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# THE GEORGE WASHINGTON UNIVERSITY

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Public Interest Comment<sup>1</sup> on  
The Federal Deposit Insurance Corporation's Request for Information  
on a Framework for Analyzing the Effects of FDIC Regulatory Actions

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The George Washington University Regulatory Studies Center improves regulatory policy through research, education, and outreach. As part of its mission, the Center conducts careful and independent analyses to assess rulemaking proposals from the perspective of the public interest. This comment in response to the Federal Deposit Insurance Corporation's (FDIC's) Request for Information (RFI) does not represent the views of any particular affected party or special interest, but is designed to help the FDIC develop analytical procedures that will more fully evaluate the primary impacts of proposed FDIC rules.

## Introduction

The FDIC is considering a more structured approach to economic analysis that informs regulatory decisions.<sup>3</sup> The RFI seeks comment on an approach that is based on Circular A-4,<sup>4</sup> the Office of Management and Budget's peer-reviewed guidance for conducting regulatory impact analysis

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<sup>1</sup> 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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<sup>3</sup> Federal Deposit Insurance Corporation, "Request for Information on a Framework for Analyzing the Effects of FDIC Regulatory Actions," 84 FED. REG. 65,808 (2019). (Hereinafter "RFI.")

<sup>4</sup> U.S. Office of Management and Budget, CIRCULAR A-4, REGULATORY ANALYSIS (2003). (Hereinafter "Circular A-4.")

(RIA) under Executive Order 12,866,<sup>5</sup> as well as economic analysis guidance issued by other financial regulators. The RFI also mentions that the FDIC is considering changes to its internal processes for developing economic analysis.<sup>6</sup>

The FDIC is wise to use Circular A-4 as a template for economic analysis. The analytical approaches in Circular A-4 are critical for determining whether a regulation under consideration is likely to produce more good than harm. The principles in Circular A-4 are also general enough that they can be applied to banking and financial regulation. The Securities and Exchange Commission's (SEC's) experience with an analytical framework based on Circular A-4 demonstrates that the framework is practicable and can produce a noticeable improvement in the quality of economic analysis.<sup>7</sup> There is, however, room for refinement in the proposed approach to economic analysis, and so I suggest the FDIC do the following:

- Proceed to develop and publicly commit to economic analysis guidance based on OMB Circular A-4;
- Clarify that the part of the analysis addressing the need for regulatory action should include an evidence-based assessment of the existence, extent, and cause of the problem the regulation is intended to address;
- Use a pre-statutory baseline in the economic analysis, and address major aspects of the regulation where the FDIC has discretionary authority by treating these discretionary decisions as alternatives to be analyzed; and
- Structure the analysis of benefits and costs to (1) identify and estimate the benefits, costs, and transfers to banks, their customers, and third parties; (2) assess any effects on overall U.S. economic performance; and (3) identify distributional consequences for sub-populations that are of interest to decision-makers.

The FDIC is also well-advised to take a holistic approach that treats the framework for economic analysis and internal processes and procedures as an interrelated system. This is consistent with the approach taken by several other independent regulatory agencies and with recommendations on organization and management of economists recently approved by the Administrative

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<sup>5</sup> Executive Order 12,866, 58 FED. REG. 51,735 (1993). (Hereinafter "Executive Order 12,866".)

<sup>6</sup> I have written more extensively about many of the topics covered in this comment in a recent law review article. It is attached to this comment as an appendix. See Jerry Ellig, *Why and How Independent Regulatory Agencies Should Conduct Regulatory Impact Analysis*, 28 CORNELL J. OF LAW AND PUB. POLICY 1 (2018).

<sup>7</sup> I have a forthcoming law review article that examines the SEC's experience in greater detail. It is attached as an appendix to this comment. See Jerry Ellig, *Improvements in SEC Economic Analysis After Business Roundtable: A Structured Assessment*, 19 FL. ST. UNIV. BUS. REV. (forthcoming 2020).

Conference of the United States (ACUS).<sup>8</sup> In addition to publicly committing to the economic analysis framework described in the RFI, the FDIC should take these steps that affect the *process* for producing economic analysis:

- Publish guidance that explains the role of economists and economic analysis in the rulemaking process and commits to placing economists on rule development teams before decisions about proposed rules are made;
- Ensure that the economic analysis reaches high-level decision-makers and require or allow the FDIC's chief economist to make separate recommendations to decision-makers;
- Give the chief economist signoff authority on regulations; and
- Develop and publicly commit to procedures for advance consultation with stakeholders.
- Develop and publish a plan for retrospective analysis of major regulations when those regulations are proposed.

These steps, along with the framework proposed in the RFI, will help the FDIC achieve its stated goal of improving the quality of its analysis of regulatory actions.

## The Proposed Analytical Framework is Feasible for Assessing Banking and Financial Regulation

The RFI notes that Circular A-4 does not explicitly address banking or financial regulation and generally draws its examples from health, safety, and environmental regulation.<sup>9</sup> Nevertheless, both logic and empirical research demonstrate that the analytical framework contained in Circular A-4 and outlined in the RFI is general enough to apply to banking and financial regulation.

Executive Order 12,866 and Circular A-4 call upon federal regulatory agencies to assess the nature and significance of the underlying problems they seek to solve, develop alternative solutions, and assess the benefits and costs of each alternative. These steps are, essentially, the application of rational policy analysis to regulation.<sup>10</sup> “[R]egulatory analysis is nothing more than sound strategic

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<sup>8</sup> Administrative Conference of the United States, “Recommendation 2019-5: Agency Economists,” 84 Fed. Reg. 71,349 (December 27, 2019), <https://www.acus.gov/sites/default/files/documents/ACUS%20Recommendation%202019-5%20Agency%20Economists.pdf>.

<sup>9</sup> RFI at 65,809.

<sup>10</sup> Thomas O. McGarity, *REINVENTING RATIONALITY: THE ROLE OF REGULATORY ANALYSIS IN THE FEDERAL BUREAUCRACY* 112 (1991).

planning and performance management applied to regulation.”<sup>11</sup> Moreover, Circular A-4 discusses numerous concepts that are critical for evidence-based analysis of banking and financial regulation, such as market power,<sup>12</sup> inadequate or asymmetric information,<sup>13</sup> externalities,<sup>14</sup> other social purposes (such as a congressional desire to aid specific groups);<sup>15</sup> diverse alternative regulatory approaches;<sup>16</sup> and the distinction between benefits, costs, and transfers.<sup>17</sup> Circular A-4 also warns that the burden of proof should be especially high to justify economic regulations, such as price controls in competitive markets, barriers to entry, product or sales quotas, or mandatory uniform quality standards.<sup>18</sup>

Several scholars point out that economic analysis of financial regulations should not be any more difficult than economic analysis of environment, health and safety regulations, and it may even be easier, since financial markets produce a significant amount of data and many of the key values at stake are expressed in monetary terms.<sup>19</sup> Empirical research that compares the quality of regulatory analysis for different types of regulations substantiates this claim. A comparison of scores that evaluate the quality of RIAs for regulations proposed between 2008 and 2011 by executive branch agencies subject to Executive Order 12,866 finds that the average score for financial regulation RIAs is virtually identical to the average score for all RIAs.<sup>20</sup> Econometric analyses that control for other factors that may affect the quality of analysis find that RIAs for financial regulations are

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<sup>11</sup> Jerry Ellig & Jerry Brito, *Toward a More Perfect Union: Regulatory Analysis and Performance Management*, 8 FL. STATE UNIV. BUS. REV. 16 (2009).

<sup>12</sup> Circular A-4 at 4-5.

<sup>13</sup> Id. at 5.

<sup>14</sup> Id. at 4.

<sup>15</sup> Id. at 5.

<sup>16</sup> Options most relevant to banking and financial regulation include different compliance dates, different enforcement methods, different degrees of stringency, different requirements for different sized firms, performance rather than design standards, market-based approaches (including fees, penalties, subsidies, changes in liability rules or property rights, or mandatory bonds or insurance), and informational remedies. Id. at 7-9.

<sup>17</sup> Id. at 38.

<sup>18</sup> Id. at 6-7.

<sup>19</sup> Eric A. Posner & E. Glen Weyl, *Benefit-Cost Paradigms in Financial Regulation*, 43 J. LEGAL STUD. S30 (2014); Eric A. Posner & E. Glen Weyl, *Cost-Benefit Analysis of Financial Regulations: A Response to Criticisms*, 124 YALE L.J. F. 70 (2015); Paul Rose & Christopher J. Walker, U.S. CHAMBER OF COMMERCE CTR. FOR CAPITAL MKTS. COMPETITIVENESS, THE IMPORTANCE OF COST-BENEFIT ANALYSIS IN FINANCIAL REGULATION 17-19 (2013).

<sup>20</sup> Jerry Ellig and Vera Soliman, *Is Regulatory Impact Analysis of Financial Regulations Possible?*, in Hester Peirce and Benjamin Klutsey (eds.), REFRAMING FINANCIAL REGULATION: ENHANCING STABILITY AND PROTECTING CONSUMERS 472-74 (2016).

either of similar quality or slightly higher quality than RIAs for other types of regulation.<sup>21</sup> On the other hand, studies that find significant fault with regulatory analysis of financial regulations tend to focus on independent financial regulators that are not subject to Executive Order 12,866.<sup>22</sup>

The SEC presents a natural experiment demonstrating that significant improvement in economic analysis is possible when an independent agency follows guidance explicitly modeled on Circular A-4. The SEC's guidance<sup>23</sup> on economic analysis of regulations—cited in footnote 3 of the RFI as a potential model for the FDIC—was issued in 2012 after the SEC lost a series of significant cases in the D.C. Circuit due to insufficient economic analysis.<sup>24</sup> A 2013 report by the SEC's inspector general concluded that the SEC followed the “spirit and intent” of the 2012 guidance for most of the rules produced after the guidance was issued.<sup>25</sup> Several law review articles have identified improvements in SEC economic analysis for individual rules,<sup>26</sup> and a forthcoming econometric study finds that the quality of SEC economic analysis improved significantly after the 2012 guidance.<sup>27</sup> The quality of analysis improved for all five elements identified in the guidance—analysis of the underlying problem, baseline, alternatives, benefits, and costs—and the SEC releases explained more transparently how the analysis affected major decisions. Improvement occurred both for conceptual/qualitative analysis and quantitative analysis.

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<sup>21</sup> Id. at 32-34; Jerry Ellig, *Evaluating the Quality and Use of Regulatory Impact Analysis: The Mercatus Center's Regulatory Report Card, 2008-2013*, Working Paper, Mercatus Center at George Mason University 59, 80 (July 2016).

<sup>22</sup> Hester Peirce, *Economic Analysis by Federal Financial Regulators*, 9 J. OF LAW, ECON. & POLICY 569 (2013); Jerry Ellig & Hester Peirce, *SEC Regulatory Analysis: “A Long Way to Go and a Short Time to Get There,”* 8 BROOK. J. CORP. FIN. & COM. L. 361 (2014); Art Fraas and Randall Lutter, *On the Economic Analysis of Regulations at Independent Regulatory Commissions*, 63 ADMIN. LAW REV. 213 (2011); Posner & Weyl, *Benefit-Cost Paradigms*, *supra* note 19, at S1, S30; Rose & Walker, *supra* note 19.

<sup>23</sup> Securities and Exchange Commission, Division of Risk, Strategy, and Financial Innovation/Office of General Counsel, *Memorandum: Current Guidance on Economic Analysis in SEC Rulemakings* (March 16, 2012).

<sup>24</sup> *American Equity Life Insurance Company v. SEC*, 572 F.3d 923 (D.C.Cir. 2009); *Chamber of Commerce v. SEC*, 412 F.3d 133 (D.C. Cir. 2005); *Business Roundtable v. SEC*, 647 F.3d 144 (D.C. Cir. 2011).

<sup>25</sup> Securities and Exchange Commission Office of Inspector General, “Use of the Current Guidance on Economic Analyses in SEC Rulemakings” (2013).

<sup>26</sup> Ellig & Peirce, *supra* note 22, at 431-35; Bruce R. Kraus, *Economists in the Room at the SEC*, 124 YALE L.J. F. 280, 296-301 (2015); Bruce Kraus & Connor Raso, *Rational Boundaries for SEC Cost-Benefit Analysis*, 30 YALE J. ON REG. 289, 324-27 (2013); Richard L. Revesz, *Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*, 34 YALE J. ON REG. 545, 570 (2017); Catherine M. Sharkey, *State Farm “with Teeth”: Heightened Judicial Review in the Absence of Executive Oversight*, 89 N.Y.U. L. REV. 1589, 1632 (2014); Joshua T. White, *The Evolving Role of Economic Analysis in SEC Rulemaking*, 50 GA. L. REV. 293 (2015).

<sup>27</sup> Ellig, *supra* note 7.

Improvements in the SEC's analysis cannot be attributed solely to the standards adopted in the guidance. The SEC's authorizing statute has specific language that requires economic analysis, the number of PhD financial economists at the SEC more than doubled, and the SEC implemented several managerial changes to get economists more directly involved in the regulation development process.<sup>28</sup> Nevertheless, the fact that improvements in the SEC's analysis tracked the categories in the guidance suggests that the guidance was an essential contributor.

## Some Additions Would Strengthen the Proposed Analytical Framework

The FDIC's proposed framework covers the major elements of an RIA discussed in Executive Order 12,866 and Circular A-4: assessment of the need for a regulatory action, defining a baseline, identification of alternatives, and assessment of the benefits and costs of the regulatory action and alternatives.<sup>29</sup> Below, I suggest some refinements and clarifications that could make the framework a more useful guide to action.

### *The Need for an Action*

The single paragraph on this topic<sup>30</sup> conveys the impression that it would be sufficient for the analysis simply to make a few assertions about why the FDIC believes a new regulation is necessary. In the case of statutorily-required regulations, this paragraph could be interpreted to mean that the analyst has fulfilled his or her duty simply by citing the statute that requires the regulation.

But to know whether a regulation is necessary requires more than just assertions or statutory citations. The very first principle of regulation listed in Executive Order 12,866 states that the agency should identify the problem it intends to address and *assess the significance* of that problem. Circular A-4 elaborates:

Thus, you should try to explain whether the action is intended to address a significant market failure or to meet some other compelling public need such as improving governmental processes or promoting intangible values such as distributional fairness or privacy. If the regulation is designed to correct a significant market failure, you should describe the failure both qualitatively and (where feasible) quantitatively. You should show that a government intervention is likely to do more good than harm. For other interventions, you should also provide

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<sup>28</sup> Id. at 14-15.

<sup>29</sup> RFI at 65,809-65,813.

<sup>30</sup> RFI at 65,809.

a demonstration of compelling social purpose and the likelihood of effective action.<sup>31</sup>

The FDIC's proposed analytical framework would provide clearer guidance if it specified that the analysis should include an evidence-based assessment of the existence, extent, and cause of the problem the regulation seeks to address. Such an assessment would allow the FDIC to determine, on the basis of facts, whether a new regulatory action is necessary and, if so, what types of alternative approaches could most effectively address the problem.

### *Baseline*

The FDIC seeks comment on how to specify the appropriate baseline when a rule implements a statutory requirement. The RFI expresses concern that a pre-statutory baseline, while providing a more comprehensive view of the effects of the regulation, could also involve evaluating the merits of the statute and may not furnish information about the effects of the decisions the FDIC actually has discretion to make.<sup>32</sup>

The fact that a pre-statutory baseline could require assessment of the statute is a feature, not a bug. While the FDIC's desire to produce economic analysis that can inform its decisions is certainly laudable, the FDIC should keep in mind that the information in the RIA is also important for the public and for other decision-makers in government. Information about the impacts of regulations that are required by statute is useful for at least two reasons.

First, there is no requirement that any federal entity conduct any economic analysis before a statute is enacted. Therefore, an analysis by an expert regulatory agency such as the FDIC may be the only opportunity for systematic economic analysis of the effects of rules mandated by a statute. Although the FDIC cannot refuse to implement a statute, Congress can re-examine major rules under the Congressional Review Act. Economic analysis using a pre-statutory baseline can assist members of Congress and the president if they reconsider a regulation.

Second, Circular A-4 suggests (in somewhat oblique language) that analysis of statutory requirements is an input into the Office of Management and Budget's annual report to Congress on the benefits and costs of regulation:

You should also discuss the statutory requirements that affect the selection of regulatory approaches. If legal constraints prevent the selection of a regulatory

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<sup>31</sup> Circular A-4 at 4.

<sup>32</sup> RFI at 65,810.



action that best satisfies the philosophy and principles of Executive Order 12866, you should identify these constraints and estimate their opportunity cost. Such information may be useful to Congress under the Regulatory Right-to-Know Act.<sup>33</sup>

The Regulatory Right-to-Know Act requires an annual accounting of the benefits and costs of regulation, and it also requires the administration to make recommendations for regulatory reforms. Use of a pre-statutory baseline could furnish more complete benefit and cost information for the annual report and also inform the administration's decisions about statutory regulatory reforms to recommend to Congress.

If regulatory agencies routinely employed post-statutory baselines, presidential, congressional, and public knowledge of regulation's consequences would shrink significantly. A forthcoming study reveals that 49 percent of economically significant, prescriptive regulations proposed by executive branch agencies between 2008 and 2013 were required by statute.<sup>34</sup> For 80 percent of these regulations, the statute determined the form the regulation had to take, such as a prohibition, a performance standard, or a disclosure requirement.<sup>35</sup> Use of post-statutory baselines in regulatory analysis would preclude expert regulatory agencies from disclosing the impacts of these decisions.

A straightforward way to assess the effects both of statutory mandates and provisions over which the FDIC has discretionary authority is to employ a pre-statutory baseline, then analyze major discretionary provisions of the regulation as alternatives. That way, all relevant decision-makers and the public would understand both the aggregate effects of the entire regulation and the distinct effects attributable to specific discretionary provisions.

### *Analysis of Benefits and Costs*

The section of the RFI on assessment of benefits and costs of the regulation and alternatives includes a list and discussion of major stakeholder and policy perspectives to be considered.<sup>36</sup> The list appears to be comprehensive and focused on major effects. However, the list and discussion may create the impression that the FDIC must consider many incommensurable goals and then choose among them in some unspecified way.

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<sup>33</sup> Circular A-4 at 17.

<sup>34</sup> An "economically significant" regulation has benefits, costs, or other economic impacts exceeding \$100 million annually, or has a material adverse effect on other factors specified in Executive Order 12,866, §3(f)(1). A "prescriptive" regulation contains mandates or prohibitions. Prescriptive regulations are distinct from budget regulations, which implement federal spending or revenue collection programs.

<sup>35</sup> Jerry Ellig and Michael Horney, *Statutory Delegation, Agency Authority, and the Asymmetry of Impact Analysis*, THE THEORY AND PRACT. OF LEGIS. (forthcoming 2020).

<sup>36</sup> RFI at 65,811.



Below I suggest a framework for organizing the analysis to address these perspectives in a way that would make many of the economic impacts more comparable with each other. What follows is essentially a very general suggestion for how to structure the analysis so that it can provide answers in each line of the second column of Table 1, labeled “Relevance of rule.”

First, identify and (to the extent possible) measure the benefits, costs, and transfers caused by a regulation and its alternatives for three distinct groups of stakeholders: banks, their customers, and any affected third parties. Conceptually, the analysis of effects on banks and their customers can be accomplished by assessing the impacts of the regulation and its alternatives on the price, quantity, and quality of lending or other financial services.<sup>37</sup> In some cases, it may be possible to assess most major effects by determining how the regulation and alternatives affect cost and demand curves. In other cases, the analysis will also need to account for how the regulation may affect innovation – factors that shift costs or customer preferences over time. Effects on third parties could be included as externalities: benefits, costs, or transfers not borne by banks or their customers.

A microeconomic analysis of benefits, costs, and transfers should allow the FDIC to identify the following impacts listed in Table 1 of the RFI: effects on bank customers (including the availability of financial services, cost of financial services, and the potential for consumer harm), effects on the availability of bank credit and other financial services, effects on the potential for illicit use of the financial system (where illicit use would most likely be analyzed as an externality that affects third parties), effects on the FDIC’s statutory resolution functions, effects on the deposit insurance fund (treating taxpayers as the most relevant third party to consider), and compliance costs or profitability effects on banks.

Second, assess effects on U.S. economic performance. There are two primary ways a regulation could affect overall U.S. economic performance. One would be if the regulation has a large enough influence on the cost or volume of credit that it creates significant economy-wide effects, beyond the effects it has in the particular sectors of the economy where the credit is being used. The other would be if the regulation significantly affects the safety and soundness of the banking system. Thus, safety and soundness of the banking system would be treated as an intermediate outcome that supports the ultimate outcome which affects citizens: economic performance.

