes estimates for reductions in co-benefits SO₂ and NO₂ in the text of its proposed rule. EPA Preliminary Regulatory Impact Analysis, *Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants* (Table ES-1. Proposed State Goals (Adjusted MWh-Weighted-Average Pounds of CO₂ per Net MWh from all Affected Fossil Fuel-Fired EGUs) for Options 1 and 2). EPA-452/R-14-002, June 2014. <http://www2.epa.gov/sites/production/files/2014-06/documents/20140602ria-clean-power-plan.pdf>

⁴⁶ As noted in footnote 31, EPA has an existing Greenhouse Gas Reporting Program (GHGRP) that tracks emissions from facilities and direct emitters of greenhouse gases, including CO₂. In addition, EPA’s annual report, *Inventory of U.S. Greenhouse Gas Emissions and Sinks*, provides estimates of “the total national greenhouse gas emissions and removals associated with human activities across the United States.” <http://www3.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2015-Main-Text.pdf>

While EPA does not commit to measuring success using these available sources of information, the agency could make use of these resources to retrospectively review the success of its rules.

REGULATORY ACCRETION: CAUSES AND POSSIBLE REMEDIES

SOFIE E. MILLER & SUSAN E. DUDLEY*

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

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1. SUSAN DUDLEY, GEO. WASH. UNIV. REG. STUDIES CTR., *A RETROSPECTIVE REVIEW OF RETROSPECTIVE REVIEW* (2013), <http://regulatorystudies.columbian.gwu.edu/files/downloads/20130507-a-retrospective-review-of-retrospective-review.pdf>.

2. Exec. Order No. 13,610 § 1, 3 C.F.R. 258 (2013).

3. Reeve T. Bull, *Building a Framework for Governance: Retrospective Review and Rulemaking Petitions*, 67 ADMIN. L. REV. 265, 288 (2015).

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*,⁴ Reeve T. Bull argues that the existing regulatory process is flawed because cognitive limitations and use of heuristics bias regulators' responses to risk events.⁵ 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.⁶

4. *Id.*

5. *See id.* at 271–76.

6. SOFIE E. MILLER, EPA'S RETROSPECTIVE REVIEW OF REGULATIONS: WILL IT REDUCE MANUFACTURING BURDENS?, 14 ENGAGE 4, 4 (2013), <http://www.fed->

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.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.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.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.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.

I. GROWTH OF REGULATION

A. Measuring Regulatory Accretion

Since Congress created the first regulatory body almost 130 years ago,¹¹ the number of regulatory agencies and the scope and reach of the regulations they issue has increased significantly.¹² Every year federal

soc.org/library/doclib/20131030_MillerEPARetroReview.pdf.

7. See Bull, *supra* note 3, at 280–86.

8. See *id.* at 280–81. Bull argues that, under the current regime, agencies may view elimination or modification of an existing rule as a “tacit admission that the agency erred in issuing the rule.” *Id.* at 280. This outcome provides agencies with an incentive to avoid effective retrospective review. *Id.* at 280–81.

9. See *id.* at 296–300.

10. See *id.* at 288 (explaining that Bull's reforms would apply only to “situations in which private parties might petition an agency to recognize a less burdensome alternative to prevailing regulations that provides equal or superior protection of the public welfare”); see also *id.* at 298 (noting further that “the contemplated use of rulemaking petitions would not serve a purely deregulatory function, as petitioners would be required to demonstrate that the proposed alternative achieves the same public welfare-promoting ends that motivated the introduction of the initial regulatory regime”).

11. The Interstate Commerce Act established the Interstate Commerce Commission in 1887 to regulate railroad rates. See Pub. L. No. 49-41, 49 Stat. 379, 383 (1887).

12. SUSAN DUDLEY & MELINDA WARREN, GEO. WASH. UNIV. REG. STUDIES CTR & WEIDENBAUM CTR. ON THE ECON., GOV'T, & PUB. POL'Y, REGULATORS' BUDGET INCREASES CONSISTENT WITH GROWTH IN FISCAL BUDGET: AN ANALYSIS OF THE U.S. BUDGET FOR FISCAL YEARS 2015 AND 2016 7–8 (2015), http://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/2016_Regulators_Budget.pdf. Note that “[a]gencies that primarily perform taxation, entitlement,

agencies issue thousands of new regulations,¹³ which now occupy more than 175,000 pages of regulatory code.¹⁴

In his Article, Bull ascribes this “regulatory accretion”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.”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).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,¹⁸ as theory and evidence revealed that

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. *Id.* at 14.