Third, assess distributional effects for sub-populations that are of special concern to decision-makers. Two obvious sub-populations would be financially underserved communities (due to the Community Reinvestment Act) and small banks (due to the Regulatory Flexibility Act). The RFI

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<sup>37</sup> I define “quality” here very broadly, so that, for example the probability of being deceived is one aspect of quality.

suggests several others.<sup>38</sup> The distributional analysis should include both the benefits, costs, and transfers identified in the first stage of the analysis and also any effects on U.S. economic performance that have significant distributional consequences.

## Internal Processes and Procedures are also Critical

The RFI notes that the FDIC is also considering “improvements to its internal approaches to developing the analysis,” such as inclusion of regulatory staff on teams early in the rulemaking process and procedures for review of the analysis.<sup>39</sup> All of these factors can have a significant influence on the quality of regulatory analysis and on regulatory outcomes.<sup>40</sup> It is eminently sensible to consider them together, as a system, instead of assuming that promulgation of an economic analysis framework by itself will generate significant improvement.

The SEC’s experience is instructive. Its 2012 economic analysis guidance outlines the major elements that SEC economic analysis of regulations will cover. But the document also publicly articulates the role economists are expected to play in the regulatory development process. Economists should be “fully integrated members of the rulewriting team,” involved in the process before alternatives are chosen. Before writing a proposed rule, the team should prepare a high-level summary of likely economic effects of the alternatives and identify any data needed to produce a useful analysis.<sup>41</sup> The SEC also made several managerial changes around the time the guidance was issued. The division that conducts economic analysis is now headed by the chief economist rather than an attorney, and the chief economist became a direct report to the chairman.<sup>42</sup> The chief economist must concur in the economic analysis before a rule can move forward, which creates incentives to involve economists in rulemaking.<sup>43</sup>

The Federal Communications Commission took a similarly systematic approach when it developed a plan to establish its Office of Economics and Analytics (OEA), which was stood up in December 2018. In addition to moving most economists out of the bureaus that write regulations and into a centralized office, the plan called for:

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<sup>38</sup> RFI at 65,813.

<sup>39</sup> RFI at 65,809.

<sup>40</sup> Jerry Ellig, *Agency Economists*, Final Report Prepared for Consideration of the Administrative Conference of the United States (September 3, 2019), <https://www.acus.gov/report/final-report-agency-economists>.

<sup>41</sup> SEC, *supra* note 23.

<sup>42</sup> Peirce, *supra* note 22, at 585.

<sup>43</sup> Kraus, *supra* note 26, at 303.

- Development of guidance explaining how the principles of regulatory impact analysis would be applied to communications issues;
- Creation of a guidance memo specifying how economics would be incorporated into decision-making and how economists would be incorporated on regulatory development teams;
- Inclusion of at least one economist on each team working on a major rulemaking;
- Creation of a separate, non-public memorandum from OEA to accompany items to be voted on by the commission;
- Modification of Senior Executive Service performance criteria to include appreciation and inclusion of economic analysis in decisions; and
- Inclusion of feedback from non-OEA units in performance reviews of economists in OEA.<sup>44</sup>

More generally, in 2019 ACUS commissioned a report and issued a multi-part recommendation on the organization and management of economists in federal agencies who conduct economic analysis to inform regulatory decisions. The report noted that locating most of the economists who analyze regulations in a centralized economics unit, rather than in the offices that write the regulations, can potentially enable economists to produce analysis that is more objective, consistent, and higher quality. However, by separating the economists from the rest of the regulatory staff, this organizational structure may also make the economic analysis less relevant (because the economists are less informed about the details of the regulation) and easier to ignore. Agencies with centralized economics offices often mitigate these disadvantages by placing economists on interdisciplinary regulatory development teams at the outset, ensuring that there is an independent path for the economists' analysis and recommendations to reach the ultimate decision-makers, and giving the head of the economics office signoff authority on regulations or on the accompanying economic analysis.<sup>45</sup>

ACUS recommended that all regulatory agencies that conduct economic analysis to inform regulatory decisions should issue public guidance specifying that economists should be involved in the rulemaking process before decisions are made. For agencies that locate their regulatory economists in a central office, ACUS recommended that economists should be included on multidisciplinary regulatory development teams at the outset, the agency should have a process to ensure that economists' analysis reaches higher-level decision-makers, and the head of the

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<sup>44</sup> Wayne Leighton et al., "Plan for Office of Economics and Analytics (OEA): Recommendations and Report to Chairman Ajit Pai, Federal Communications Commission" (January 9, 2018), [http://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2018/db0109/DOC-348640A1.pdf](http://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0109/DOC-348640A1.pdf).

<sup>45</sup> Ellig, *supra* note 40.

economics office should have an avenue to express concerns about the quality of the analysis to the agency head.<sup>46</sup>

## Consultation with Stakeholders Can Produce More Complete Analysis

The RFI states that the FDIC is considering “processes for seeking information from stakeholders.”<sup>47</sup> Research shows that two particular types of processes are associated with higher-quality economic analysis of regulations.

First, consultation with stakeholders is associated with more thorough economic analysis of regulations.<sup>48</sup> Advance consultation with stakeholders is more common for environmental and health/safety regulations, where regulators may have more difficulty reconciling diverse values, than for economic and financial regulations.<sup>49</sup> This suggests that for financial regulation, consultation may be more useful in special cases where not all values of interest to decision-makers can be reduced to monetary terms.

Second, preproposal notices are also associated with more thorough economic analysis.<sup>50</sup> Scholars suggest that the most effective form of preproposal notice would include preliminary analysis of a wide variety of alternatives the agency is considering.<sup>51</sup> This would allow stakeholders to offer initial responses and furnish data or studies that could assist the agency with its economic analysis.

## Retrospective Analysis Can Improve Regulation

A report prepared for ACUS several years ago noted that retrospective analysis of the actual benefits and costs produced by regulation rarely occurs.<sup>52</sup> For this reason, it is heartening to read

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<sup>46</sup> ACUS, *supra* note 8.

<sup>47</sup> RFI at 65,809.

<sup>48</sup> However, consultation via public meetings is associated with less thorough economic analysis – perhaps because public meetings facilitate deals between stakeholders before the economic analysis is conducted. Jerry Ellig and Rosemarie Fike, *Regulatory Process, Regulatory Reform, and the Quality of Regulatory Impact Analysis*, 7 J. BEN.-COST ANALYSIS 523, 537, 548-49 (2016).

<sup>49</sup> Jerry Ellig, *Coproduction of Regulations Under the Administrative Procedure Act: How Close is the U.S. to a Classical Liberal Regulatory System?*, \_\_ REV. AUS. ECON. \_\_ (2019), earlyview version available at <https://link.springer.com/article/10.1007/s11138-019-00486-5>.

<sup>50</sup> Ellig & Fike, *supra* note 48, at 537.

<sup>51</sup> Christopher Carrigan & Stuart Shapiro, *What’s Wrong with the Back of the Envelope: A Call for Simple (and Timely) Benefit-Cost Analysis*, 11 REG. & GOVERNANCE 203 (2016).

<sup>52</sup> Joseph E. Aldy, *Learning from Experience: An Assessment of the Retrospective Reviews of Agency Rules and the Evidence for Improving the Design and Implementation of Regulatory Policy*, Final Report Prepared for the

in the RFI that the FDIC is also considering processes for retrospective analysis.<sup>53</sup> Several methods are available for institutionalizing retrospective analysis. For example, the Department of Transportation recently codified a new rule governing its rulemakings which specifies that that NPRM for an economically significant rule must specify an achievable objective for the rule and include metrics for measuring progress toward that objective.<sup>54</sup> DOT also specifies that every five years after the effective date of an economically significant rule, it will publish a regulatory assessment that identifies the impacts, effectiveness, and benefits and costs produced by the rule, including a comparison of the actual benefits and costs with the benefits and costs predicted in the RIA at the time the rule was adopted.<sup>55</sup> More generally, regulatory experts have proposed that the economic analysis for economically significant rules should include a plan for assessing the rule's actual benefits and costs and identify the data needed to perform such a retrospective analysis.<sup>56</sup>

## Conclusion

The FDIC is well-advised to develop a framework for economic analysis based on OMB Circular A-4 and to treat that framework as part of a holistic system that also includes internal processes and procedures for developing economic analysis. The proposed approach to economic analysis is practicable, and it would be even more informative and transparent with the additions and clarifications suggested in this comment. Moreover, the improvements in practices and procedures recommended above would help ensure that the framework actually drives improvements in the quality of economic analysis and its use in decisions.

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Administrative Conference of the United States (November 17, 2014), <https://www.acus.gov/report/retrospective-review-report>.

<sup>53</sup> RFI at 65,809.

<sup>54</sup> Department of Transportation, Office of the Secretary, “Administrative Rulemaking, Guidance, and Enforcement Procedures,” 84 FED. REG. 71,724 (December 27, 2019).

<sup>55</sup> Id. at 71,725.

<sup>56</sup> Susan E. Dudley & Sally Katzen, *Crossing the Aisle to Streamline Regulation*, WALL ST. J. (May 13, 2019), <https://www.wsj.com/articles/crossing-the-aisle-to-streamline-regulation-11557788679>; Susan E. Dudley and Brian F. Mannix, *Improving Regulatory Benefit-Cost Analysis*, 34 J. OF LAW & POLITICS 1 (2018).

**IMPROVEMENTS IN SEC ECONOMIC ANALYSIS  
AFTER *BUSINESS ROUNDTABLE*:  
A STRUCTURED ASSESSMENT**

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**ABSTRACT**

Several D.C. Circuit decisions that remanded regulations to the Securities and Exchange Commission (SEC) between 2005 and 2011 provide a natural experiment that permits researchers to identify the correlation between judicial review, the quality of regulatory agencies’ economic analysis, and its use in regulatory decisions. SEC economic analysis improved substantially following the issuance of new staff guidance on economic analysis in 2012. Improvement occurred on all major elements that the guidance identified as important. The improvement occurred both on criteria that address “conceptual” economic analysis and on criteria that require quantification of benefits or costs to receive full credit. Although substantial room for improvement still exists, the court decisions appear to have motivated the SEC, in just a few years, to close the gap between the quality of its economic analysis and the average quality of economic analysis produced by executive branch agencies. This result holds implications not just for the debate about SEC economic analysis but also for the broader debate over the relationship between judicial review and regulatory impact analysis. It suggests that judicial review is likely to have a salutary effect on the quality of agency economic analysis.

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## I. INTRODUCTION

In recent years, two related debates have raged over the proper role of the judiciary in reviewing economic analysis conducted by regulatory agencies when they issue major regulations. Several D.C. Circuit decisions that remanded regulations to the Securities and Exchange Commission (SEC) have been widely criticized for expanding the role of courts in critiquing agencies' substantive analysis.<sup>1</sup> Nevertheless, members of Congress have introduced legislation that would require financial regulatory agencies to conduct economic analysis to inform regulatory decisions and allow courts to review it.<sup>2</sup> More broadly, advocates of comprehensive regulatory reform have argued that courts should review the quality of the regulatory impact analyses that federal regulatory agencies produce, including independent agencies.<sup>3</sup> Legislation permitting judicial review of agency analysis, the Regulatory Accountability Act, has been introduced in the past several

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1. See *infra* Section II.C.

2. See, e.g., Financial CHOICE Act of 2017, H.R. 10, 115th Cong. (2017) (listing the topics that financial regulators' economic analysis must cover in § 312 and providing for judicial review of agency compliance with those requirements in § 317).

3. See, e.g., Reeve Bull & Jerry Ellig, *Judicial Review of Regulatory Impact Analysis: Why Not the Best?*, 69 ADMIN. L. REV. 725 *passim* (2017); Susan E. Dudley, *Improving Regulatory Accountability: Lessons from the Past and Prospects for the Future*, 65 CASE W. RES. L. REV. 1027, 1054–56 (2015); Jonathan S. Masur & Eric A. Posner, *Cost-Benefit Analysis and the Judicial Role*, 85 U. CHI. L. REV. 935 *passim* (2018); Christopher J. Walker, *Modernizing the Administrative Procedure Act*, 69 ADMIN. L. REV. 629 *passim* (2017).



Congresses and has passed the House of Representatives multiple times.<sup>4</sup>

Even in the absence of new legislation, recent cases suggest the courts will place greater weight on the quality and use of economic analysis by regulatory agencies in the future.<sup>5</sup> Two examples not involving the SEC illustrate this tendency.

In *Michigan v. EPA*, the Supreme Court overturned the Environmental Protection Agency (EPA) regulation of hazardous air pollutants from fossil fuel power plants because the EPA declined to consider costs when determining whether its regulation was “appropriate and necessary.”<sup>6</sup> The agency’s regulatory impact analysis (RIA) estimated costs of \$9.6 billion annually, but the EPA said the RIA played no role in its decision.<sup>7</sup> Without dictating how the EPA must take costs into account, the court ruled that the agency failed to consider a relevant factor when it completely ignored costs.<sup>8</sup>

In *MetLife, Inc. v. Financial Stability Oversight Council*, the U.S. District Court for the District of Columbia overturned a regulatory decision to classify MetLife as a nonbank financial company subject to enhanced regulatory oversight by the Federal Reserve.<sup>9</sup> Two of the reasons for the court’s decision directly pertain to deficient economic analysis. First, the Financial Stability Oversight Council (FSOC) did not estimate the size of potential losses that financial distress could create for MetLife, nor did it estimate the resulting size of losses that counterparties might sustain.<sup>10</sup> As a result, the regulators had no factual basis for determining that financial distress at MetLife would undermine the stability of the U.S. financial system.<sup>11</sup> Second, the FSOC failed to estimate or even consider the costs that MetLife would incur from increased regulation.<sup>12</sup> Because those costs could impair MetLife’s profitability, they could affect the vulnerability of the

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4. See, e.g., Regulatory Accountability Act of 2017, H.R. 5, 115th Cong. § 951 (2017). Unlike the legislation discussed *supra* note 2, which applies to financial regulatory agencies, the Regulatory Accountability Act of 2017 is a comprehensive revision of the Administrative Procedure Act that applies to almost all regulatory agencies.

5. See, e.g., Caroline Cecot & W. Kip Viscusi, *Judicial Review of Agency Benefit-Cost Analysis*, 22 GEO. MASON L. REV. 575, 578 (2015); Cass R. Sunstein, *Cost-Benefit Analysis and Arbitrariness Review*, 41 HARV. ENVTL. L. REV. 1, 2–3 (2017); Masur & Posner, *supra* note 3, *passim*.

6. *Michigan v. EPA*, 135 S. Ct. 2711, 2712 (2015).

7. *Id.* at 2705–06.

8. *Id.* at 2712.

9. *MetLife, Inc. v. Fin. Stability Oversight Council*, 177 F. Supp. 3d 219 (D.D.C. 2016).

10. *Id.* at 238.

11. *Id.* at 237–40.

12. *Id.* at 239.

company to financial distress. Thus, the regulators ignored a factor that was highly relevant to the decision they had to make.<sup>13</sup>

Courts have interpreted the SEC's authorizing legislation to require the commission to assess the economic effects of new rules before it adopts them.<sup>14</sup> The D.C. Circuit's decisions in the SEC cases provide a natural experiment that permits researchers to assess the effects of judicial review on the quality of regulatory agencies' economic analysis and its use in regulatory decisions. Subsequent to the D.C. Circuit decisions, the SEC's Office of General Counsel and Office of Economic Analysis issued new guidance for economic analysis<sup>15</sup> that is explicitly based on the principles of Executive Order No. 12,866, which governs regulatory analysis and review in the executive branch.<sup>16</sup> The guidance also reorganized the process for developing regulations to involve economists at the outset, and the number of financial economists with PhDs working at the SEC more than doubled.<sup>17</sup>

SEC regulations issued before this guidance were accompanied by analyses that were much less thorough than the analyses conducted by executive branch agencies.<sup>18</sup> Existing studies disagree on whether the SEC's economic analysis has improved. Numerous authors claim to find little evidence of improvement.<sup>19</sup> Other researchers, however, have suggested that the economic analysis accompanying individual SEC regulations has improved since the D.C. Circuit decisions.<sup>20</sup>

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13. *Id.* at 239–43.

14. *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148 (D.C. Cir. 2011).

15. OFFICE OF GEN. COUNSEL & DIV. OF RISK, STRATEGY & FIN. INNOVATION, SEC. & EXCH. COMM'N, CURRENT GUIDANCE ON ECONOMIC ANALYSIS IN SEC RULEMAKINGS 1 (2012) [hereinafter CURRENT GUIDANCE].

16. Exec. Order No. 12,866, 3 C.F.R. 638 (1993), *reprinted as amended in* 5 U.S.C. § 601 app. at 822–27 (2018).

17. *See infra* Section II.D.

18. Jerry Ellig & Hester Peirce, *SEC Regulatory Analysis: "A Long Way to Go and a Short Time to Get There,"* 8 BROOK. J. CORP. FIN. & COM. L. 361, 363 (2014).

19. *See, e.g., id.* at 431–35; Eric A. Posner & E. Glen Weyl, *Benefit-Cost Paradigms in Financial Regulation*, 43 J. LEGAL STUD. S1, S30 (2014); Jeff Schwartz & Alexandra Nelson, *Cost-Benefit Analysis and the Conflict Minerals Rule*, 68 ADMIN. L. REV. 287 (2016); PAUL ROSE & CHRISTOPHER J. WALKER, U.S. CHAMBER OF COMMERCE CTR. FOR CAPITAL MKTS. COMPETITIVENESS, THE IMPORTANCE OF COST-BENEFIT ANALYSIS IN FINANCIAL REGULATION 11, 27 (2013).

20. *See, e.g.,* Bruce R. Kraus, *Economist in the Room at the SEC*, 124 YALE L.J. F. 280, 296–301 (2015); Bruce Kraus & Connor Raso, *Rational Boundaries for SEC Cost-Benefit Analysis*, 30 YALE J. ON REG. 289, 324–27 (2013); Richard L. Revesz, *Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*, 34 YALE J. ON REG. 545, 570 (2017); Catherine M. Sharkey, *State Farm "with Teeth": Heightened Judicial Review in the Absence of Executive Oversight*, 89 N.Y.U. L. REV. 1589, 1632 (2014); Joshua T. White, *The Evolving Role of Economic Analysis in SEC Rulemaking*, 50 GA. L. REV. 293 *passim* (2015).

This Article provides a more systematic view by offering a structured assessment of the economic analysis accompanying a sample of SEC regulations issued after the 2012 guidance. Using the evaluation method developed for the Regulatory Report Card project, the Article compares the quality and claimed use of economic analysis for samples of post-2012 SEC regulations, pre-2012 SEC regulations, and executive branch regulations.

SEC economic analysis improved substantially following issuance of the 2012 guidance. The difference is highly statistically significant, and it persists even after econometrically controlling for other factors that may be associated with higher-quality analysis. Improvement occurred on all major elements the SEC identified as important in its 2012 guidance: (1) explanation of the justification for the rule, (2) clear definition of the baseline against which to measure the rule's economic impacts, (3) identification and discussion of reasonable alternatives, and (4) analysis of the benefits and costs of the proposed rule and the principal alternatives. The improvement occurred both on criteria that address "conceptual" economic analysis and on criteria that require quantification of benefits or costs to receive full credit.

The SEC's explanations of how economic analysis informed its decisions also improved noticeably. For the most part, economic analysis was used to identify potentially effective solutions and to discard alternatives that had little chance of creating benefits. The SEC did not improve its explanation of how net benefits (benefits minus costs) affected its decisions, largely because benefits are not quantified sufficiently to allow calculation of net benefits and comparison of alternatives.

Substantial opportunities for improvement still exist. The economic analysis accompanying SEC regulations is still far from complete—a characteristic it shares with the analysis produced by executive branch agencies. Nevertheless, the court decisions appear to have motivated the SEC, in just a few short years, to close the gap between the quality of its economic analysis and the average quality of economic analysis produced by executive branch agencies. The SEC example illustrates how judicial review can prompt a regulatory agency to produce higher-quality analysis and to provide a more complete explanation of how that analysis affected its decisions.

## II. BACKGROUND

### *A. Major Elements of Regulatory Analysis*

A thorough economic analysis to inform regulatory decision-making consists of at least four elements. Those elements are outlined in President Clinton's Executive Order No. 12,866, which governs regulatory analysis and review in the executive branch,<sup>21</sup> and *Circular A-4*, the Office of Management and Budget's guidance to agencies on regulatory analysis<sup>22</sup>:

- (1) *Problem analysis*. The very first principle enunciated in Executive Order No. 12,866 is that "[e]ach agency shall identify the problem that it intends to address (including, where applicable, the failures of private markets or public institutions that warrant new [regulatory] action) as well as assess the significance of that problem."<sup>23</sup> The analysis should define the problem and identify its root cause, so that the agency can identify whether regulation is necessary and, if so, can develop effective solutions. Thus, analysis of the problem is a logically prior and necessary step before development of alternatives or counting of benefits or costs can occur.<sup>24</sup> It is clear from both Executive Order No. 12,866 and OMB *Circular A-4* that agencies must do more than simply cite the statute that authorized or required the regulation.<sup>25</sup> Citing a statute is not the same thing as assessing a problem.
- (2) *Development of alternatives*. Executive Order No. 12,866 and *Circular A-4* direct agencies to consider multiple types of alternatives, including alternatives to direct regulation, removal of existing regulations, alternative forms of regulation, different levels of stringency, different compliance dates, and use of state or local regulation instead of federal regulation.<sup>26</sup>
- (3) *Estimation of benefits*. For executive branch agencies, the scope of analysis and degree of quantification depend on the importance of the regulation. Any regulation subject to review by the Office of Information and Regulatory Affairs

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21. Exec. Order No. 12,866, 3 C.F.R. 638.

22. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, CIRCULAR A-4, REGULATORY ANALYSIS (2003).

23. Exec. Order No. 12,866 § 1(b)(1), 3 C.F.R. at 639.

24. White, *supra* note 20, at 305.

25. Exec. Order No. 12,866 § 6(a)(3)(B)(i), 3 C.F.R. at 645; OFFICE OF MGMT. & BUDGET, *supra* note 22, at 3-4.

26. Exec. Order No. 12,866 § 1(b)(1), 3 C.F.R. at 639; OFFICE OF MGMT. & BUDGET, *supra* note 22, at 6-9.

(OIRA) must include an assessment of benefits.<sup>27</sup> An economically “significant regulatory action”—defined as a regulation with annual economic effects of at least \$100 million or meeting certain other criteria—must have an analysis that quantifies the benefits of the regulation and the alternatives considered.<sup>28</sup> A regulation with \$1 billion or more in annual economic impact must have a formal analysis of uncertainties associated with the estimates.<sup>29</sup>

- (4) *Estimation of costs.* The cost of a regulation includes all opportunity costs to society, not just compliance costs for regulated entities.<sup>30</sup> For executive branch agencies, the differing requirements for the scope of analysis and degree of quantification based on the impact of the regulation apply to the cost analysis as well as to the benefit analysis.

In the executive branch, this economic analysis of prospective regulations has come to be known as a regulatory impact analysis (RIA). An agency’s RIA may be either a separate document or a separate section in the *Federal Register* notice announcing the proposed or final regulation. The executive order neither attenuates nor creates any additional right of judicial review.<sup>31</sup> However, an agency’s RIA may be subject to judicial review if the statute authorizing the regulation requires the agency to conduct a benefit-cost analysis or to consider benefits and costs. Courts can also review the analysis if the agency voluntarily uses any part of the RIA to support its decisions.<sup>32</sup>

No administration has required independent agencies to comply with the executive order’s RIA requirements. However, some independent agencies have an obligation to conduct a benefit-cost analysis or related economic analysis as a result of language in their authorizing statutes. The SEC, for example, is required to consider the effects of regulation on competition, efficiency, and capital formation when it evaluates whether a regulation is in the public interest. Courts have interpreted that language to mean that the SEC must conduct a benefit-cost analysis of potential regulations and reasonable alternatives. The resulting analysis is subject to judicial review.

When courts review an executive branch or independent agency’s economic analysis, the review occurs under the “arbitrary

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27. Exec. Order No. 12,866 § 6(a)(3)(B)(ii), 3 C.F.R. at 645.

28. *Id.* § 6(a)(3)(C)(i), at 645; *id.* § 6(a)(3)(C)(iii), at 646.

29. OFFICE OF MGMT. & BUDGET, *supra* note 22, at 40.

30. *Id.* at 19.

31. Exec. Order No. 12,866 § 10, 3 C.F.R. at 649.

32. Cecot & Viscusi, *supra* note 5, *passim*.

and capricious” standard, unless the statute authorizing the regulation specifies an alternative standard. In practice, the thoroughness of court review under the “arbitrary and capricious” standard has varied widely. In some cases, courts have been highly deferential, merely satisfying themselves that the analysis has articulated some reason for the agency’s decisions. In other cases, courts have evaluated the completeness, accuracy, and logic of the agency’s analysis in light of other information in the record.<sup>33</sup> The major D.C. Circuit cases that struck down SEC regulations were of the latter variety.

### *B. The D.C. Circuit Cases*

The first case, *Chamber of Commerce v. SEC*, involved a regulation that required most mutual funds to have a supermajority of independent directors and an independent chair.<sup>34</sup> The court remanded the regulation in part because the SEC refused to assess a disclosure alternative favored by two dissenting commissioners.<sup>35</sup> The court also faulted the SEC for failure to consider the costs that mutual funds would incur in complying with the rule.<sup>36</sup> Although acknowledging that a full cost estimate may be difficult, the decision noted that the SEC could at least have provided a rough estimate.<sup>37</sup> When the SEC readopted the rule after a week of deliberation, the court struck down the rule because the SEC relied on extra-record evidence and did not consider data on the costs already incurred by some funds that had complied with the regulation.<sup>38</sup>

The second case, *American Equity v. SEC*, considered a rule that deemed fixed index annuities to be an investment product subject to the federal securities laws, not just an insurance product governed by state insurance laws.<sup>39</sup> The court faulted the SEC for asserting that the rule would increase competition and efficiency without assessing the current (baseline) extent of competition and efficiency under the state law regime.<sup>40</sup> The court also criticized

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33. See, e.g., Reeve T. Bull & Jerry Ellig, *Statutory Rulemaking Considerations and Judicial Review of Regulatory Impact Analysis*, 70 ADMIN. L. REV. 873 *passim* (2018); Bull & Ellig, *supra* note 3, *passim*; Cecot & Viscusi, *supra* note 5, *passim*.

34. *Chamber of Commerce v. SEC*, 412 F.3d 133, 136 (D.C. Cir. 2005).

35. *Id.*

36. *Id.*

37. *Id.* at 144–45.

38. *Chamber of Commerce v. SEC*, 443 F.3d 890, 906 (D.C. Cir. 2006).

39. *Am. Equity Inv. Life Ins. Co. v. SEC*, 572 F.3d 923, 925 (D.C. Cir. 2009), *amended and superseded by*, 613 F.3d 166 (D.C. Cir. 2010).

40. *Id.* at 935.

the SEC's circular reasoning that the rule would increase competition by reducing uncertainty because the absence of a rule created uncertainty.<sup>41</sup>

The third and most momentous case was *Business Roundtable v. SEC*.<sup>42</sup> This case involved a challenge to an SEC rule that outlined the circumstances in which a company's board of directors had to include shareholder-nominated board candidates in the board's proxy materials sent to investors.<sup>43</sup> The court vacated the rule for seven reasons. First, the SEC failed to estimate companies' compliance costs (even though there was evidence available).<sup>44</sup> Second, the SEC provided insufficient empirical support for its claim that the rule would benefit shareholders by improving corporate performance.<sup>45</sup> Third, the SEC failed to assess whether the rules would lead to additional contested elections or merely make currently contested elections easier.<sup>46</sup> Fourth, the commission attributed the costs of elections that would be contested as a result of the rule to preexisting state laws that give shareholders the right to elect directors.<sup>47</sup> Fifth, the SEC ignored the possibility that the rule could create additional costs by allowing certain groups of shareholders to use them as leverage to extract special concessions from the company.<sup>48</sup> Sixth, in calculating benefits and costs, the analysis used inconsistent estimates of the frequency with which the rule would be used.<sup>49</sup> Seventh, the SEC did not consider whether imposing the requirements on investment companies would create different benefits and costs from imposing them on other types of corporations.<sup>50</sup>

All of these D.C. Circuit cases involved elements that were missing from the economic analysis, such as obvious alternatives, significant costs, or empirical support for claims of fact. But *Business Roundtable* arguably went much further than the other cases because the court critically assessed the SEC's analytical judgment in (1) choosing input values for calculations, (2) attributing costs to state laws rather than to the new regulation, (3) interpreting conflicting academic studies on the relationship

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41. *Id.* at 934–35.

42. *Bus. Roundtable v. SEC*, 647 F.3d 1144 (D.C. Cir. 2011).

43. *Id.* at 1146–47.

44. *Id.* at 1150.

45. *Id.*

46. *Id.*

47. *Id.* at 1151.

48. *Id.* at 1151–52.

49. *Id.* at 1153.

50. *Id.* at 1154–55.



between independent directors and corporate performance, and (4) determining whether to include certain benefits or costs that require predictions of behavioral changes.<sup>51</sup> The D.C. Circuit appeared quite frustrated that the SEC's analysis of the proxy access rule suffered from the same kinds of deficiencies that the court had pointed out several years previously in *Chamber of Commerce* and *American Equity*.<sup>52</sup>

### *C. Scholarly Reactions to the D.C. Circuit Cases*

Proponents argue that the SEC cases are a positive development. Prior research finds that the economic analysis of independent financial regulatory agencies often falls far short of the quality of analysis conducted by executive branch agencies.<sup>53</sup> A study prepared for the Administrative Conference of the United States surveyed research by independent academics, the Government Accountability Office, and agency inspector generals.<sup>54</sup> The author found that although independent agencies often conduct some qualitative analysis of benefits or costs, they often fail to address benefits or costs of elements of the regulation that are required by law, are less likely to assess the benefits and costs of alternatives to the regulation, and often fail to quantify benefits or costs other than paperwork costs.

Jonathan Masur and Eric Posner put the SEC's analysis in *Business Roundtable* in this category: "The reason that the court in *Business Roundtable* acted rightly in striking down the proxy access rule is not that the rule was obviously a bad one but that the SEC failed to supply an adequate [cost-benefit analysis]."<sup>55</sup> Henry Manne suggests that *Business Roundtable* spurred the SEC's change of heart on economic analysis and that judicial review is essential to prevent insufficient or faulty analysis.<sup>56</sup> Jonathan Guynn contends that economic analyses performed by financial regulatory agencies "have typically read as if they were written by lawyers trying to make a plausible case for a precooked

51. Kraus & Raso, *supra* note 20, at 303–16; Michael E. Murphy, *The SEC and the District of Columbia Circuit: The Emergency of a Distinct Standard of Judicial Review*, 7 VA. L. & BUS. REV. 125, 158–62 (2012).

52. ROSE & WALKER, *supra* note 19, at 33.

53. See, e.g., Ellig & Peirce, *supra* note 18, at 361–63; Arthur Fraas & Randall Lutter, *On the Economic Analysis of Regulations at Independent Regulatory Commissions*, 63 ADMIN. L. REV. (SPECIAL ISSUE) 213 *passim* (2011).

54. CURTIS W. COPELAND, ECONOMIC ANALYSIS AND INDEPENDENT REGULATORY AGENCIES 4 (2013).

55. Masur & Posner, *supra* note 3, at 29.

56. Henry G. Manne, *Economics and Financial Regulation*, REGULATION, Summer 2012, at 20, 25.

conclusion, rather than as a rigorous analysis based on actual data and solid scientific methods.”<sup>57</sup> He argues that *Business Roundtable* should generate a welcome improvement in the quality of agency analysis as agencies seek to avoid litigation. Catherine Sharkey argues that external review of agency analysis plays a vital “information-forcing” role.<sup>58</sup> She suggests that OIRA performs this role adequately for executive branch agencies, but because independent agencies are not subject to the OIRA review process, courts should step in and evaluate their analysis using a heightened standard of scrutiny.

Critics see much mischief and little good coming from the decisions. Many believe that heightened court scrutiny will make it more difficult for the SEC to issue major new regulations.<sup>59</sup> Berkeley law professor Steven Davidoff Solomon commented disapprovingly, “[T]he opinion appears to create an almost insurmountable barrier for the SEC by requiring that it provide empirical support amounting to proof that its rules would be effective.”<sup>60</sup> Even some advocates of expanded benefit-cost analysis express skepticism about the merits of judicial review.<sup>61</sup>

Most significant for the purposes of this Article, however, are several criticisms that imply that judicial review might not lead to higher-quality analysis. Jeffrey Gordon argues that benefit-cost analysis of financial regulation is simply impossible because changes in regulation lead to unpredictable changes in the behavior of the financial system.<sup>62</sup> His view implies that any attempts to improve benefit-cost analysis of financial regulation are futile. John Coates warns that if the court decisions are interpreted to mean that agencies must produce fully quantified estimates of benefits and costs, they may require the SEC to

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57. Jonathan D. Guynn, Note, *The Political Economy of Financial Rulemaking After Business Roundtable*, 99 VA. L. REV. 641, 642 (2013). Cf. Kraus & Raso, *supra* note 20, at 297–301.

58. Sharkey, *supra* note 20, at 1591.

59. See, e.g., James D. Cox, *Iterative Regulation of Securities Markets After Business Roundtable: A Principles-Based Approach*, 78 L. & CONTEMP. PROBS., no. 3, 2015, at 25, 27–28; Jill E. Fisch, *The Long Road Back: Business Roundtable and the Future of SEC Rulemaking*, 36 SEATTLE U. L. REV. 695, 709 (2013); Kraus & Raso, *supra* note 20, at 318–19; Murphy, *supra* note 51, at 127.

60. Steven Davidoff Solomon, *Proxy Access in Limbo After Court Rules Against It*, N.Y. TIMES (July 27, 2011, 3:36 PM), <http://dealbook.nytimes.com/2011/07/27/proxy-access-in-limbo-after-court-rules-against-it/>.

61. See, e.g., John H. Cochrane, *Challenges for Cost-Benefit Analysis of Financial Regulation*, 43 J. LEGAL STUD. S63, S95 (2014); Cass R. Sunstein, *Financial Regulation and Cost-Benefit Analysis*, 124 YALE L.J. F. 263, 268 (2015); Posner & Weyl, *supra* note 19, at S30.

62. Jeffrey N. Gordon, *The Empty Call for Benefit-Cost Analysis in Financial Regulation*, 43 J. LEGAL STUD. S351 *passim* (2014).

attempt the impossible, because the benefits of many regulations that safeguard the financial system are difficult if not impossible to quantify with any degree of accuracy.<sup>63</sup> Cost estimates could be subject to the same drawback; Jeff Schwartz and Alexandra Nelson argue that the SEC substantially overstated the costs of its conflict minerals rule because it felt obligated to produce a number.<sup>64</sup>

Even if one takes a more sanguine view of what is possible, financial regulatory agencies may not currently have the technical knowledge, resources, institutional setting, or managerial structures necessary to produce significantly better analysis.<sup>65</sup> Judicial review is an adversarial process that occurs after a regulation has been adopted. Thus, judicial review offers less opportunity for improvement of the analysis before the regulation is adopted than does the interagency process coordinated by OIRA before an executive agency regulation is published.<sup>66</sup> Judicial review may also prompt agencies to hide weaknesses in their analysis<sup>67</sup> or to produce a distorted economic analysis that helps them win court cases but is not methodologically sound.<sup>68</sup> Finally, judges may use judicial review to enforce their own policy preferences,<sup>69</sup> or they may decline to examine agency analysis because of their policy preferences<sup>70</sup>—choices that would make judicial review a less credible enforcement mechanism.

Many skeptics of judicial review acknowledge that better economic analysis is needed and have suggested other ways to improve financial regulators' economic analysis. Proposed structural solutions include (1) have OIRA or some other external entity conduct a review, (2) modify the Paperwork Reduction Act to facilitate data gathering, (3) allow agency economics staff to release an analysis without approval of the commissioners, (4)

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63. John C. Coates IV, *Cost-Benefit Analysis of Financial Regulation: Case Studies and Implications*, 124 YALE L.J. 882 *passim* (2015).

64. Schwartz & Nelson, *supra* note 19, *passim*.

65. See, e.g., Ryan Bubb, Comment, *The OIRA Model for Institutionalizing CBA of Financial Regulation*, 78 L. & CONTEMP. PROBS., no. 3, 2015, at 47 *passim*; John C. Coates IV, *Towards Better Cost-Benefit Analysis: An Essay on Regulatory Management*, 78 L. & CONTEMP. PROBS., no. 3, 2015, at 1, 23.

66. Bubb, *supra* note 65, at 52.

67. Coates, *supra* note 63, at 1004.

68. Robert J. Jackson, Jr., Comment, *Cost-Benefit Analysis and the Courts*, 78 L. & CONTEMP. PROBS., no. 3, 2015, at 55, 59.

69. See, e.g., Grant M. Hayden & Matthew T. Bodie, *The Bizarre Law and Economics of Business Roundtable v. SEC*, 38 J. CORP. L. 101 *passim* (2012); Recent Case, *Business Roundtable v. SEC*, 647 F.3d 1144 (D.C. Cir. 2011), 125 HARV. L. REV. 1088, 1092–93 (2012).

70. See Eric A. Posner & E. Glen Weyl, *Cost-Benefit Analysis of Financial Regulations: A Response to Criticisms*, 124 YALE L.J. F. 246, 260–61 (2015) (citing Coates, *supra* note 63).

have agency economics staff report to all commissioners (rather than just the chair), and (5) require sunsets and retrospective evaluation for all new regulations.<sup>71</sup> Proposed resource solutions include (1) more funding for economic analysis, (2) appointment of commissioners with expertise in economics, (3) greater sharing of best practices across agencies, and (4) more research on methods of benefit-cost analysis for financial regulations.<sup>72</sup>

The varied reactions to the D.C. Circuit decisions are a microcosm of the broader debate over judicial review of RIAs. Proponents of judicial review see significant deficiencies in agency analysis—even by executive branch agencies subject to OIRA review—and see judicial review as a salutary enforcement mechanism to encourage higher-quality analysis.<sup>73</sup> Opponents question the ability of generalist judges to evaluate agency economic analysis, and they fear that judicial review will slow or halt rulemaking.<sup>74</sup> Instead, they suggest that more resources for analysis and various structural changes will produce more desirable improvements in agency analysis.<sup>75</sup>

#### *D. The SEC as a Case Study*

There are two reasons the SEC provides an informative case study of the effects of judicial review on the quality and claimed use of economic analysis in regulations.

First, the circumstances surrounding the decisions create a quasi-natural experiment. The mandate for improved economic analysis was imposed on the SEC externally by the courts and

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71. See, e.g., Robert P. Bartlett III, *The Institutional Framework for Benefit-Cost Analysis in Financial Regulation: A Tale of Four Paradigms?*, 43 J. LEGAL STUD. S379 *passim* (2014); Rachel A. Benedict, Note, *Judicial Review of SEC Rules: Managing the Costs of Cost-Benefit Analysis*, 97 MINN. L. REV. 278, 297–300 (2012); Bubb, *supra* note 65, at 48; Coates, *supra* note 63, at 895; Posner & Weyl, *supra* note 19, at S30–31; Posner & Weyl, *supra* note 70, at 261–62; Revesz, *supra* note 20, at 584.

72. Coates, *supra* note 63, at 1007–11; Revesz, *supra* note 20, at 575–82.

73. See, e.g., *Cost-Justifying Regulations: Protecting Jobs and the Economy by Presidential and Judicial Review of Costs and Benefits: Hearing Before the Subcomm. on Courts, Commercial & Admin. Law of the H. Comm. on the Judiciary*, 112th Cong. 7 (2011) (statement of John D. Graham, Dean, Indiana University School of Public and Environmental Affairs); Bull & Ellig, *supra* note 3, at 730; Cecot & Viscusi, *supra* note 5, at 605–07; Dudley, *supra* note 3, at 1055; Masur & Posner, *supra* note 3.

74. See, e.g., *A Review of Regulatory Reform Proposals: Hearing Before the S. Comm. on Homeland Sec. & Governmental Affairs*, 114th Cong. 12–13 (2015) (statement of Sidney A. Shapiro, Chair, Wake Forest University School of Law, and Vice President, Center for Progressive Reform); Ronald Levin, *Judicial Review of Procedural Compliance*, 48 ADMIN. L. REV. 359, 362 (1996).

75. See, e.g., *Toward a 21st Century Regulatory System: Hearing Before the S. Comm. on Homeland Sec. & Governmental Affairs*, 114th Cong. 12–13 (2015) (statement of Sally Katzen, Professor, New York University School of Law).

reinforced by pressure from Congress. The court decisions (especially *Business Roundtable*) were a surprise, representing a significant departure from past practice.<sup>76</sup> By Sharkey's account, "A shock wave reverberated throughout the banking and financial services community" in response to *Business Roundtable*.<sup>77</sup> I suspect the shock of the court decisions was not completely random, but it was surely regarded as a low-probability outcome *ex ante*. Thus, it is as close to a natural experiment as one is likely to find in the policy world.