13. FEDERAL REGISTER PAGES PUBLISHED 1936–2014, FEDERALREGISTER.GOV (2015), <https://www.federalregister.gov/uploads/2015/05/Federal-Register-Pages-Published-1936-2014.pdf>.

14. CODE OF FEDERAL REGULATIONS ACTUAL PAGE BREAKDOWN: 1975–2014, FEDERALREGISTER.GOV (2015), <https://www.federalregister.gov/uploads/2015/05/Code-of-Federal-Regulations-Actual-Page-Breakdown-1975-2014.pdf>.

15. Bull, *supra* note 3, at 276.

16. *Id.* at 272–73, 306.

17. Niclas Berggren, *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. See J. Howard Beales III, *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, *Behavioral Economics: Implications for Regulatory Behavior*, 41 J. REG. ECON. 41 (2012).

18. Susan E. Dudley, *Improving Regulatory Accountability: Lessons from the Past and Prospects for the Future*, 65 CASE W. RES. L. REV. 1027, 1033 (2015).

such regulation tended to keep prices higher than necessary—to the benefit of regulated industries—and at the expense of consumers.¹⁹ 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.²⁰

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.²¹ 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.²²

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

19. MARTHA DERTHICK & PAUL J. QUIRK, *THE POLITICS OF DEREGULATION* 5 (1985); *see also* ICC Termination Act of 1995, Pub. L. No. 104-88, § 101, 109 Stat. 803, 804 (1995).

20. George J. Stigler, *The Theory of Economic Regulation*, 2 *BELL J. ECON. & MGMT. SCI.* 3, 3 (1971).

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.

22. PAUL J. GERTLER ET AL., *WORLD BANK, IMPACT EVALUATION IN PRACTICE* 4 (2011), http://siteresources.worldbank.org/EXTHDOFFICE/Resources/5485726-1295455628620/Impact_Evaluation_in_Practice.pdf.

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;²³ however, such retrospective analysis has received much less attention and fewer resources than those directed at *ex ante* regulatory review.²⁴ In 1978, President Carter directed agencies to “periodically review their existing regulations to determine whether they are achieving . . . policy goals.”²⁵ President Reagan called on agencies to “perform Regulatory Impact Analyses of currently effective major rules,”²⁶ 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.”²⁷

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.²⁸ 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.²⁹

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.

24. JOSEPH E. ALDY, ADMIN. CONFERENCE OF THE UNITED STATES (ACUS), LEARNING FROM EXPERIENCE 9 (2014), <https://www.acus.gov/sites/default/files/documents/Aldy%20Retro%20Review%20Draft%2011-17-2014.pdf>.

25. Exec. Order No. 12,044, 3 C.F.R. 152, 155 (1979).

26. Exec. Order No. 12,291, 3 C.F.R. 127, 130 (1982).

27. Exec. Order No. 12,866 § 5(a), 3 C.F.R. 638, 644 (1994).

28. *Section 610 Reviews*, ENVTL. PROT. AGENCY (EPA) (2015), <http://www.epa.gov/reg-flex/section-610-reviews>.

29. OFFICE OF INFORMATION AND REGULATORY AFFAIRS (OIRA), OMB, VALIDATING REGULATORY ANALYSIS (2005).

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.”³⁰

A few months later, President Obama issued Executive Order 13,579,³¹ which encourages independent regulatory agencies to develop and make public plans for retrospective review,³² and Executive Order 13,610, which emphasized that “further steps should be taken . . . to promote public participation in retrospective review.”³³ 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.³⁴ 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.³⁵

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

30. Exec. Order No. 13,563 § 6(b), 3 C.F.R. 215, 217 (2012).

31. Exec. Order No. 13,579, 3 C.F.R. 256 (2012).

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)).