Second, by most accounts, the SEC did, in fact, take significant steps to improve its economic analysis because of the court decisions.<sup>78</sup> In March 2012, the SEC's general counsel and chief economist issued new guidance for economic analysis of regulations.<sup>79</sup> The guidance is based on the principles in executive orders and OMB guidance geared toward executive branch agencies.<sup>80</sup> It identifies four key components that should be included in the economic analysis accompanying regulations: (1) an explanation of the justification for the rule, (2) a clear definition of the baseline against which to measure the rule's economic impacts, (3) identification and discussion of reasonable alternatives, and (4) analysis of the benefits and costs of the proposed rule and the principal alternatives.<sup>81</sup> The document also outlines a new organizational process intended to ensure that economists are involved in the development of regulations at every step in the process.<sup>82</sup> The guidance explicitly states that these changes are a response to the three D.C. Circuit decisions, congressional inquiries, and evaluations from the Government Accountability Office and the SEC's inspector general.<sup>83</sup> Paul Rose and Christopher Walker document how the guidance responds directly to the D.C. Circuit's criticisms, often citing the three cases as justification.<sup>84</sup>

The SEC's actions did not end at issuing new guidance. In a reversal of an earlier decision, the chief economist now reports

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76. *E.g.*, Robert B. Ahdieh, *Reanalyzing Cost-Benefit Analysis: Toward a Framework of Function(s) and Form(s)*, 88 N.Y.U. L. REV. 1983, 1988–90 (2013); James D. Cox & Benjamin J. C. Baucom, *The Emperor Has No Clothes: Confronting the D.C. Circuit's Usurpation of SEC Rulemaking Authority*, 90 TEX. L. REV. 1811, 1828–30 (2012); Cox, *supra* note 59, at 27; Guynn, *supra* note 57, at 681.

77. Sharkey, *supra* note 20, at 1624.

78. Kraus, *supra* note 20, at 288 n.41.

79. CURRENT GUIDANCE, *supra* note 15.

80. *Id.* at 3–4.

81. *Id.* at 4.

82. *Id.* at 2.

83. *Id.* at 1–2.

84. ROSE & WALKER, *supra* note 19, at 34–36.

directly to the chair of the commission.<sup>85</sup> The budget of the Division of Economic and Risk Analysis (DERA) grew from \$20 million in fiscal year 2011 to \$43 million in fiscal year 2014.<sup>86</sup> The number of financial economists with PhDs increased from thirty in 2011 to seventy-three in 2015.<sup>87</sup> “The underlying spirit (though not the letter) of the much-maligned [*Business Roundtable*] opinion has brought economists to the table in the SEC rulemaking process, where their contributions are real.”<sup>88</sup>

Thus, it is reasonable to infer that if an observed change in the quality of SEC economic analysis occurs after the three court decisions previously discussed, at least some of that change was a response to the court decisions.

### III. REGULATIONS COVERED

Hester Peirce and I assessed the quality of economic analysis accompanying seven SEC regulations issued from 2010 to 2011.<sup>89</sup> We selected the two most recent major rules (as of February 2012) for each of the primary rule-writing divisions: Corporation Finance, Investment Management, and Trading and Markets. One additional rule in the sample was issued by the enforcement division. This study replicates the previous study’s method by selecting the two most recent final, nontemporary rules (as of January 2016) from each of the three primary rulemaking divisions. All but one of the rules in the sample are major. The nonmajor rule, dealing with credit ratings, is nevertheless an important rule that was accompanied by an economic analysis.<sup>90</sup> The enforcement division issued no major rules during this period, so the seventh rule is issued jointly by the Corporation Finance and Investment Management divisions. Table 1 lists and summarizes the SEC rules evaluated for this study.

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85. Ellig & Peirce, *supra* note 18, at 372–73.

86. White, *supra* note 20, at 309.

87. *Id.* at 308–09.

88. Kraus, *supra* note 20, at 304.

89. Ellig & Peirce, *supra* note 18, at 361.

90. See Removal of Certain References to Credit Ratings and Amendment to the Issuer Diversification Requirement in the Money Market Fund Rule, 80 Fed. Reg. 58,124, 58,143 (Sept. 25, 2015) (to be codified at 17 C.F.R. pts. 270, 274). As Table 4, *infra*, demonstrates, the economic analysis of the Credit Ratings regulation scored close to the sample mean, so inclusion of this regulation did not bias the results of the evaluation.

Table 1. SEC Rules Assessed in This Study.

Rule	Summary of Rule
Preguidance <sup>91</sup>	
<p>Risk Management Controls for Brokers or Dealers with Market Access</p> <p>Published Nov. 15, 2010</p> <p>Division of Trading and Markets</p>	<p>Requires brokers or dealers offering customers direct access to an exchange or alternative trading system to establish controls and procedures to limit risks associated with direct access. It also requires these brokers and dealers to establish controls to prevent entry of orders that are erroneous, exceed certain capital or credit thresholds, or violate regulatory requirements.</p>
<p>Shareholder Approval of Executive Compensation and Golden Parachute Compensation</p> <p>Published Feb. 2, 2011</p> <p>Division of Corporate Finance</p>	<p>Requires companies to conduct a separate shareholder advisory vote to approve executive compensation, plus a vote to determine how often they will conduct this advisory vote. It also requires companies that are conducting a vote on mergers or acquisitions to disclose golden parachute arrangements and, in some cases, to conduct a shareholder advisory vote. Smaller companies have an extended transition period to comply.</p>
<p>Securities Whistleblower Incentives and Protections</p> <p>Published June 13, 2011</p> <p>Division of Enforcement</p>	<p>Establishes a new whistleblower program. It creates procedures for reporting securities law violations to the SEC and for calculating payment of a whistleblower award if the tip leads to a successful SEC enforcement action that generates more than \$1 million in monetary sanctions.</p>

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91. For preguidance rules, see Ellig & Peirce, *supra* note 18, at 375–78.



<p>Rules Implementing Amendments to the Investment Advisers Act of 1940</p> <p>Published July 19, 2011</p> <p>Division of Investment Management</p>	<p>Transitions medium-sized advisers from SEC registration to state registration; requires advisers to hedge funds and certain other funds to register with the SEC and provide information on Form ADV; implements Dodd-Frank exemptions for certain foreign advisers and advisers to venture capital and small private funds; requires these exempt advisers to file reports with the SEC; and amends “pay-to-play” rules.</p>
<p>Large Trader Reporting</p> <p>Published Aug. 3, 2011</p> <p>Division of Trading and Markets</p>	<p>Requires large traders to receive an identification number from the SEC and furnish this number to broker-dealers who execute their transactions. It also requires broker-dealers to use this number to maintain records, report transactions to the SEC, and monitor transactions for activity that could trigger large trader requirements.</p>
<p>Reporting by Investment Advisers to Private Funds and Certain Commodity Pool Operators and Commodity Trading Advisers on Form PF</p> <p>Published Nov. 16, 2011</p> <p>Division of Investment Management and CFTC</p>	<p>Requires investment advisers to one or more large private funds to file Form PF with the SEC. It also requires certain commodity pool operators and commodity trading advisers to file Form PF with the SEC and lets them use this filing to satisfy CFTC filing requirements with respect to commodity pools that are not private funds.</p>
<p>Net Worth Standard for Accredited Investors</p> <p>Published Dec. 29, 2011</p> <p>Division of Corporation Finance</p>	<p>Revises the definition of <i>accredited investor</i> to exclude the value of a person’s primary residence and certain associated debt when calculating net worth. It also makes a number of related technical corrections.</p>

Postguidance	
<p>Eliminating the Prohibition against General Solicitation and General Advertising in Rule 506 and Rule 144A Transactions</p> <p>Published July 24, 2013</p> <p>Division of Corporation Finance and Division of Investment Management</p>	<p>Implements a provision of the JOBS Act that allows issuers of certain securities that are not publicly offered to engage in general advertising and solicitation, provided that the purchasers of the securities are accredited investors. It also allows certain securities that were never publicly offered to be offered to parties other than qualified institutional buyers for resale as long as the buyers are qualified institutional buyers or parties acting on their behalf.</p>
<p>Money Market Fund Reform</p> <p>Published Aug. 14, 2014</p> <p>Division of Investment Management</p>	<p>Requires institutional nongovernment money market funds to transact at a floating net asset value instead of fixing the value of their shares at \$1. The rule allows money market fund boards of directors to impose liquidity fees or temporarily suspend redemptions in times of stress. It also requires money market funds to engage in greater diversification, adopt enhanced stress testing, and disclose more information to the SEC and to investors.</p>
<p>Security-Based Swap Data Repository Registration, Duties, and Core Principles</p> <p>Published Mar. 19, 2015</p> <p>Division of Trading and Markets</p>	<p>Requires registration of repositories that receive and store data on security-based swap transactions and outlines the duties of these repositories.</p>

<p>Registration Process for Security-Based Swap Dealers and Major Security-Based Swap Participants</p> <p>Published Aug. 14, 2015</p> <p>Division of Trading and Markets</p>	<p>Requires registration of security-based swap dealers and major security-based swap market participants.</p>
<p>Pay Ratio Disclosure</p> <p>Published Aug. 18, 2015</p> <p>Division of Corporation Finance</p>	<p>Requires disclosure of the annual total compensation of a company's chief executive officer, the median annual total compensation of employees other than the chief executive officer, and the ratio of those two figures in annual reports, proxy statements, and registration statements.</p>
<p>Removal of Certain References to Credit Ratings and Amendment to the Issuer Diversification Requirement in the Money Market Fund Rule</p> <p>Published Sept. 15, 2015</p> <p>Division of Investment Management</p>	<p>Removes references to credit ratings in rules and forms applicable to money market funds. It also removes an exception to the issuer diversification requirements that allowed funds to make larger investments in securities issued subject to a guarantee by a non-controlled person.</p>
<p>Crowdfunding</p> <p>Published Nov. 16, 2015</p> <p>Division of Corporation Finance</p>	<p>Establishes rules allowing small businesses and start-ups to raise capital from small investors over the Internet. The rule also permits Internet-based platforms to facilitate crowdfunding without having to register as brokers.</p>

The quality and claimed use of economic analysis was assessed using the standardized scoring system developed for the Regulatory Report Card project. In the Regulatory Report Card project, a research team assessed the quality of the regulatory impact analysis accompanying every economically significant prescriptive regulation that was proposed by executive branch regulatory agencies and that cleared OIRA review between 2008

and 2013—a total of 130 regulations.<sup>92</sup> The research team also assessed the extent to which the agency claimed to use the analysis to inform its decisions. The Report Card evaluation data have been used as a measure of the quality of agency economic analysis in several published studies.<sup>93</sup>

The evaluation criteria employed in the Regulatory Report Card flow directly from the principal requirements for regulatory impact analysis found in Executive Order No. 12,866 and OMB *Circular A-4*. The analysis criteria consist of the four fundamental topics, listed in Table 2, that any RIA should cover: (1) analysis of the underlying systemic problem, (2) alternatives, (3) benefits, and (4) costs. Patrick McLaughlin and I provide a crosswalk chart that shows how the evaluation criteria correspond to items in OMB's RIA checklist.<sup>94</sup> These four criteria are very similar to the criteria listed in the SEC's 2012 guidance for economic analysis.<sup>95</sup> That should be no surprise, because both the SEC's guidance and the Regulatory Report Card are based on Executive Order No. 12,866. The primary difference is that a fifth aspect of analysis listed in the SEC's guidance—assessment of the baseline—is included in the Regulatory Report Card as a subcriterion under analysis of the problem. The discussion below shows results for the baseline subcriterion separately to more closely track the list of topics as they are presented in the SEC's guidance.

The "Use" criteria address the extent to which the agency explained how it used the analysis in making decisions about the regulation. Evaluations of those criteria are based on claims the agency made about its use of analysis, because the evaluators cannot observe the extent to which information in an RIA actually influenced agency decisions. One might expect that agency claims

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92. Bull & Ellig, *supra* note 33, at 877. " 'Economically significant' regulations are those that have costs or other economic effects exceeding \$100 million annually or that meet other criteria specified in section 3[(f)(1)] of Executive Order No. 12,866." Jerry Ellig & Rosemarie Fike, *Regulatory Process, Regulatory Reform, and the Quality of Regulatory Impact Analysis*, 7 J. BENEFIT-COST ANALYSIS 523, 530 (2016). A prescriptive regulation contains mandates, prohibitions, or other restrictions on citizens' activity. *Id.* "The other major type of regulation is budget regulations, which implement federal spending or revenue collection programs." *Id.*

93. See, e.g., Jerry Ellig & Christopher J. Conover, *Presidential Priorities, Congressional Control, and the Quality of Regulatory Analysis: An Application to Healthcare and Homeland Security*, 161 PUB. CHOICE 305 *passim* (2014); Jerry Ellig et al., *Continuity, Change, and Priorities: The Quality and Use of Regulatory Analysis Across U.S. Administrations*, 7 REG. & GOVERNANCE 153 *passim* (2013); Bull & Ellig, *supra* note 33, *passim*; Ellig & Fike, *supra* note 92, at 529–30; Ellig & Peirce, *supra* note 18, *passim*.

94. Compare Jerry Ellig & Patrick A. McLaughlin, *The Quality and Use of Regulatory Analysis in 2008*, 32 RISK ANALYSIS 855, 871–72 (2012), with OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, AGENCY CHECKLIST: REGULATORY IMPACT ANALYSIS 1–2 (2010).

95. CURRENT GUIDANCE, *supra* note 15, at 4.

to use the RIA would result in numerous “false positives,” as agencies might claim to use the RIAs simply to make it easier to “sell” the regulation to the public. However, the Report Card data demonstrate that in the majority of cases, agencies do not claim to have used the RIA at all.<sup>96</sup> Therefore, it does not appear that false positives distort the data. There may well be a countervailing tendency for “false negatives” because an agency’s RIA can be challenged in court if the agency relies on it to justify decisions about the regulation.<sup>97</sup>

Table 2. Regulatory Report Card Assessment Criteria.<sup>98</sup>

Analysis
For each analysis criterion, the lettered subquestions each receive a score of zero to five, and these are averaged and rounded to produce the score on the criterion. Score data for each of these subquestions can be downloaded at <a href="http://www.mercatus.org/reportcards/archive">http://www.mercatus.org/reportcards/archive</a> .
<div>1. <i>Systemic problem</i>: How well does the analysis identify and demonstrate the existence of a market failure or other systemic problem the regulation is supposed to solve?<div>A. <i>Name problem</i>: Does the analysis identify a market failure or other systemic problem?<div>B. <i>Theory</i>: Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal?<div>C. <i>Evidence</i>: Does the analysis present credible empirical support for the theory?<div>D. <i>Baseline</i>: How well does the analysis address the baseline—what the state of the world is likely to be in the absence of further federal action?<div>E. <i>Uncertainty</i>: Does the analysis adequately assess uncertainty about the existence and size of the problem?</div></div></div></div></div></div>

96. Jerry Ellig, Evaluating the Quality and Use of Regulatory Impact Analysis: The Mercatus Center’s Regulatory Report Card, 2008-2013, at 25–26 (July 2016) (unpublished manuscript) (on file with the Mercatus Center at George Mason University).

97. Cecot & Viscusi, *supra* note 5, at 591.

98. Ellig, *supra* note 96, at 14–16.

2. *Alternatives*: How well does the analysis assess the effectiveness of alternative approaches?
  - A. *Alternatives named*: Does the analysis enumerate other alternatives to address the problem?
  - B. *Scope of alternatives*: Is the range of alternatives considered narrow or broad?
  - C. *Benefits of alternatives*: Does the analysis evaluate how alternative approaches would affect the amount of the outcome achieved?
  - D. *Cost of alternatives*: Does the analysis identify and quantify incremental costs of all alternatives considered?
  - E. *Net benefits of alternatives*: Does the analysis identify the approach that maximizes net benefits?
  - F. *Cost-effectiveness of alternatives*: Does the analysis identify the cost-effectiveness of each alternative considered?
3. *Benefits*: How well does the analysis identify the benefits (or other desired outcomes) and demonstrate that the regulation will achieve them?
  - A. *Outcomes named*: How clearly does the analysis identify ultimate outcomes that affect citizens' quality of life?
  - B. *Outcomes measured*: How well does the analysis identify how these outcomes are to be measured?
  - C. *Theory*: Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes?
  - D. *Evidence*: Does the analysis present credible empirical support for the theory?
  - E. *Uncertainty*: Does the analysis adequately assess uncertainty about the outcomes?
  - F. *Incidence*: Does the analysis identify all parties who receive benefits and assess the incidence of benefits?
4. *Costs*: How well does the analysis assess costs?
  - A. *Expenditures*: Does the analysis identify all expenditures likely to arise as a result of the regulation?
  - B. *Passthrough*: Does the analysis identify how the regulation would likely affect the prices of goods and services?
  - C. *Behavior*: Does the analysis examine costs that stem from changes in human behavior as consumers and producers respond to the regulation?
  - D. *Uncertainty*: Does the analysis adequately address uncertainty about costs?
  - E. *Incidence*: Does the analysis identify all parties who bear costs and assess the incidence of costs?

Use
5. <i>Any use of analysis:</i> Does the proposed rule or the RIA present evidence that the agency used any aspect of the analysis in making decisions?
6. <i>Cognizance of net benefits:</i> Did the agency choose the alternative that maximizes net benefits or explain why it chose another option?

For each criterion, trained evaluators assigned a score ranging from zero (no useful content) to five (comprehensive analysis with potential best practices). Table 3 lists the guidelines for scoring. The scorers compiled notes explaining the reasons for each score.<sup>99</sup> As a qualitative evaluation using Likert-scale scoring, the Report Card represents an approach midway between checklist scoring systems and detailed case studies of individual regulations.<sup>100</sup> Inter-rater reliability tests indicate that the training method for evaluators produces consistent evaluations across multiple scorers.<sup>101</sup>

Table 3. Report Card Scoring Guidelines.<sup>102</sup>

Score	Guideline
5	Complete analysis of all or almost all aspects, with one or more “best practices”
4	Reasonably thorough analysis of most aspects and/or shows at least one “best practice”
3	Reasonably thorough analysis of some aspects
2	Some relevant discussion with some documentation of analysis
1	Perfunctory statement with little explanation or documentation

In a previously-published article, several colleagues and I used the Regulatory Report Card evaluation framework to evaluate the

99. The scorers’ notes on each regulation are publicly available at *Regulatory Report Card*, MERCATUS CTR. GEO. MASON U., <http://www.mercatus.org/reportcards> (last visited Jan. 10, 2020).

100. The evaluation method is explained more fully in Ellig & McLaughlin, *supra* note 94, at 858–62.

101. *E.g.*, *id.* at 860–61; Ellig et al., *supra* note 93, at 159.

102. Ellig & McLaughlin, *supra* note 94, at 860.

analysis accompanying preguidance SEC regulations.<sup>103</sup> For this Article, I scored the seven postguidance SEC regulations.

#### IV. AVERAGE QUALITY AND USE OF ANALYSIS, PRE- AND POSTGUIDANCE

##### *A. Summary Statistics and Comparison of Means*

Table 4 shows the Report Card scores of the pre- and postguidance SEC regulations for the overall quality of analysis, the various subcomponents of quality of analysis, and the two criteria that assess how well the agency explained how its analysis influenced decisions. Table 5 shows summary statistics for these two groups of regulations plus three comparison groups: the three SEC regulations remanded by the D.C. Circuit, executive branch financial regulations, and all executive branch regulations evaluated in the Regulatory Report Card project.

The scores for the three regulations remanded by the D.C. Circuit are similar to the scores for the seven regulations issued during the year and a half before the SEC staff issued its economic analysis guidance. This result suggests that the quality of SEC economic analysis changed little in the period between the court decisions and the March 2012 guidance.<sup>104</sup> The differences in mean scores for SEC pre- and postguidance regulations suggest substantial improvement. The differences are statistically significant for every criterion except cognizance of net benefits. Comparison of mean scores suggests that the quality of SEC economic analysis has improved so much that it is now statistically indistinguishable from analysis conducted for executive branch financial regulations (excluding cognizance of net benefits). The mean for SEC postguidance regulations is still slightly below the mean for all executive branch regulations on analysis of alternatives, benefits, and costs.

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103. Ellig & Peirce, *supra* note 18, at 363–64.

104. None of the differences in means are statistically significant in a two-tailed *t*-test. The difference in means for the cost score is (marginally) significant at the 10% level.



Table 4. Report Card Scores for SEC Pre- and Postguidance Regulations.

	Analysis	Problem	Baseline	Alternatives	Benefits	Costs	Any Use Claimed	Cognizance of Net Benefits
Preguidance <sup>105</sup>								
Risk Management Controls	5	2	1	0	1	2	1	0
Executive Compensation	3	0	0	1	1	1	1	0
Whistleblower Incentives	4	0	0	2	1	1	3	1
Amendments to Investment Advisers Act	5	1	1	1	1	2	1	0
Large Trader Reporting	5	1	1	1	1	2	1	0
Reporting by Investment Advisers	6	1	0	2	2	1	2	0
Net Worth Standards for Accredited Investors	3	0	1	1	1	1	2	0
Postguidance								
Removal of Advertising Prohibition	9	3	4	1	3	2	2	0
Money Market Reform	13	4	3	3	3	3	5	1
Swap Data Repository	8	2	1	2	2	2	3	1
Swap Dealer Registration	6	1	1	2	1	2	3	0
Pay Ratio Disclosure	5	1	2	2	0	2	3	0
Credit Ratings	7	1	2	2	2	2	3	0
Crowdfunding	10	3	3	2	3	2	2	0

105. Scores for SEC preguidance regulations do not always match those reported by Ellig & Peirce, *supra* note 18, because all scores were converted to the Regulatory Report Card's post-2012 scoring system to make them comparable to the scores for the sample of 2008–2013 executive branch regulations. For an explanation of the change in the Report Card scoring system after 2012, see Ellig, *supra* note 96.

Table 5. Summary Statistics.

Variable	Mean	Standard Deviation	Minimum	Maximum	Median
SEC Remanded Regulations ( $n = 3$ )					
Analysis	5.3	1.5	4	7	6
Problem	1.3	0.6	1	2	1
Baseline	0.3	0.6	0	1	0
Alternatives	1.3	0.6	1	2	1
Benefits	1.7	0.6	1	2	2
Costs	1.0	0.0	1	1	1
Any Use Claimed	1.0	0.0	1	1	1
Cognizance of Net Benefits	0.0	0.0	0	0	0
SEC Preguidance Regulations ( $n = 7$ )					
Analysis	4.4	1.1	3	6	5
Problem	0.7	0.8	0	2	1
Baseline	0.6	0.5	0	1	1
Alternatives	1.1	0.7	0	2	1
Benefits	1.1	0.4	1	2	1
Costs	1.4	0.5	1	2	1
Any Use Claimed	1.6	0.8	1	3	1
Cognizance of Net Benefits	0.1	0.4	0	1	0
SEC Postguidance Regulations ( $n = 7$ )					
Analysis	8.3***	2.7	5	13	8
Problem	2.1**	1.2	1	4	2
Baseline	2.3***	1.1	1	4	3
Alternatives	2.0**	0.6	1	3	2

Benefits	2.0*	1.2	0	3	2
Costs	2.1**	0.4	2	3	2
Any Use Claimed	3.0**	1.0	2	5	3
Cognizance of Net Benefits	0.3	0.5	0	1	0
Executive Branch Financial Regulations 2008–2013 ( <i>n</i> = 9)					
Analysis	10.3	3.7	5	14	12
Problem	2.6	1.0	1	4	3
Baseline	1.2	1.0	0	3	1
Alternatives	2.8	1.2	1	4	3
Benefits	2.9	1.2	1	4	3
Costs	2.1	0.8	1	3	2
Any Use Claimed	2.7	1.1	1	4	2
Cognizance of Net Benefits	2.6+++	1.3	1	4	3
All Executive Branch Regulations 2008–2013 ( <i>n</i> = 130)					
Analysis	10.7	2.9	2	18	10.5
Problem	2.2	1.0	0	4	2
Baseline	2.3	1.2	0	5	2
Alternatives	2.7††	1.2	0	5	3
Benefits	3.2††	0.8	1	5	3
Costs	2.6††	1.0	1	5	3
Any Use Claimed	2.3	1.4	0	5	2
Cognizance of Net Benefits	2.4††	1.5	0	5	2

Notes: Statistical significance of difference in mean scores for SEC preguidance and SEC postguidance (two-tailed *t*-test) is: \*\*\* 1%, \*\* 5%, \* 10%. Statistical significance of difference in mean scores for SEC postguidance and executive branch financial regulations (two-tailed *t*-test) is: +++ 1%. Statistical significance of difference in mean scores for SEC postguidance and all executive branch regulations (two-tailed *t*-test) is: †† 5%.

### B. Econometric Analysis

The foregoing comparison of mean scores suggests that the quality of SEC economic analysis and the extent to which the SEC claimed to use the analysis in decisions improved noticeably following *Business Roundtable* and the SEC's new economic analysis guidance. Other factors, however, could account for some or all of this improvement. For example, more complicated regulations may be accompanied by lengthier analysis. Regulations that are more politically controversial or have larger impacts might be accompanied either by higher-quality analysis, because elected leaders expect a more careful vetting of such regulations,<sup>106</sup> or by lower-quality analysis, because politics trumps economic analysis.<sup>107</sup> Regulations subject to statutory deadlines may have lower-quality analysis simply because the agency has less time to do the work.<sup>108</sup> Statutory restrictions on agency decision-making authority for a particular regulation may lead to lower-quality analysis because fewer margins exist on which the analysis could affect decisions, so the agency invests less in analysis.<sup>109</sup>

The statistics in Table 6 suggest that some of these factors could help explain why the SEC's postguidance regulations are accompanied by more thorough analysis than the preguidance regulations. On average, the postguidance regulations have approximately double the word count of the preguidance regulations, suggesting that they may be more complex. The postguidance regulations attracted an average of four times as many public comments as the preguidance regulations (excluding one outlier, pay ratio disclosure, which received more than 300,000 public comments). The increased number of comments may indicate that these regulations are more politically salient.

Most of the statutory constraints are similar for both groups of regulations, with two exceptions: two postguidance regulations had

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106. Mathew D. McCubbins et al., *Administrative Procedures as Instruments of Political Control*, 3 J. L. ECON. & ORG. 243, 259 (1987).

107. Stuart Shapiro & John F. Morrall III, *The Triumph of Regulatory Politics: Benefit-Cost Analysis and Political Salience*, 6 REG. & GOVERNANCE 189 *passim* (2012).

108. See, e.g., Alden F. Abbott, *The Case Against Federal Statutory and Judicial Deadlines: A Cost-Benefit Appraisal*, 39 ADMIN. L. REV. 171 *passim* (1987); Alden F. Abbott, *Case Studies on the Costs of Federal Statutory and Judicial Deadlines*, 39 ADMIN. L. REV. 467 *passim* (1987); Jacob E. Gersen & Anne Joseph O'Connell, *Deadlines in Administrative Law*, 156 U. PA. L. REV. 923 *passim* (2008).

109. Richard Williams, *The Influence of Regulatory Economists in Federal Health and Safety Agencies* 14 (Mercatus Ctr. at George Mason Univ., Working Paper No. 08-15, 2008).

statutory deadlines, and three postguidance regulations were issued under statutes that gave the SEC little discretion to decide who is subject to the regulation. The SEC estimated that one of the fourteen regulations had an economic impact exceeding \$1 billion annually. Some other SEC regulations may have had actual impacts exceeding \$1 billion annually, but this variable is coded solely on the basis of the agencies’ estimates for each regulation.

Table 6. Explanatory Variables for SEC Regulations, Pre- and Postguidance.

	Preguidance	Postguidance
Averages		
Word Count	4,464	9,322
Public Comments	95	44,210
Public Comments (Excluding Pay Ratio Regulation)	95	381
Number of Regulations		
Statutory Deadline	0	2
Regulation Required	5	6
Prescribed Form	6	5
Prescribed Stringency	2	1
Prescribed Coverage	1	3
Effects Exceed \$1 Billion	0	1

1. Econometric Model and Estimation Method

The econometric analysis tests for differences in the quality and claimed use of economic analysis for SEC regulations pre- and postguidance. The model employs a difference-in-difference specification with agency-specific fixed effects. The other variables listed in Table 6 are included as control variables. The full model is:

$$Score_i = \alpha + \beta_1 SEC*Postguidance\ Publication_i + \beta_2 SEC_i + \beta_3 Postguidance\ Publication_i + \beta_4 Word\ Count_i + \beta_5 Public\ Comments_i + \beta_6 Public\ Comments_i^2 + \beta_7 Financial_i + \beta_{8-12} Statutory\ Constraints_i + \beta_{13} \$1Billion\ Impact_i + \beta_{14} Agency_i + \varepsilon,$$

where  $Score_i$  is equal to regulation  $i$ 's Report Card score,  $SEC*Postguidance\ Publication_i$  is the difference-in-difference estimator equal to one if the regulation is an SEC regulation published after the March 2012 guidance,  $SEC_i$  is a dummy variable equal to one if the regulation is an SEC regulation, and  $Postguidance\ Publication_i$  is a dummy variable equal to one if the regulation was published after the March 2012 guidance.  $Word\ Count_i$  is the number of words in the regulatory text, used as a measure of the complexity of the regulation.  $Financial_i$  is a dummy variable equal to one if the regulation is a financial regulation.  $Public\ Comments_i$  and  $Public\ Comments_i^2$  indicate the number of public comments submitted when the regulation was proposed, plus the square of this number (to control for diminishing marginal returns).  $Statutory\ Constraints_i$  is a vector of five dummy variables that indicate statutory constraints: there is a statutory deadline for the regulation, the regulation is required by statute, or the statute dictates the form, stringency, or coverage of the regulation;  $\$1\ Billion\ Impact_i$  is a dummy variable that indicates whether the regulation has benefits, costs, or other economic impacts of at least \$1 billion, as determined by the issuing agency; and  $Agency_i$  is a vector of agency dummy variables that control for agency-specific fixed effects.

The omitted category agency is the Department of Transportation, whose mean Report Card score for analysis (10.25) is almost identical to the sample mean (10.27). Thus, the agency coefficients essentially test whether each agency's analysis is statistically different from the typical executive branch analysis.

The dependent variables—scores indicating the quality or claimed use of analysis—are ordinal. Therefore, ordered logit is likely the most appropriate estimation method, especially when the score variable has only a few possible outcomes.<sup>110</sup> The dependent variable in an ordered logit regression equation is the log of the ratio of the odds that the score will or will not have a designated value.<sup>111</sup> The coefficients in an ordered logit regression estimate how each explanatory variable affects this odds ratio.

The explanatory variables were tested for collinearity through examination of the correlation coefficients,<sup>112</sup> the variance inflation

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110. Ellig & Conover, *supra* note 93, at 312; Ellig & Fike, *supra* note 92, at 536; Ellig et al., *supra* note 93, at 157.

111. HENRI THEIL, PRINCIPLES OF ECONOMETRICS 634 (1971).

112. See Donald E. Farrar & Robert R. Glauber, *Multicollinearity in Regression Analysis: The Problem Revisited*, 49 REV. ECON. & STAT. 92 *passim* (1967).

factor,<sup>113</sup> and the condition index.<sup>114</sup> None indicated significant collinearity. The SEC variables of interest are not collinear with any other variables. The explanatory variable they are most closely correlated with is the financial regulation dummy, but more than half of the financial regulations are from agencies other than the SEC. Therefore, false negatives due to collinearity are unlikely to be a problem for the SEC variables.

2. Results

Table 7 reports regression results using the score for overall quality of analysis as the dependent variable. The sample used for the regressions contains 143 regulations: 129 executive branch regulations evaluated as part of the Regulatory Report Card project, 7 preguidance SEC regulations, and 7 postguidance SEC regulations. One agency that issued just one regulation in the Report Card sample, the Office of Personnel Management, is omitted because its inclusion frequently generated warnings that the standard errors are suspect because one or more observations were completely determined.

Table 7. Overall Quality Analysis Score Is Significantly Different Pre- and Postguidance.

	(1) Ordered Logit	(2) Ordered Logit	(3) BUC Ordered Logit	(4) OLS
SEC*Postguidance Publication	5.09 (4.50)***	5.95 (3.33)***	17.96 (13.26)***	4.94 (8.16)***
SEC	-6.33 (4.52)***	-7.89 (4.04)***	Not Applicable	-6.91 (15.32)***
Postguidance Publication	-0.62 (1.30)	-0.32 (0.90)	-0.41 (1.34)	-0.39 (1.15)
Word Count		-0.00001 (2.39)**	-6.98e-06 (2.44)**	-9.29e-06 (2.23)**
Public Comments		0.00004 (2.19)**	0.00003 (1.85)*	0.00004 (2.07)*

113. See DAVID A. BELSLEY ET AL., REGRESSION DIAGNOSTICS: IDENTIFYING INFLUENTIAL DATA AND SOURCES OF COLLINEARITY 93 (1980).

114. See *id.* at 153.

Public Comments <sup>2</sup>		-1.88e-10 (2.42)**	-1.45e-10 (2.21)**	-1.83e-10 (2.55)**
Financial		1.25 (1.96)**	1.24 (2.72)***	1.60 (2.75)**
Statutory Deadline		-0.41 (0.64)	-0.21 (0.34)	-0.38 (0.47)
Regulation Required		-0.23 (0.69)	-0.34 (1.40)	-0.41 (1.28)
Prescribed Form		-0.21 (0.48)	0.27 (0.75)	0.35 (0.59)
Prescribed Stringency		-0.59 (0.92)	-0.74 (1.80)*	-0.87 (1.69)
Prescribed Coverage		-0.01 (0.03)	-0.01 (0.04)	0.04 (0.08)
Effects Exceed \$1 Billion		1.61 (3.18)***	1.58 (2.72)***	1.88 (3.30)***
Constant $R^2$ or Pseudo- $R^2$	0.07	0.18	0.18	0.56
$N$	143	143	1,186	143
Linear Combination SEC*Postguidance Publication + SEC	-1.24 (2.26)**	-1.93 (2.94)***	Not Applicable	-1.96 (2.95)***

Note: Absolute values of  $z$ - or  $t$ -statistics in parentheses are based on robust standard errors clustered by department. Agency fixed effects coefficients for columns (2) and (4) are not reported to conserve space. Agency coefficients are not reported for BUC ordered logit in column (3) because the method does not produce agency-specific coefficients. Statistical significance is indicated by asterisks: \* 10%, \*\* 5%, \*\*\* 1%.

Column (1) shows a bare-bones regression that includes only the difference-in-difference estimator, the dummy variable for the SEC, and the dummy variable indicating whether the regulation was published after the SEC's March 2012 guidance. Subsequent columns show the full regression model using three different estimators.

Column (2) shows the results for an ordered logit estimator with agency-specific dummy variables. A virtue of this estimator is that it calculates coefficients for the agency-specific dummy variables, including the SEC dummy variable. A potential disadvantage is that ordered logit may not be a consistent



estimator when the number of observations for some of the agencies is small.<sup>115</sup>

Column (3) employs the “blow up and cluster” (BUC) ordered logit estimator developed by Gregori Baetschmann, Kevin Staub, and Rainer Winkelmann,<sup>116</sup> which is consistent, is reasonably efficient, and is unbiased for small sample sizes. The sample is “blown up” by creating  $K-1$  copies of each observation, where  $K$  is the number of possible values the dependent variable could take. This is why  $N$  is equal to 1,186 for this estimator instead of 143. Each of the copies is dichotomized at one of the different possible values of the dependent variable. Standard errors are clustered by observation because all the  $K-1$  copies are obviously related to each other. Conditional maximum likelihood is applied to the entire blown-up set of observations. Because the BUC estimator does not employ agency-specific dummy variables, it does not create agency-specific coefficients. However, it is possible to test whether the SEC postguidance regulations have higher analysis scores than preguidance regulations by including a dummy variable for the postguidance regulations.<sup>117</sup>

Column (4) shows results using ordinary least squares (OLS). OLS may be permissible in this case because the dependent variable—the total score for quality of analysis—takes on seventeen different values ranging from two points to eighteen points, and the scores are not clustered around a few values. Therefore, it may be permissible to treat the analysis score as a cardinal variable.

All three estimators used for the full regression model produce essentially the same results. Postguidance SEC regulations are accompanied by significantly better economic analysis. For the ordered logit and OLS estimators, it is possible to use Stata’s “lincom” command to calculate a coefficient that shows the combined effect of one or more individual coefficients. For estimators (1), (3), and (4), the combined effect of *SEC\*Postguidance Publication* and *SEC* is negative and statistically significant. This indicates that the improvement in the SEC’s economic analysis after the 2012 guidance is not quite large enough to offset the negative SEC coefficient.

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115. See Gary Chamberlain, *Analysis of Covariance with Qualitative Data*, 47 REV. ECON. STUD. 225 *passim* (1980).

116. See Gregori Baetschmann et al., *Consistent Estimation of the Fixed Effects Ordered Logit Model*, 178 J. ROYAL STAT. SOC’Y SERIES A (STAT. IN SOC’Y) 685, 686 (2015).

117. When dummy variables are included for both SEC preguidance and SEC postguidance regulations, the BUC estimator fails to converge.

Nevertheless, the improvement is substantial. In the OLS regression, the coefficient on *SEC\*Postguidance Publication* is almost five points. The coefficient is larger than the mean score (4.30 points) and more than five times the standard deviation (0.95 points) of SEC regulations in the preguidance period.

The negative sign on *Word Count* suggests that more complex regulations receive somewhat less thorough economic analysis than one would expect after controlling for the size of the regulations' impact and agency-specific fixed effects.<sup>118</sup> Regulations that are more politically salient, as measured by the number of public comments, receive more extensive analysis (although this variable is significant at only the 10% level in the BUC and OLS estimators). This effect is subject to diminishing returns. None of the statutory constraints correlate with the quality of analysis, although *Prescribed Stringency* is marginally significant in one regression.<sup>119</sup> Regulations with impacts exceeding \$1 billion have higher-quality analysis. These results are all consistent with previous research using the Report Card data set.<sup>120</sup>

Another interesting result is that, after controlling for agency-specific fixed effects, financial regulations have higher-quality analysis than other types of regulations. This outcome undercuts the claim that economic analysis is especially difficult for financial regulations.

Table 8 shows regression results for each of the individual components of analysis that correspond to topics listed in the SEC's guidance, plus the two criteria related to the agency's explanation of how it used the analysis. In every regression, the difference-in-difference coefficient indicates that the SEC's postguidance analysis, as well as the commission's explanations of how it used the analysis, improved compared with the preguidance period. Improvement is even evident in analysis of the systemic problem—the criterion on which scores are typically lowest.

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118. Other measures, such as the number of unique words and the number of regulatory restrictions (occurrences of the words *must*, *shall*, *may not*, *required*, and *prohibited*) produced virtually identical results in the regressions.

119. None of the statutory constraints were significant when entered singly in separate regressions either.

120. See, e.g., Bull & Ellig, *supra* note 33, at 877–78, 888, 916–17; Ellig, *supra* note 96, *passim*; Ellig & Conover, *supra* note 93, at 311; Ellig & Fike, *supra* note 92, at 530, 535–36; Ellig et al., *supra* note 93, at 160–64.

Table 8. Regressions for Individual Criteria Related to Quality or Use of Analysis.

	Problem	Baseline	Alternatives	Benefits	Costs	Any Use Claimed	Cognizance of Net Benefits
SEC*Postguidance Publication	3.17 (5.11)***	3.04 (4.22)***	3.09 (4.45)***	4.24 (5.53)***	2.89 (3.25)***	2.46 (5.07)***	2.71 (4.43)***
SEC	-0.71 (0.98)	-0.51 (0.82)	-5.71 (4.80)***	-5.82 (7.25)***	-2.99 (4.70)***	-3.27 (3.78)***	-9.10 (7.51)***
Postguidance Publication	0.99 (1.94)*	0.84 (1.32)	-1.33 (2.18)**	-0.30 (0.72)	-0.53 (1.37)	0.38 (0.82)	-2.16 (3.34)***
Word Count	-2.18e-06 (0.49)	-5.51e-06 (1.93)*	-9.82e-06 (1.61)	-0.00002 (4.35)***	8.17e-07 (0.19)	-4.42e-06 0.60	-4.16e-06 (0.57)
Public Comments	1.01e-06 (0.06)	0.00002 (1.46)	0.00004 (3.18)***	0.00008 (3.63)***	-3.62e-06 (0.32)	0.00003 (0.85)	0.00005 (3.06)***
Public Comments <sup>2</sup>	-3.76e-11 (0.63)	-6.60e-11 (1.43)	-1.43e-10 (3.15)***	-3.63e-10 (3.80)***	-2.93e-11 (0.74)	-9.77e-11 (0.81)	-1.60e-10 (2.78)***
Financial	0.53 (1.17)	-3.42 (4.37)***	2.70 (2.63)***	-0.46 (0.75)	0.70 (1.21)	1.75 (2.12)**	2.38 (2.28)**
Statutory Deadline	-0.68 (1.32)	-0.44 (0.66)	-0.33 (1.02)	-0.53 (0.53)	0.15 (0.22)	0.89 (1.91)*	0.52 (0.99)
Regulation Required	-0.33 (0.52)	-0.28 (0.54)	0.39 (1.22)	-0.24 (0.51)	-0.81 (1.34)	-0.44 (1.18)	-0.24 (0.61)
Prescribed Form	-0.49 (0.86)	-1.28 (1.96)**	-0.11 (0.23)	1.17 (1.84)*	0.83 (1.39)	0.56 (0.82)	-0.63 (0.91)
Prescribed Stringency	-0.05 (0.13)	0.42 (0.62)	-1.37 (2.73)***	0.17 (0.29)	-0.99 (1.93)*	-0.58 (0.83)	-1.01 (2.03)**
Prescribed Coverage	-0.05 (0.13)	0.02 (0.04)	-0.23 (0.86)	0.51 (1.73)*	-0.01 (0.02)	-0.15 (0.38)	0.19 (0.38)
Effects Exceed \$1 Billion	1.31 (2.26)**	0.78 (1.69)*	1.12 (1.20)	1.70 (2.05)**	1.07 (2.45)***	1.25 (1.48)	0.84 (1.11)
Pseudo- $R^2$	0.6	0.18	0.17	0.33	0.29	0.22	0.31
$N$	143	143	143	143	143	143	143
Linear Combination SEC*Postguidance Publication + SEC	-0.16 (0.18)	2.53 (2.89)***	-2.62 (3.31)***	-1.58 (3.56)***	-0.10 (0.12)	-0.80 (1.00)	-6.34 (5.85)***
Linear Combination SEC*Postguidance Publication + SEC + Financial	0.37 (0.60)	-0.89 (1.69)*	0.07 (0.16)	-2.04 (5.61)***	0.60 (1.09)	0.95 (1.76)*	-3.96 (5.18)***

Note: Absolute values of  $z$ - or  $t$ -statistics in parentheses are based on robust standard errors clustered by department. Statistical significance is indicated by asterisks: \* 10%, \*\* 5%, \*\*\* 1%.