33. Exec. Order No. 13,610 §1, 3 C.F.R. 258, 259 (2013).

34. *Reducing Unnecessary and Costly Red Tape through Smarter Regulations: Hearing Before the Joint Econ. Comm.*, 113th Cong. 6–8 (2013) (statement of Susan E. Dudley, Dir., Geo. Wash. Univ. Reg. Studies Ctr.) [hereinafter Dudley Statement].

35. Bull, *supra* note 3, at 265, 272–73, 306.

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.³⁶ 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.³⁷ In his report for

36. Rick Rouan, *Dimon Says Dodd-Frank Puts 'Bigger Moat' Around JPMorgan Chase*, COLUMBUS BUS. FIRST (Feb. 5, 2013, 10:41 AM), <http://www.bizjournals.com/columbus/blog/2013/02/dimon-says-dodd-frank-puts-bigger.html>. Keith Horowitz, a Citi financial services analyst, sat with Jamie Dimon, CEO of JPMorgan Chase & Co., and described the conversation:

[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.

Joe Weisenthal, *The 4 Things That Worry Jamie Dimon . . .*, BUS. INSIDER (Feb. 4, 2013, 7:45 AM), <http://www.businessinsider.com/the-four-things-that-worry-jamie-dimon-2013-2>.

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—in

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.”³⁸

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.³⁹

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.⁴⁰ 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.⁴¹

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.”⁴² 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).⁴³

part—why it is so important for agencies to plan their data collection efforts in advance. § 1320.8(d)(1).

38. ALDY, *supra* note 24, at 9.

39. OIRA, OMB, 2015 DRAFT REPORT TO CONGRESS ON THE BENEFITS AND COSTS OF FEDERAL REGULATIONS AND UNFUNDED MANDATES ON STATE, LOCAL, AND TRIBAL ENTITIES 7 (2015).

40. See Angela Ambroz & Marc Shotland, *Randomized Controlled Trial (RCT)*, BETTEREVALUATION, <http://betterevaluation.org/plan/approach/rct> (last visited Feb. 19, 2016).

41. Francesca Dominici et al., *Particulate Matter Matters*, 344 SCIENCE 257 (2014).

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 Congress⁴⁴ and in the Executive Branch.⁴⁵

Despite the obvious benefit of doing so, regulators do not write their rules to enable measurement ex post.⁴⁶ 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.

Joseph P. Mohorovic, Comm’r, CPSC, *Statement Regarding Retrospective Review in the Commission’s Rulemaking Under Section 108 of the Consumer Product Safety Improvement Act of 2008 (CPSIA)* (Dec. 14, 2015) <http://www.cpsc.gov/en/About-CPSC/Commissioners/Joseph-Mohorovic/Commissioner-Mohorovic-Statement/Statements/Statement-of-Commissioner-Joseph-P-Mohorovic-Regarding-Retrospective-Review-in-the-Commissions-Rulemaking-Under-Section-108-of-the-Consumer-Product-Safety-Improvement-Act-of-2008-CPSIA/> (internal citations omitted).

46. SOFIE E. MILLER, GEO. WASH. UNIV. REG. STUDIES CTR., *LEARNING FROM EXPERIENCE: RETROSPECTIVE REVIEW OF REGULATIONS IN 2014* 6–7 (2015), https://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/Retrospective%20Review%20in%202014_MillerS_11_3.pdf.

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).⁴⁷

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.

48. Bull, *supra* note 3, at 280–82.

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%2520%255B12-9-14%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.”⁵⁴ Experience with compliance likely will indicate whether alternative approaches for ensuring regulatory goals are met.

Both OIRA⁵⁵ and the Small Business Administration Office of Advocacy have solicited petitions for regulatory reform.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.”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.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

54. *See id.* at 265–66.

55. *See generally* OMB, PROGRESS IN REGULATORY REFORM 58 (2004).

56. John McDowell, OFFICE OF ADVOCACY, SMALL BUS. ASS'N, *Deadline for Submitting Regulatory Reform Nominations is Here* (Dec. 10, 2008) (seeking nominations for regulatory reform for the Regulatory Review and Reform initiative), <https://advocacysba.sites.usa.gov/2008/12/10/deadline-for-submitting-regulatory-reform-nominations-is-here/>.