The other control variables are usually correlated with some, but not all, of the individual elements of the quality or claimed use of economic analysis. Thus, *Word Count* is negatively correlated with analysis only of benefits. *Public Comments* and *Public Comments*<sup>2</sup> are correlated with analysis of alternatives and benefits, plus the thoroughness of the agency's explanation of the role of net benefits in its decisions. Financial regulations appear to have more thorough analysis of alternatives, less thorough analysis of baselines, and more thorough explanations of how the agency used the analysis and the role of net benefits in the decision. Statutory constraints are mostly uncorrelated with the quality of individual elements of economic analysis, except that *Prescribed Stringency* is highly correlated with less thorough analysis of alternatives. Regulations with effects exceeding \$1 billion appear to have more thorough analysis of the underlying problem, benefits, and costs.

To conserve space, Table 8 reports results for only the ordered logit fixed effects estimator using the full model. Bare-bones ordered logit regressions like the one in Column (1) of Table 7, as well as BUC ordered logit regressions, produced results similar to the results reported in Table 8. OLS was not estimated because it is not an appropriate estimator when the dependent variable is ordinal and has a small number of potential values (zero to five).

## V. QUALITATIVE VERSUS QUANTITATIVE ANALYSIS

Scholars have spilled a great deal of ink arguing over the possibility and desirability of economic analysis of financial regulations. Gordon claims that economists cannot predict the results of financial regulations because the regulations change the financial system.<sup>121</sup> Coates and Schwartz and Nelson argue that nonquantified or "conceptual" economic analysis is desirable, but reliable quantification of many major benefits and costs is unlikely to be feasible.<sup>122</sup> Posner and Glen Weyl counter that economic analysis, including calculation of benefits and costs, should be no more difficult for financial regulations than for other regulations;<sup>123</sup> in fact, it should perhaps be easier, given that most of the valuations relevant to financial regulation are monetary.<sup>124</sup>

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121. Gordon, *supra* note 62, *passim*.

122. Coates, *supra* note 63, at 887–88, 895; Coates, *supra* note 65, at 3; Schwartz & Nelson, *supra* note 19, at 345.

123. Posner & Weyl, *supra* note 19, at S30; Posner & Weyl, *supra* note 70, at 261.

124. *Cf.* ROSE & WALKER, *supra* note 19, at 17–19.

Given these disagreements, it is instructive to observe what kind of improvements in SEC analysis occurred following adoption of the 2012 guidance.

### *A. Report Card Data*

The Report Card evaluation criteria in Table 2 can be divided into two types. Some of the criteria are largely conceptual, in the sense that they focus on a clear understanding of concepts or on theoretical and empirical analysis of cause-and-effect relationships. They include, for example, the identification, theory, and empirical evidence analyzing the systemic problem; the identification of a wide variety of alternatives; and the identification of intended outcomes and the theory and evidence showing how the regulation will achieve them. Other criteria require a clear understanding of economic concepts but also require some degree of quantification in order to receive full credit under the Report Card scoring system. Examples include the analysis of the baseline, the calculation of benefits and costs of the regulation and its alternatives, and the assessment of uncertainties that might alter the magnitude of the problem, benefits, or costs. Thus, the Report Card criteria assess the use of economic concepts and supporting empirical analysis, as well as the extent of quantification of benefits and costs.

Figures 1 through 4 show how the average scores for SEC regulations changed pre- and postguidance for each evaluation criterion related to the quality of analysis. Criteria that require quantification to receive full credit are marked with asterisks. Three conclusions are clear from these graphs. First, substantial improvement occurred on numerous “conceptual” criteria that do not require quantification. Second, substantial improvement also occurred on criteria that require quantification. Third, the average scores for most criteria are still usually below three points, the score that indicates reasonably thorough analysis of some aspects of the topic.

Figure 1. Changes in Scores for Criteria Related to Problem Analysis.

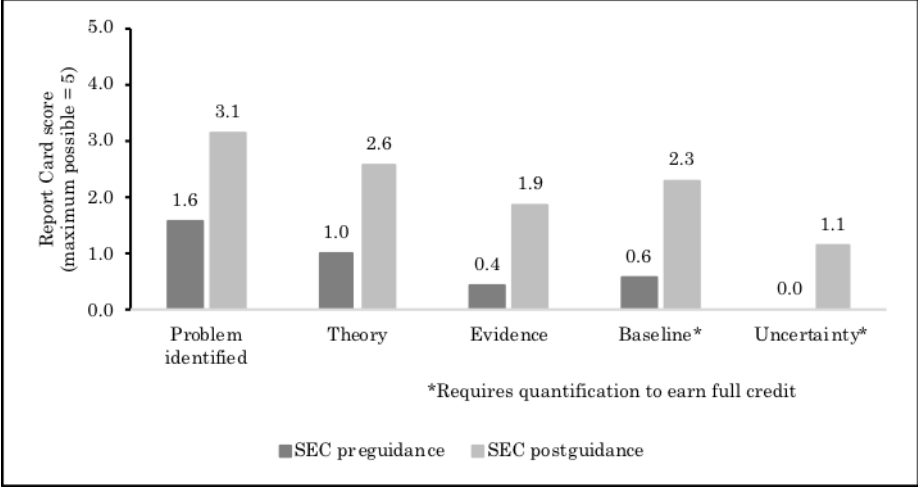
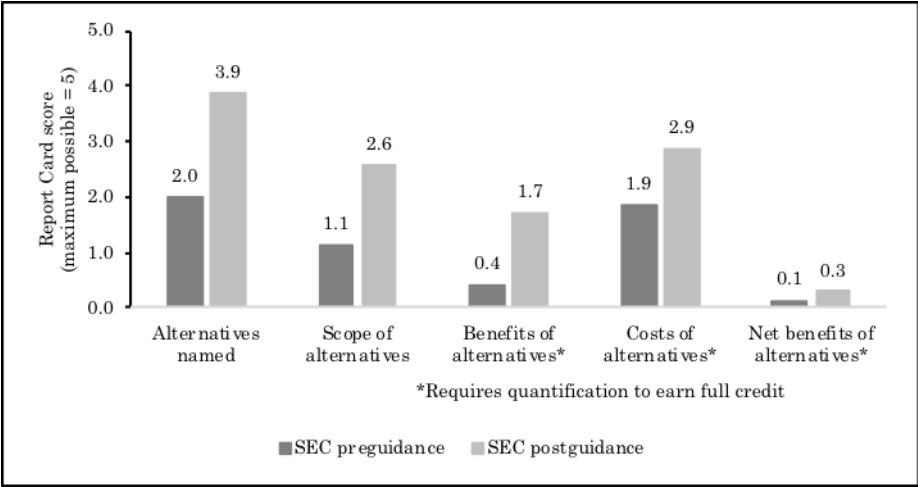


Figure 2. Changes in Scores for Criteria Related to Analysis of Alternatives.



Note: Scores for cost-effectiveness of alternatives are omitted because they equaled zero in both periods.

Figure 3. Changes in Scores for Criteria Related to Analysis of Benefits.

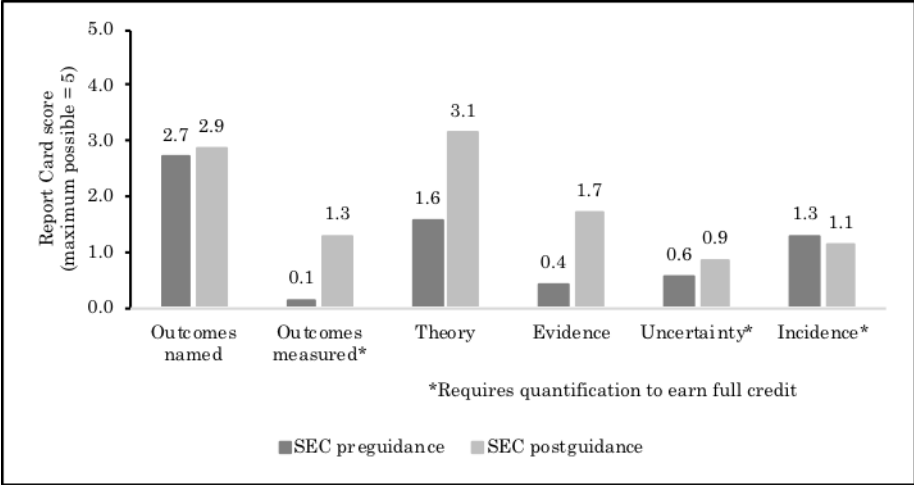
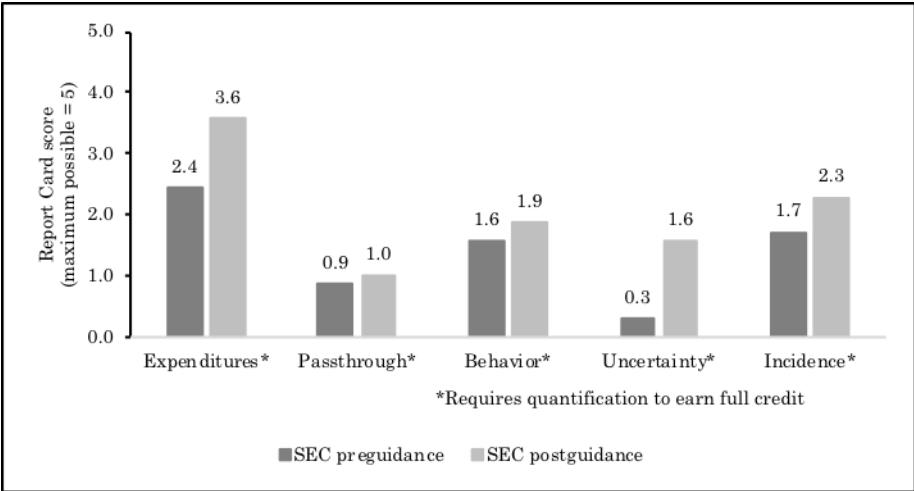


Figure 4. Changes in Scores for Criteria Related to Analysis of Costs.



Even the average postguidance scores for most criteria are usually below three points, suggesting that much of the improvement on criteria that involve quantification may reflect more effective incorporation of the underlying economic concepts rather than significant improvements in quantification. For some of the analysis criteria, that is true. Figure 1, for example, indicates a large improvement in analysis of baselines. In most cases, though, the improvement occurred because the analysis accompanying preguidance regulations barely mentioned the baseline at all. The analysis accompanying postguidance regulations explained the current regulations and conditions that

the new regulation was expected to change. Thus, the recent past was implicitly assumed to be the baseline that would continue in the absence of a new regulation.

Only one postguidance regulation was accompanied by a (partial) projection of how the market was likely to evolve in the absence of the new regulation. The paperwork burden analysis for the regulation that removed the ban on general advertising for certain private investment placements projected how regulatory filings were expected to grow in the future and then estimated how the regulation would alter those figures, based on the SEC's experience with a similar regulatory change in the past.<sup>125</sup> That projection of the baseline, however, was limited to the paperwork analysis. The economic analysis presented a great deal of quantitative information about the size, scope, and composition of the exempt-offerings market in recent years, followed by a qualitative assessment of how the size of the exempt-offerings market might be expected to change under the regulation.<sup>126</sup>

Other examples demonstrate significant improvements in quantification. They primarily involve quantification of costs that take the form of expenditures. Figure 4 shows that the average score for calculation of expenditures increased by more than one point. One regulation—pay ratio disclosure—earned a score of five points for reasonably complete assessment of compliance expenditures. The analysis included expenditures for both outside counsel and other assistance, plus internal time. Initial compliance costs for registrants covered by the rule were extrapolated from cost estimates supplied by ten large firms that submitted comments. Ongoing compliance costs were estimated based on several commenters' estimates of these costs as a percentage of initial costs. A separate section calculates paperwork burdens.<sup>127</sup> Three other regulations earned four points for reasonably complete analysis of some aspects of expenditures. They were the regulations implementing security-based swap data repository

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125. Eliminating the Prohibition Against General Solicitation and General Advertising in Rule 506 and Rule 144A Offerings, 78 Fed. Reg. 44,771, 44,787–88 (July 24, 2013) (to be codified at 17 C.F.R. pts. 230, 239, 242).

126. *Id.* at 44,788–98.

127. Pay Ratio Disclosure, 80 Fed. Reg. 50,104, 50,154–61 (Aug. 18, 2015) (to be codified at 17 C.F.R. pts. 229, 240, 249).



registration,<sup>128</sup> security-based swap dealer and participant registration,<sup>129</sup> and crowdfunding.<sup>130</sup>

### *B. Conceptual Analysis Example: Money Market Fund Reform*

The money market reform regulation demonstrates how conceptual and empirical economics can inform decision-making even when benefits and costs are not quantified sufficiently to permit calculation of net benefits.<sup>131</sup> This regulation earned a score of five points for “Any Use of Analysis” but just one point for “Cognizance of Net Benefits.” Economic analysis clearly informed numerous decisions, even though net benefits of alternatives were not estimated. The Division of Risk, Strategy, and Financial Innovation (now DERA) undertook a study at the request of three commissioners that the SEC indicated was “critically important” in the design of its reform proposals.<sup>132</sup> Economic analysis appears to have played a large role in the design of the regulation and its application to four types of money market funds:

- (1) *Prime retail*, which invest in commercial paper and have individuals as shareholders;
- (2) *Prime institutional*, which invest in commercial paper and have institutional investors as shareholders;
- (3) *Treasury*, which invest primarily in U.S. Treasury securities; and
- (4) *Tax exempt*, which invest in debt issued by state and local governments.

The DERA study identified a fundamental problem created by the liquidity-maturity mismatch inherent in the structure of money market funds. Before the 2014 reforms, all money market funds were permitted to trade at a stable net asset value (usually \$1), even though the actual (“shadow”) net asset value could fluctuate. Differences between the stable and shadow net asset values give alert investors an incentive to redeem shares at the stable value, leaving the remaining investors with shares worth less than the stable value and creating pressure for the fund to

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128. Security-Based Swap Data Repository Registration, Duties, and Core Principles, 80 Fed. Reg. 14,438 (Mar. 19, 2015) (to be codified at 17 C.F.R. pts. 232, 240, 249).

129. Registration Process for Security-Based Swap Dealers and Major Security-Based Swap Participants, 80 Fed. Reg. 48,964 (Aug. 14, 2015) (to be codified at 17 C.F.R. pts. 240, 249).

130. Crowdfunding, 80 Fed. Reg. 71,388 (Nov. 16, 2015) (to be codified at 17 C.F.R. pts. 200, 227, 232, 239–40, 249, 269, 274).

131. Money Market Fund Reform; Amendments to Form PF, 79 Fed. Reg. 47,736, 47,736 (Aug. 14, 2014) (to be codified at 17 C.F.R. pts. 230, 239, 270, 274, 279).

132. *Id.* at 47,739.

subsequently “break the buck”—redeem shares for less than the stable value.<sup>133</sup> Large outflows in times of financial stress can create pressure for the fund to liquidate assets at a loss, potentially affecting the rest of the financial system by reducing the net asset value of other funds that hold the same assets and encouraging redemptions from other money market funds that hold the same assets.<sup>134</sup>

The SEC did not just theorize about these potential problems; it examined evidence. DERA found that in noncrisis periods, an individual fund’s need for sponsor support to avoid breaking the buck was not accompanied by industrywide redemptions, suggesting that problems in a single fund do not often affect broader financial markets.<sup>135</sup>

In contrast, the 2008 breaking of the buck by the Reserve Primary Fund, which held 1.2% of its assets in Lehman Brothers’ commercial paper, was accompanied by large flows of funds from “prime” money market funds to Treasury money market funds.<sup>136</sup> The SEC historically sought to maintain stable net asset values by requiring money market funds to invest in short-term, high-quality, diversified debt securities and to maintain sufficient liquidity to meet foreseeable redemptions.

The DERA study demonstrated that, even with the addition of reforms adopted in 2010, which reduced the maximum weighted average maturity from ninety days to sixty days, SEC regulations existing at the time would not have prevented the Reserve Primary Fund from breaking the buck.<sup>137</sup> Thus, the potential for “runs” on prime money market funds still existed even after the 2010 reforms.

The SEC’s economic analysis of the problem pointed the way toward solutions that address the root causes of the problem. The 2014 reforms permitted money market funds to charge redemption fees and impose redemption gates in times of financial stress. Fees allow the fund to pass liquidity costs—reductions in net asset value caused by investors’ sudden redemptions—back to the investors whose decisions create those costs. Redemption gates allow money market funds to temporarily prevent redemptions that could cause significant costs. The SEC cited evidence that fees

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133. DIV. OF RISK, STRATEGY & FIN. INNOVATION, SEC. & EXCH. COMM’N, RESPONSE TO QUESTIONS POSED BY COMMISSIONERS AGUILAR, PAREDES, AND GALLAGHER 3–5 (2012) [hereinafter RESPONSE TO QUESTIONS].

134. Money Market Fund Reform; Amendments to Form PF, 79 Fed. Reg. at 47,743–44.

135. RESPONSE TO QUESTIONS, *supra* note 133, at 14–16.

136. *Id.* at 6–7.

137. *Id.* at 36–38.

and gates had been used by other types of cash management pools to discourage redemptions in crises.<sup>138</sup> Finally, the requirement that prime institutional funds price and transact at actual net asset value removes the incentive for investors to redeem shares for \$1 when the shares are worth less than \$1.<sup>139</sup>

Decisions about the regulation's coverage also appear to be influenced by economic analysis. The SEC concluded that applying the rules to Treasury money funds would produce little benefit because default risks are lower, the underlying securities are highly liquid, Treasury securities' value tends to rise during financial stress, and Treasury money funds experience inflows during times of stress.<sup>140</sup> Applying fees and gates to retail funds could counter retail investors' incentive to redeem in times of stress, but applying the floating net asset value rule to retail funds would produce little benefit because retail investors have little incentive to behave as first movers.<sup>141</sup> Rules were applied to municipal funds on the basis of data suggesting that their risks are more like those of prime funds than government funds.<sup>142</sup> Bruce Kraus identifies several other decisions on the money market fund regulation that were informed by economic analysis.<sup>143</sup>

The comparison of SEC pre- and postguidance economic analysis reveals clear improvement in the incorporation of economic concepts and research, plus some improvement in quantification. This finding should be good news regardless of whether one favors quantitative or conceptual economic analysis.

## VI. CONCLUSION

I had hoped to write a fairy-tale ending, in which the D.C. Circuit's black-robed angels induced the SEC to produce at least one product that could be lauded as an example of the "gold standard" for economic analysis of financial regulations. The gold standard need not involve impossible feats of quantification, but an analysis that outscored most of the analyses from executive branch agencies would have been nice. No such wonkish unicorn reared its pointy head.

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138. Money Market Fund Reform; Amendments to Form PF, 79 Fed. Reg. at 47,748–49, 47,752.

139. *Id.* at 47,775–77.

140. *Id.* at 47,792.

141. *Id.* at 47,794–98, 47,800.

142. *Id.* at 47,803–06.

143. Kraus, *supra* note 20, at 299–300.

Nevertheless, the results are encouraging. In a relatively short period of time, the SEC issued new guidance for economic analysis, reorganized internally to give economists a greater voice in rulemaking, and produced a measurable improvement in the quality of economic analysis accompanying its regulations. Conceptual economic reasoning, use of relevant economic literature, and quantification all improved. The SEC's score for quality of analysis almost doubled, from an average of 4.4 points from 2010 to 2011 to an average of 8.3 points from 2013 to 2015. By way of comparison, a study using a similar qualitative assessment methodology found that the quality of federal agencies' annual performance reports produced under the Government Performance and Results Act improved by 75% between 1999 and 2009.<sup>144</sup> In other words, the SEC achieved more improvement in its economic analysis in three years than federal agencies achieved in their Government Performance and Results Act performance reports in ten years. The SEC's accomplishment suggests that judicial review of agency economic analysis is a mighty motivator indeed.

This result holds implications not just for the debate about SEC economic analysis but also for the broader debate over the relationship between judicial review and regulatory impact analysis. The SEC example illustrates how judicial review can prompt a regulatory agency to produce higher-quality analysis and to provide a more complete explanation of how that analysis affected its decisions. Thus, judicial review is likely to have a salutary, rather than a perverse, effect on the quality of agency economic analysis.

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144. JERRY ELLIG ET AL., *GOVERNMENT PERFORMANCE AND RESULTS: AN EVALUATION OF GPRA'S FIRST DECADE* 12 (2012).

## ARTICLES

# WHY AND HOW INDEPENDENT AGENCIES SHOULD CONDUCT REGULATORY IMPACT ANALYSIS

*Jerry Ellig\**

*Independent regulatory agencies face increasing pressure to conduct high-quality economic analysis of regulations, similar to the regulatory impact analysis conducted by executive branch agencies. Such analysis could be required by evolving judicial doctrines, regulatory reform statutes, or executive order. This article explains how regulatory impact analysis can contribute to smarter regulation, documents the current low quality of such analysis at many independent regulatory agencies, and offers a blueprint that independent agencies can use to build their capacity to conduct objective, high-quality analysis.*

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## INTRODUCTION

Regulations should solve real problems at a reasonable cost.<sup>1</sup> To know whether a proposed regulation is indeed likely to do this, a regulator needs to know whether a real problem exists, whether a proposed regulation addresses the cause of the problem, and what good things society must forgo to enjoy the expected benefits of the regulation. Regulatory impact analysis is the tool that provides decision makers with this information. A complete regulatory impact analysis assesses the nature and significance of the problem the regulation seeks to solve, identifies alternative solutions, and estimates the benefits and costs of these alternatives.<sup>2</sup>

<sup>1</sup> I intentionally avoid the more restrictive normative claim that a regulation's benefits should exceed its costs, and I leave the reader to decide what counts as a "problem" and what amount of cost is "reasonable." However these are defined, a thorough regulatory impact analysis provides useful information.

<sup>2</sup> These components can all be found in Exec. Order No. 12866, 58 Fed. Reg. 51,735 (Oct. 4, 1993), which outlines the primary requirements for regulatory impact analysis currently in force for executive branch agencies. For all regulations, agencies are expected to assess the nature and significance of the problem the regulation seeks to solve. Exec. Order No. 12866, 58 FR at §§ 1(b)(1), 6(a)(3)(B)(i). An assessment of benefits and costs must accompany all "significant" regulations—generally, regulations that have an effect on the economy exceeding \$100 million annually, have other material adverse effects, conflict with other agencies' actions, affect federal spending or loan programs materially, or raise novel legal or

Since 1981, a series of executive orders has required executive branch agencies to conduct regulatory impact analysis for significant regulations.<sup>3</sup> Independent agencies have not historically been subject to these executive orders,<sup>4</sup> however, they may face growing pressure to conduct such analysis in the future. That pressure could come from any of the three branches of government—the courts, Congress, or the President.

Evolving judicial doctrines now appear to require that regulatory agencies consider benefits and costs as long as the statute does not prohibit such considerations.<sup>5</sup> In *Michigan v. Environmental Protection Agency*, the Supreme Court unanimously held that an agency acts unreasonably if it completely ignores economic considerations, unless Congress has directed the agency to do so.<sup>6</sup> Because of this case, Richard Revesz argues that courts will likely require independent agencies that write financial regulations to conduct benefit-cost analysis.<sup>7</sup> Their statutes often contain open-ended authorizations to determine what is “appropriate and necessary” or in the “public interest,” which could be read to include consideration of costs.<sup>8</sup> Jonathan Masur and Eric Posner suggest that courts will ultimately require agencies to conduct formal, quan-

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policy issues. Exec. Order No. 12866, 58 FR at § 6(a)(3)(B)(ii). Regulations with economic effects exceeding \$100 million annually or certain other material adverse effects listed in the executive order must be accompanied by an analysis of the benefits and costs of the regulation and alternatives, with benefits and costs quantified where feasible. Exec. Order No. 12866, 58 FR at § 6(a)(3)(C).

<sup>3</sup> President Reagan’s Executive Order 12291 first used the term “regulatory impact analysis.” See Exec. Order No. 12291, 46 Fed. Reg. 13193 (Feb. 19, 1981).

<sup>4</sup> The Independent Agency Regulatory Analysis Act, S. 1448, 115th Cong. (introduced 2017). See also, *The Independent Agency Regulatory Analysis Act*, COALITION FOR SENSIBLE SAFEGUARDS, <https://sensiblesafeguards.org/issues/iaraa/>.

<sup>5</sup> Cass Sunstein, *Cost-Benefit Analysis and Arbitrariness Review* (Harvard Pub. Law, Working Paper No. 16-12, 2016), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2752068](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2752068); Reeve T. Bull & Jerry Ellig, *Judicial Review of Regulatory Impact Analysis: Why Not the Best?*, 69 ADMIN. L. REV. 725 (2017); Jonathan S. Masur & Eric A. Posner, *Cost-Benefit Analysis and the Judicial Role* (U. Chicago Pub. Law, Working Paper No. 614, 32–35 2017), [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2915063](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2915063).

<sup>6</sup> *Michigan v. Env’tl. Prot. Agency*, 135 S. Ct. 2699, 2707 (2015) (“One would not say that it is even rational, never mind ‘appropriate,’ to impose billions of dollars in economic costs in return for a few dollars in health or environmental benefits.”); see also *id.* at 2716–17 (Kagan, J., dissenting) (“Cost is almost always a relevant—and usually, a highly important—factor in regulation. Unless Congress provides otherwise, an agency acts unreasonably in establishing ‘a standard-setting process that ignore[s] economic considerations.’” (internal citation omitted)); *MetLife, Inc. v. Fin. Stability Oversight Council*, No. 15-0045 (D.D.C. Mar. 30, 2016), slip op. at 30 (“In the end, cost must be balanced against benefit because ‘[n]o regulation is “appropriate” if it does significantly more harm than good.’” (internal citation omitted)).

<sup>7</sup> Richard L. Revesz, *Cost-Benefit Analysis and the Structure of the Administrative State: The Case of Financial Services Regulation*, 34 YALE J. ON REG. 545, 548 (2017).

<sup>8</sup> *Id.*

titative benefit-cost analyses to determine whether a regulation causes more good than harm.<sup>9</sup>

On the congressional front, the idea that independent regulatory agencies should conduct regulatory impact analysis to inform decisions has long been part of the discussion about regulatory reform legislation.<sup>10</sup> Major regulatory reform bills in both the Senate and the House would require virtually all regulatory agencies, including the independent ones, to consider the nature and significance of the problem they seek to solve, alternative solutions, and the benefits and costs of alternatives.<sup>11</sup> Agencies would also be required to rely on the best available scientific, technical, and economic information—a provision that would effectively require reasonably thorough regulatory impact analysis.<sup>12</sup>

To date, no president has attempted to compel independent agencies to conduct regulatory impact analysis. Key figures in both Republican and Democratic administrations—such as C. Boyden Gray, coauthor of President Reagan’s Executive Order 12291, and Sally Katzen, a principal author of President Clinton’s Executive Order 12866—contend that a president has the legal authority to do so, but administrations have sought

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<sup>9</sup> Masur & Posner, *supra* note 5, at 34–35.

<sup>10</sup> Numerous experts have recommended such analyses. See Letter from Susan Dudley, Dir., Geo. Wash. Reg. Stud. Ctr. et al. to Sen. Joseph I. Lieberman (Sept. 13, 2012), *available at* [https://www.portman.senate.gov/public/index.cfm/files/serve?File\\_id=563c60e4-3770-4329-b1aa-ff51752cd750](https://www.portman.senate.gov/public/index.cfm/files/serve?File_id=563c60e4-3770-4329-b1aa-ff51752cd750); American Bar Association House of Delegates, *Recommendation: Presidential Review of Rulemaking*, 1990 ANNUAL MEETING, [https://www.americanbar.org/content/dam/aba/directories/policy/1990\\_am\\_302.authcheckdam.pdf](https://www.americanbar.org/content/dam/aba/directories/policy/1990_am_302.authcheckdam.pdf); Robert Hahn & Cass Sunstein, *A New Executive Order for Improving Federal Regulation? Deeper and Wider Cost-Benefit Analysis*, 150 U. PA. L. REV. 1489, 1531–37 (2002); Sally Katzen, *OIRA at Thirty: Reflections and Recommendations*, 63 ADMIN. L. REV. (SPECIAL EDITION) 103, 109–10 (2011); *The APA at 65—Is Reform Needed to Create Jobs, Promote Economic Growth and Reduce Costs?: Hearing Before the H. Subcomm. on the Courts, Commercial & Administrative Law*, 112th Cong. (2011) (testimony of Peter L. Strauss, 47–48), *available at* [http://judiciary.house.gov/\\_files/hearings/pdf/Strauss02282011.pdf](http://judiciary.house.gov/_files/hearings/pdf/Strauss02282011.pdf); *Regulatory Accountability Act of 2011: Hearing on H.R. 3010 Before the H. Comm. On the Judiciary*, 112th Cong. 44–49 (2011) (statement of C. Boyden Gray, coauthor of Executive Order 12291), *available at* [http://judiciary.house.gov/\\_files/hearings/pdf/Gray%2010252011.pdf](http://judiciary.house.gov/_files/hearings/pdf/Gray%2010252011.pdf); *The APA at 65—Is Reform Needed to Create Jobs, Promote Economic Growth and Reduce Costs?: Hearing Before the H. Subcomm. on Courts, Commercial & Admin. Law*, 112th Cong. 20 (2011) (statement of Susan Dudley, Dir., Geo. Wash. Reg. Stud. Ctr.), *available at* [http://judiciary.house.gov/\\_files/hearings/pdf/Dudley02282011.pdf](http://judiciary.house.gov/_files/hearings/pdf/Dudley02282011.pdf). President Obama’s Jobs Council recommended that independent agencies be required to conduct regulatory impact analysis, coupled with review by OIRA or some other independent entity. See PRESIDENT’S COUNCIL ON JOBS & COMPETITIVENESS, ROAD MAP TO RENEWAL 45 (2011), *available at* [http://files.jobs-council.com/files/2012/01/JobsCouncil\\_2011YearEndReportWeb.pdf](http://files.jobs-council.com/files/2012/01/JobsCouncil_2011YearEndReportWeb.pdf).

<sup>11</sup> Regulatory Accountability Act of 2017, S. 951, 115th Cong. (2017) § 3(b); Regulatory Accountability Act, H.R. 5, 115th Cong. (2017) § 103(b).

<sup>12</sup> Regulatory Accountability Act of 2017, S. 951, 115th Cong. (2017) §§ 3(c)(3) and 3(f)(3); Regulatory Accountability Act, H.R. 5, 115th Cong. (2017) § 103(f)(2).



to avoid a confrontation with Congress over the issue.<sup>13</sup> In December 2017, sixteen state attorneys general and governors signed a letter asking President Trump to issue a new executive order extending regulatory impact analysis requirements to independent agencies.<sup>14</sup> Thus, an executive order requiring independent agencies to conduct regulatory impact analysis remains a definite possibility.

Independent agencies may therefore be required to conduct regulatory impact analysis, but few have developed the capacity to do so. Assessments by agency inspectors general, the US Government Accountability Office (GAO), and independent scholars find that many independent agencies' regulatory analyses lack basic information such as monetized estimates of benefits, monetized estimates of costs (other than paperwork costs), or discussion of benefits and costs of alternatives to the regulation.<sup>15</sup>

Some agencies have recognized that producing quality analysis requires significant changes in organizational structure, practices, and culture. For example, the Securities and Exchange Commission (SEC) lost several high-profile court cases because of insufficient economic analysis after courts interpreted language in the SEC's authorizing statute to require benefit-cost analysis of regulations.<sup>16</sup> In response, the SEC launched an initiative in 2012 to improve the quality of economic analysis and the influence of economists in regulatory decisions.<sup>17</sup> The chief economist became a direct report to the chairman, the general counsel and chief economist issued joint guidance on economic analysis based on the principles executive branch agencies must follow, and the Commis-

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<sup>13</sup> C. Boyden Gray, The President's Constitutional Power to Order Cost-Benefit Analysis and Centralized Review of Independent Agency Rulemaking (May 31, 2017) (unpublished manuscript) (on file with Mercatus Center at George Mason University), <https://www.mercatus.org/system/files/mercatus-gray-executive-power-independent-agencies-v1.pdf>; Katzen, *supra* note 10, at 109–10. *But see* Curtis W. Copeland, *Economic Analysis and Independent Regulatory Agencies* 20–25 (Apr. 30, 2013), <https://www.acus.gov/sites/default/files/documents/Copeland%20Final%20BCA%20Report%204-30-13.pdf>.

<sup>14</sup> Letter from Ken Paxton, Tx. Att'y Gen. et al. to President Donald Trump (Dec. 20, 2017), available at [https://www.texasattorneygeneral.gov/files/epress/Independent\\_Agency\\_Letter\\_FINAL.pdf?cachebuster:81](https://www.texasattorneygeneral.gov/files/epress/Independent_Agency_Letter_FINAL.pdf?cachebuster:81).

<sup>15</sup> See Part III *infra*.

<sup>16</sup> The SEC must consider the effects of proposed regulations on competition, efficiency, and capital formation when determining whether the regulation is in the public interest. This language appears in Section 2(b) of the Securities Act of 1933, 15 U.S.C. § 77b; Section 3(f) of the Securities Exchange Act of 1934, 15 U.S.C. § 78c(f); and Section 2(c) of the Investment Company Act of 1940, 15 U.S.C. §§ 80a–2(c). This requirement was added to these statutes by the National Securities Markets Improvement Act of 1996. The Gramm-Leach-Bliley Act of 1999 added the language to the Investment Advisers Act of 1940. See 15 U.S.C. §§ 80b–2(c).

<sup>17</sup> See Memorandum from the SEC Division of Risk, Strategy, and Fin. Innovation and the Off. of Gen. Couns. to the Staff of the Rulewriting Divisions and Offices (Mar. 16, 2012) (on file with author).

sion more than doubled the number of PhD financial economists on staff.<sup>18</sup> The quality of SEC economic analysis has improved measurably since then.<sup>19</sup> The Federal Communications Commission (FCC) provides another example. In April 2017, FCC Chairman Ajit Pai announced plans to expand the role of economic analysis at the FCC by moving most of its economists into a new Office of Economics and following Office of Management and Budget (OMB) guidance on regulatory impact analysis when issuing new regulations; the FCC approved the creation of this office in January 2018.<sup>20</sup>

An agency seeking to improve its economic analysis of regulations faces significant challenges in constructing the capacity to do so and ensuring that economists and other analysts have the appropriate incentives and opportunity to conduct objective analysis. This Article addresses those challenges. Part II clarifies the role that regulatory impact analysis can play in promoting smart regulation. Part III documents the low quality of such analysis at many independent agencies and presents some brief examples that demonstrate how low-quality analysis can lead to poor decisions. Part IV explains key implementation steps an independent agency can take to improve its analysis and ensure that the analysis is considered when making regulatory decisions. The Article concludes with some suggestions on how an agency can make a credible commitment to produce and use high-quality regulatory impact analysis in the future.

## I. THE PURPOSE OF REGULATORY IMPACT ANALYSIS: BETTER REGULATION

Citizens expect federal regulation to accomplish many important things such as protecting them from financial fraudsters, preventing workplace injuries, preserving clean air, and deterring terrorist attacks. However, regulation also requires sacrifice and there is no free lunch. Depending on the regulation, consumers may pay more, workers may receive less, our retirement savings may grow more slowly because of reduced corporate profits, and we may have less privacy or less personal

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<sup>18</sup> See *id.*; Revesz, *supra* note 7.

<sup>19</sup> Jerry Ellig, *Improvements in SEC Economic Analysis since Business Roundtable: A Structured Assessment* (Dec. 15, 2016) (unpublished manuscript) (on file with Mercatus Center at George Mason University), <https://www.mercatus.org/publications/improvements-SEC-economic-analysis>.

<sup>20</sup> See Ajit Pai, Chairman, Fed. Comm. Comm'n, Remarks on Economic Analysis at the Hudson Institute (Apr. 5, 2017), available at <https://hudson.org/events/1415-commission-chairman-ajit-pai-on-economic-analysis-at-the-fcc42017>; Federal Communications Commission, *In the Matter of Establishment of the Office of Economics and Analytics, Order* (Jan. 30, 2018), available at [https://transition.fcc.gov/Daily\\_Releases/Daily\\_Business/2018/db0131/FCC-18-7A1.pdf](https://transition.fcc.gov/Daily_Releases/Daily_Business/2018/db0131/FCC-18-7A1.pdf).

freedom. Given the important values at stake, regulatory agencies should craft regulations with knowledge of their likely results. A decision maker's failure or refusal to acquire this knowledge before making a decision is a willful choice to act based on ignorance.

Reasonable people disagree about the tradeoffs they are willing to make to get the benefits that regulation provides.<sup>21</sup> However, reasonable people surely can agree that regulators should not adopt a regulation unless they are reasonably certain that it will solve a real problem at a reasonable cost.

Regulatory impact analysis is the tool that helps agencies identify whether alternative regulatory proposals are likely to solve a real problem and at what cost.<sup>22</sup> The principal elements of regulatory analysis outlined in executive orders and in OMB guidance reflect standard economic principles of policy analysis and government performance management.<sup>23</sup> To provide four types of critical information, regulatory impact analysis should:

- 1) Assess the nature and significance of the problem the agency is trying to solve, so the agency knows whether there is a problem that could be solved through regulation, and so the agency can tailor a solution that will effectively solve the problem;<sup>24</sup>
- 2) Identify a wide variety of alternative solutions;<sup>25</sup>
- 3) Define the benefits the agency seeks to achieve in ultimate outcomes that affect citizens' quality of life,

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<sup>21</sup> See John Graham, *Saving Lives Through Administrative Law and Economics*, 157 U. PA. L. REV. 395, 432–38 (2008) (discussing the different ways decision makers might use the results of regulator impact analysis).

<sup>22</sup> See *id.* at 514.

<sup>23</sup> U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-14-714, *FEDERAL RULEMAKING: AGENCIES INCLUDED KEY ELEMENTS OF COST-BENEFIT ANALYSIS, BUT EXPLANATIONS OF REGULATIONS' SIGNIFICANCE COULD BE MORE TRANSPARENT* 3 (2014) ("These four broad elements stem from several sources including Executive Orders 12866 and 13563, OMB's *Circular A-4*, and general economic principles. *Circular A-4*, consistent with standard economic principles, identifies these selected elements as basic elements to include in the regulatory analysis required by the executive orders."); Jerry Ellig & Jerry Brito, *Toward a More Perfect Union: Regulatory Analysis and Performance Management*, 8 FLA. ST. U. BUS. REV. 1 (2009) (explaining parallels between analytical steps for regulatory impact analysis and government performance management); THOMAS O. MCGARITY, *REINVENTING RATIONALITY: THE ROLE OF REGULATORY ANALYSIS IN THE FEDERAL BUREAUCRACY* 112 (1991) (defining regulatory analysis as the application of rational policy analysis to regulation).

<sup>24</sup> Exec. Order No. 12866, 58 FR at §§ 1(b)(1), 6(a)(3)(B)(i).

<sup>25</sup> *Id.* at § 6(a)(3)(C)(iii). See also U.S. OFFICE OF MGMT. & BUDGET, *CIRCULAR A-4, REGULATORY ANALYSIS* 3–5 (2003), available at [https://obamawhitehouse.archives.gov/omb/circulars\\_a004-a-4/](https://obamawhitehouse.archives.gov/omb/circulars_a004-a-4/).

and assess each alternative's ability to achieve those outcomes;<sup>26</sup>

- 4) Identify the good things that regulated entities, consumers, and other stakeholders must sacrifice to achieve the desired outcomes under each alternative.<sup>27</sup> In economics jargon, these sacrifices are known as "costs," but like benefits, costs may involve far more than monetary expenditures.<sup>28</sup>

If this information is not produced, agencies are more likely to base regulatory decisions on hopes, intentions, and wishful thinking than on reality.