57. OIRA, OMB, MAKING SENSE OF REGULATION 7 (2001).

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.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.⁶⁰ But this neglects the Stiglerian insight that the public interest, being diffuse, is not easily represented in a regulatory proceeding.⁶¹ Indeed, narrow, private interests are often presented using public interest arguments.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.

59. Letter from Andrew N. Liveris Chair, Smart Reg. Comm., Bus. Roundtable, to Sens. James Lankford, Chairman, Subcomm. on Reg. Affairs & Fed. Mgmt., and Heidi Heitkamp, Member, Subcomm. on Reg. Affairs & Fed. Mgmt. (July 29, 2015) (“[Business Roundtable] believes that reducing the cost of future rules is more important than reducing the cost of existing rules.”). The Business Roundtable also stated:

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.

A More Efficient and Effective Government: Improving the Regulatory Framework: Hearing Before the Subcomm. on the Efficiency and Effectiveness of Fed. Programs and the Fed. Workforce of the S. Comm. on Homeland Sec. and Gov’t Affairs, 113th Cong. 125 (2014) (Statement for the Record submitted by the Business Roundtable).

60. See Bull, *supra* note 3, at 314.

61. See Stigler, *supra* note 20 at 10–12.

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

63. See generally SUSAN E. DUDLEY, GEO. WASH. UNIV. REG. STUDIES CTR., REGULATORY SCIENCE AND POLICY: A CASE STUDY OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS 2 (2015), https://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/SDudley_Regulatory_Science_NAAQS%202015-09-09.pdf.

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

65. Exec. Order No. 12,866 § 5(a), 3 C.F.R. 638, 644 (1994); see Exec. Order No. 13,563, 3 C.F.R. 215 (2012).

66. Dudley Statement, *supra* note 34.

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

68. *Id.*; OFFICE OF AIR AND RADIATION, EPA, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT FROM 1990 TO 2020 1-2 (2011), <http://www.epa.gov/sites/production/files/2015-07/documents/summaryreport.pdf>.

69. See DUDLEY, *supra* note 63, 35-36.

resulting changes in outputs (such as health effects).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.

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.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."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.⁷³

Congress and OMB should reallocate resources from ex ante analysis to

70. Louis Anthony (Tony) Cox, Jr., GEO. WASH. UNIV. REG. STUDIES CTR., Public Interest Comment on the Proposed Rule on National Ambient Air Quality Standards for Ozone 1, 14 (Mar. 17, 2015), <http://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/TCox-NAAQS-ozone-2015.pdf>.

71. See Bull, *supra* note 3, at 269–70.

72. JOHN O. MCGINNIS, ACCELERATING DEMOCRACY 112 (2013).

73. See Cox, *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., *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.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.⁷⁵ For rules proposed by independent regulatory agencies, the outlook is bleaker.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.⁷⁷ Recognizing this need, Senators Heidi Heitkamp (D-N.D.) and James Lankford (R-Okla.) have proposed the Smarter Regs Act of 2015,⁷⁸ which would require agencies to include in major rules a framework for reassessing the rule, including the timeframe for reassessment,⁷⁹ the metrics that should be used to gauge efficacy,⁸⁰ and a plan to gather relevant data to compile these metrics.⁸¹

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.⁸² Despite this

74. See generally *Examining Practical Solutions to Improve the Federal Regulatory Process: Roundtable Discussion before the Subcomm. on Reg. Affairs and Fed. Mgmt.* of the S. Comm. on Homeland Sec. and Governmental Affairs, 114th Cong. (2015) (Prepared Statement of Susan E. Dudley, Director, Geo. Wash. Univ. Reg. Studies Ctr.), http://regulatorystudies.columbian.gwu.edu/sites/regulatorystudies.columbian.gwu.edu/files/downloads/Dudley-HSGAC-Roundtable-Statement_20150604.pdf (arguing that putting a greater emphasis on understanding cause and effect of proposed rules would improve regulatory outcomes).

75. MILLER, *supra* note 46, 10–13.

76. *Id.* at 17–18.

77. *Id.* at 16–18.

78. S. 1817, 114th Cong. (2015).

79. *Id.* § 2(f)(1)(D).

80. *Id.* § 2(f)(1)(B).

81. *Id.* § 2(f)(1)(C).

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.