The executive branch has had almost four decades of experience with regulatory impact analysis.<sup>29</sup> Numerous studies document instances in which regulatory analysis helped improve regulatory decisions by providing additional options regulators could consider or by unearthing new information about benefits or costs of particular modifications to the regulation.<sup>30</sup> For example, Scott Farrow, who studied a 2004 Environmental Protection Agency (EPA) regulation requiring power plants to design cooling water intake structures that minimize harm to marine organisms, concluded that the "EPA clearly chose an approach that imposed a significantly lighter burden on society . . . . The record provides substantial evidence that the agency considered a lower-cost alternative to meeting a standard with the potential to save approximately \$3 billion in annualized dollars or approximately \$40 billion in present value."<sup>31</sup>

The primary documented effect of regulatory impact analysis appears to be on the margins of regulations, identifying opportunities to increase benefits or achieve the same outcomes at lower cost.<sup>32</sup> At the conclusion of a generally pessimistic assessment of the impact of economic analysis, Robert Hahn and Paul Tetlock acknowledge that when regulations create billions of dollars' worth of benefit or costs, even mar-

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<sup>26</sup> Exec. Order No. 12866, 58 FR at §§ 6(a)(3)(C)(i), 6(a)(3)(C)(iii). See also U.S. OFFICE OF MGMT. & BUDGET, *supra* note 25, at 7–9.

<sup>27</sup> Exec. Order No. 12866, 58 FR at §§ 6(a)(3)(C)(ii), 6(a)(3)(C)(iii). See also U.S. OFFICE OF MGMT. & BUDGET, *supra* note 25, at 18–42.

<sup>28</sup> Exec. Order No. 12866, 58 FR at §§ 6(a)(3)(C)(ii), 6(a)(3)(C)(iii). See also U.S. OFFICE OF MGMT. & BUDGET, *supra* note 25, at 18–42.

<sup>29</sup> See Exec. Order No. 12291, *supra* note 3.

<sup>30</sup> REFORMING REGULATORY IMPACT ANALYSIS (Winston Harrington et al. eds., 2009); RICHARD D. MORGENTHAU, ECONOMIC ANALYSES AT EPA: ASSESSING REGULATORY IMPACT (1997); THOMAS O. MCGARITY, REINVENTING RATIONALITY: THE ROLE OF REGULATORY ANALYSIS IN THE FEDERAL BUREAUCRACY (1991).

<sup>31</sup> Scott Farrow, *Improving the CWIS Rule Regulatory Analysis: What Does an Economist Want?*, in REFORMING REGULATORY IMPACT ANALYSIS, *supra* note 30, at 176, 182.

<sup>32</sup> See Robert W. Hahn & Paul C. Tetlock, *Has Economic Analysis Improved Regulatory Decisions?*, 22 J. ECON. PERSP. 67, 82 (2008).

ginal changes can be significant for society.<sup>33</sup> They also note that the most important contribution of regulatory impact analysis may be its deterrent value in preventing regulators from advancing economically unsound proposals.<sup>34</sup>

Although it has led to improvements in regulation, regulatory impact analysis is no panacea. GAO studies and scholarly research reveal that in many cases, regulatory impact analyses are not sufficiently complete to serve as a guide to agency decisions.<sup>35</sup> The quality of analysis varies widely, and even the most elaborate analyses still have problems.<sup>36</sup> The Mercatus Center at George Mason University's Regulatory Report Card, which evaluates the quality of regulatory impact analysis for the 130 economically significant, prescriptive regulations proposed between 2008 and 2013, finds that agencies' actual practice often falls far short of the principles enunciated in Executive Order 12866 and OMB guidance.<sup>37</sup> Regulatory impact analyses sometimes seem to be advocacy documents written to justify decisions that were already made, rather than information that helped regulators determine what to do.<sup>38</sup>

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<sup>33</sup> *Id.* at 82–83.

<sup>34</sup> *Id.* at 79.

<sup>35</sup> U.S. GOV'T ACCOUNTABILITY OFFICE, REGULATORY REFORM: AGENCIES COULD IMPROVE DEVELOPMENT, DOCUMENTATION, AND CLARITY OF REGULATORY ECONOMIC ANALYSES (1998), available at <http://www.gao.gov/products/RCED-98-142>; U.S. GOV'T ACCOUNTABILITY OFFICE, AIR POLLUTION: INFORMATION CONTAINED IN EPA'S REGULATORY IMPACT ANALYSES CAN BE MADE CLEARER (1997), available at <http://www.gao.gov/products/RCED-97-38>. A more recent study found that most regulatory impact analyses cover the four major elements identified earlier, but the study cautions that it did not evaluate the quality of the analysis. See U.S. GOV'T ACCOUNTABILITY OFFICE, *supra* note 23, at 4.

<sup>36</sup> See Art Fraas & Randall Lutter, The Challenges of Improving the Economic Analysis of Pending Regulations: The Experience of OMB Circular A-4 (Dec. 2010) (Resources for the Future, Discussion Paper 10-54) (on file with author); Jamie Belcore & Jerry Ellig, *Homeland Security and Regulatory Analysis: Are We Safe Yet?*, 40 RUTGERS L.J. 1 (2008); Robert W. Hahn, et al., *Assessing Regulatory Impact Analyses: The Failure of Agencies to Comply with Executive Order 12,866*, 23 HARV. J.L. & PUB. POL'Y 859 (2000); Robert W. Hahn & Patrick M. Dudley, *How Well Does the U.S. Government Do Benefit-Cost Analysis?*, 1 REV. ENVTL. ECON. & POL'Y 192 (2007); Robert W. Hahn & Robert E. Litan, *Counting Regulatory Benefits and Costs: Lessons for the U.S. and Europe*, 8 J. INT'L ECON. L. 473 (2005); Robert W. Hahn et al., *Do Federal Regulations Reduce Mortality?*, AEI-Brookings Joint Ctr. for Reg. Studies (2000).

<sup>37</sup> Jerry Ellig, *Evaluating the Quality and Use of Regulatory Impact Analysis: The Mercatus Center's Regulatory Report Card, 2008–2013* (Jul. 6, 2016) (unpublished manuscript) (on file with Mercatus Center at George Mason University), available at <https://www.mercatus.org/publication/evaluating-regulatory-impact-analysis-regulatory-report-card>.

<sup>38</sup> Richard Williams, *The Influence of Regulatory Economists in Federal Health and Safety Agencies* (Jul. 2008) (unpublished manuscript) (on file with Mercatus Center at George Mason University), [mercatus.org/sites/default/files/publication/WP0815\\_Regulatory%20Economists.pdf](https://www.mercatus.org/sites/default/files/publication/WP0815_Regulatory%20Economists.pdf); Wendy E. Wagner, *The CAIR RIA: Advocacy Dressed Up as Policy Analysis*, in REFORMING REGULATORY IMPACT ANALYSIS, *supra* note 30, at 57.

Despite these shortcomings, regulatory impact analysis can generate significant improvements when agencies perform a thorough analysis and consider the results carefully when making decisions. Unfortunately, most independent agencies lag far behind executive branch agencies in the quality and use of regulatory impact analysis, as Part III documents.

## II. THE NEED FOR THOROUGH REGULATORY IMPACT ANALYSIS AT INDEPENDENT AGENCIES

We do not know whether many of the regulations adopted by independent agencies solve real problems at a reasonable cost, because independent agencies often neglect to conduct thorough regulatory impact analysis of alternatives when developing new regulations.

### A. *Regulatory Ferment*

For the past two decades, regulation by independent agencies has risen steadily.<sup>39</sup> Figure 1 shows the increase in total number of regulatory restrictions from independent agencies since 1970.<sup>40</sup>

A “regulatory restriction” is a binding requirement in a regulation that contains the words “shall,” “must,” “may not,” “prohibited,” or “required.”<sup>41</sup> Independent agencies accounted for 140,915 regulatory restrictions in 2017—about 13 percent of the US government’s total.<sup>42</sup> Among independent agencies, the FCC had the largest number of restrictions (28,529), followed by the Nuclear Regulatory Commission (16,603) and the SEC (15,124). The consequences of regulatory accumulation are significant; a recent study estimated that the additional federal regulatory restrictions adopted between 1980 and 2012 could have slowed GDP growth by as much as 0.8 percent annually.<sup>43</sup>

### B. *Poor Impact Analysis*

Unfortunately, some of the ingredients in this ever-expanding pie of regulations leave a lot to be desired. A study prepared for the Administrative Conference of the United States assesses economic analyses of

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<sup>39</sup> Patrick A. McLaughlin & Oliver Sherouse, *QuantGov—A Policy Analytics Platform* (2017), [http://docs.QuantGov.org/QuantGov\\_working\\_paper.pdf](http://docs.QuantGov.org/QuantGov_working_paper.pdf) (last visited March 6, 2018).

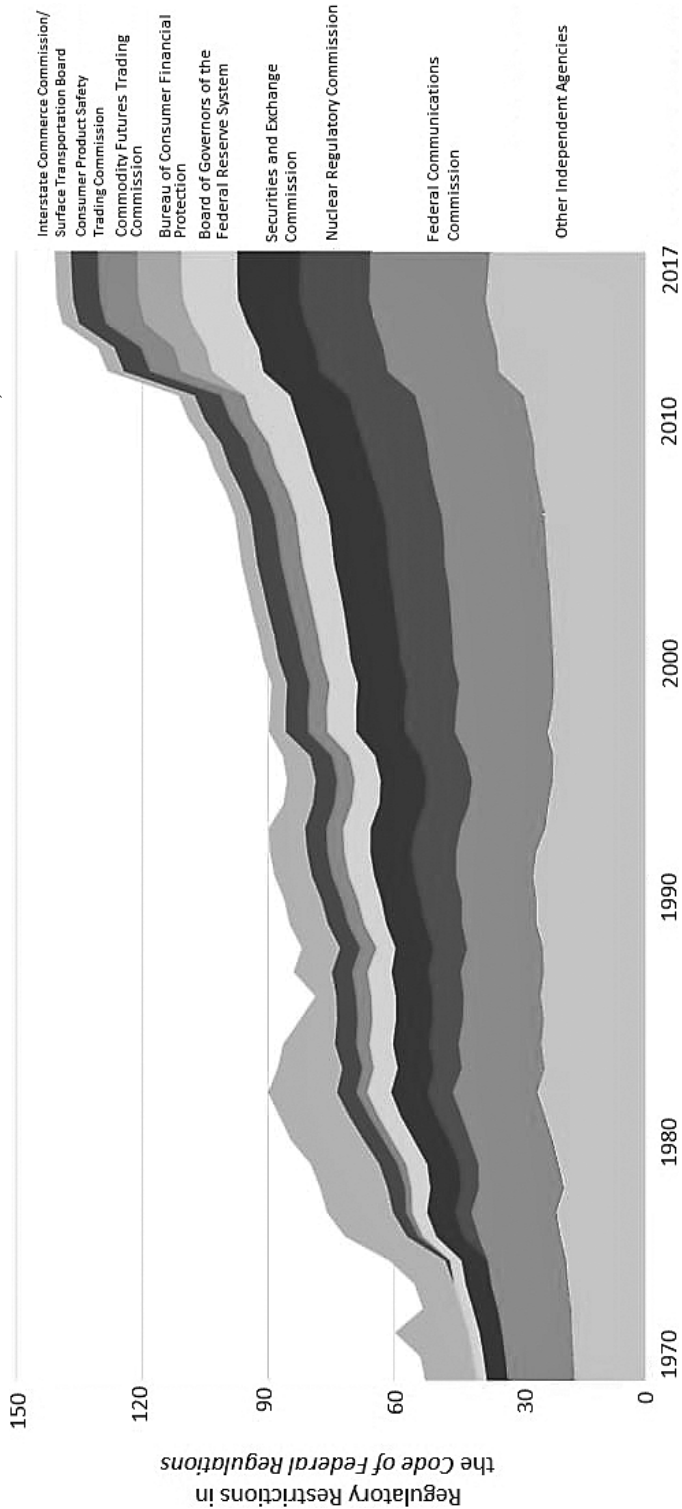
<sup>40</sup> *Id.*

<sup>41</sup> Omar Al-Ubaydli & Patrick A. McLaughlin, *RegData: A Numerical Database on Industry-Specific Regulations for All United States Industries and Federal Regulations, 1997–2012*, 11 REG. & GOV. 109, 112 (2017).

<sup>42</sup> Patrick A. McLaughlin & Oliver Sherouse, *RegData: A QuantGov Product*, QUANTGOV (2017).

<sup>43</sup> Bentley Coffey et al., *The Cumulative Cost of Regulations* (April 26, 2016) (unpublished manuscript) (on file with Mercatus Center at George Mason University), available at <https://www.mercatus.org/publication/cumulative-cost-regulations>.

FIGURE 1. ACCUMULATION OF REGULATION BY INDEPENDENT AGENCIES, 1970–2017





regulations by independent regulatory agencies.<sup>44</sup> It covers evaluations by the GAO, agency inspectors general, and outside researchers.<sup>45</sup> The author also performs some of his own evaluations of agency economic analysis.<sup>46</sup> Key findings of this report include the following:

- Independent agencies often perform some type of analysis that considers benefits and costs qualitatively.<sup>47</sup>
- Some agencies fail to analyze benefits or costs of parts of the regulation that are required by law. As a result, their analysis does not provide a complete assessment of the benefits and costs of the entire regulation.<sup>48</sup>
- Quantification of benefits is uncommon.<sup>49</sup>
- Quantification of costs is more common, but it is often confined to paperwork costs.<sup>50</sup>
- Costs to agencies are often ignored.<sup>51</sup>
- Benefits and costs of alternatives are less likely to be considered or quantified.<sup>52</sup>

These findings are consistent with those in other studies by independent scholars. Art Fraas and Randall Lutter, for example, examine the analysis accompanying seventy-eight major regulations issued by independent agencies between 2003 and 2010.<sup>53</sup> Benefits and costs were discussed in the analysis for 69 percent of the regulations.<sup>54</sup> However, only 12 percent of the regulations were accompanied by monetized estimates of benefits, and only 47 percent had monetized estimates of costs.<sup>55</sup> The cost estimates frequently included only the paperwork costs.<sup>56</sup> In contrast, executive branch agencies almost always included a discussion of benefits and costs with their regulations.<sup>57</sup> Some quantitative estimates of benefits were provided for about 60 percent of executive branch regulations, and quantitative estimates of costs were provided for more than 75

<sup>44</sup> See generally Copeland, *supra* note 13, at 61–110.

<sup>45</sup> *Id.* at 61.

<sup>46</sup> *Id.* at 110–23.

<sup>47</sup> *Id.* at 75, 78–80, 81, 87.

<sup>48</sup> *Id.* at 74–78, 94.

<sup>49</sup> *Id.* at 80–81, 87.

<sup>50</sup> *Id.* at 80–81, 88.

<sup>51</sup> *Id.* at 76, 78, 80–81, 88.

<sup>52</sup> *Id.* at 75, 80.

<sup>53</sup> Arthur Fraas & Randall L. Lutter, *On the Economic Analysis of Regulations at Independent Regulatory Commissions*, 63 ADMIN. LAW REV. (SPECIAL EDITION) 213 (2011).

<sup>54</sup> *Id.* at 237–40.

<sup>55</sup> *Id.*

<sup>56</sup> *Id.* at 217.

<sup>57</sup> *Id.* at 215.



percent.<sup>58</sup> Even some independent financial regulatory agencies that are required by law to consider benefits and costs do not prepare very thorough benefit-cost analyses.<sup>59</sup> A study of SEC regulations issued before the 2012 economic analysis guidance found that the SEC's assessments of the problem, baseline, alternatives, benefits, and costs were far less complete than those conducted by executive branch agencies.<sup>60</sup>

A related but distinct problem is “ready-fire-aim” rulemaking, in which the regulatory agency makes key decisions first and then expects analysts to produce a document that supports those decisions.<sup>61</sup> For example, before SEC benefit-cost analysis became subject to judicial review, SEC releases typically included a benefit-cost analysis section that merely repeated arguments in favor of the regulation that had already been made elsewhere in the document.<sup>62</sup> A former SEC attorney noted, “Historically, the agency’s lawyers have been primarily responsible for drafting these analyses with varying degrees of assistance from the agency’s economists.”<sup>63</sup> Even when economists are responsible for the economic analysis, they are less likely to conduct high-quality analysis (particularly of alternatives) if they know that the major decisions have already been made.<sup>64</sup>

### C. *Regulation Without Analysis: Cautionary Tales*

Consider a few examples of independent agency regulatory proposals or decisions made in the absence of some of the information that a thorough regulatory impact analysis would have provided.

#### 1. Problem Analysis: Securities and Exchange Commission’s Net Worth Standard for Accredited Investors

Companies that issue securities can avoid costly SEC registration requirements if they restrict the sale of those securities to “accredited investors,” who are believed to have sufficient sophistication and financial wherewithal that they do not need the protections provided by SEC registration.<sup>65</sup> One way an investor meets the accredited investor test is

<sup>58</sup> *Id.* at 237. Percentages for independent agencies were calculated from data in table 1.

<sup>59</sup> Hester Peirce, *Economic Analysis by Federal Financial Regulators*, 9 J.L. ECON. & POL’Y 569 (2013). *See also* Revesz, *supra* note 7.

<sup>60</sup> Jerry Ellig & Hester Peirce, *SEC Regulatory Analysis: “A Long Way to Go and a Short Time to Get There,”* 8 BROOK. J. CORP. FIN. & COM. L. 361 (2014).

<sup>61</sup> Williams, *supra* note 38, at 5; Wagner, *The CAIR RIA: Advocacy Dressed Up as Policy Analysis*, in REFORMING REGULATORY IMPACT ANALYSIS, *supra* note 30, at 56, 57.

<sup>62</sup> Bruce Kraus and Conor Raso, *Rational Boundaries for SEC Cost-Benefit Analysis*, 30 YALE J. REG. 289, 297–98 (2013).

<sup>63</sup> Peirce, *supra* note 59, at 582. The author later notes that the SEC substantially changed its approach starting in 2012. *Id.* at 585.

<sup>64</sup> *See* Williams, *supra* note 38, at 5.

<sup>65</sup> Ellig & Peirce, *supra* note 60, at 408.

by demonstrating that he or she has a net worth of \$1 million or more.<sup>66</sup> In 2011, the SEC adopted a regulation that excludes the value of an investor's primary residence when determining whether the individual meets the \$1 million net worth requirement.<sup>67</sup> The change was required by the Dodd-Frank Wall Street Reform and Consumer Protection Act.<sup>68</sup> The Act also gave the SEC authority to conduct an analysis of the statutory definition of "accredited investor" and modify it as the SEC "may deem appropriate for the protection of investors, in the public interest, and in light of the economy."<sup>69</sup> The SEC explicitly declined to exercise this authority to adjust the definition.<sup>70</sup>

If the SEC had considered modifying the definition, it could have evaluated whether the regulation solves a real problem. The SEC could have examined whether individuals whose home values had recently put them above the \$1 million threshold actually invested in unregistered securities and suffered any harm from doing so. Perhaps this was a significant problem, or perhaps these individuals made minimal investments in unregistered securities, or perhaps issuers of unregistered securities declined to market them to these potential investors.<sup>71</sup> The answers to these questions could have affected whether or how the SEC opted to change the definition, but the SEC declined to consider this issue.

If there is a significant investor protection problem, the adequacy of the net worth requirement to solve the problem is not obvious. The SEC could have considered whether a net worth test would sufficiently protect investors from making bad investment decisions or whether a financial sophistication test or diversification requirement could achieve that objective more effectively. Existing regulations already require broker-dealers to make only "suitable" investment recommendations to their customers. The suitability requirement, perhaps with a heightened level of care when the bulk of the investor's net worth consists of home equity, may have been sufficient to address the problem.<sup>72</sup> The SEC conducted no such analyses, so it is not clear if the regulation solves an actual problem or does so in the most effective way.

Such deficiencies in SEC analysis may become less common as a result of court decisions that remanded several important regulations be-

<sup>66</sup> *Id.* at 409.

<sup>67</sup> *Id.*

<sup>68</sup> *Id.*

<sup>69</sup> *Id.* at 410.

<sup>70</sup> Net Worth Standard for Accredited Investors, Securities Act Release No. 33-9287, Investment Advisers Act Release No. 3341, 17 C.F.R. §§ 230, 239, 270, 275 (2012).

<sup>71</sup> Ellig & Peirce, *supra* note 60, at 410–11.

<sup>72</sup> *Id.*

cause of insufficient economic analysis.<sup>73</sup> Unlike most independent agencies, the SEC's authorizing statute contains language that courts have interpreted to require benefit-cost analysis.<sup>74</sup> In 2012, the SEC's general counsel and chief economist issued new staff guidance on economic analysis that explicitly draws on OMB's regulatory analysis guidance for executive branch agencies.<sup>75</sup> The Commission's economic analysis of regulations, including analysis of the underlying problem, has improved measurably since then.<sup>76</sup>

## 2. Alternatives: Surface Transportation Board's Competitive Switching Proposal for Freight Railroads

The Surface Transportation Board (STB) inherited the residual economic regulatory responsibilities of the Interstate Commerce Commission when the latter was abolished in 1996.<sup>77</sup> In July 2016, the STB proposed new regulations defining when a shipper can require a railroad serving its facilities to switch cars carrying the shipper's freight to a competing railroad.<sup>78</sup> Under current policy, regulators require competitive switching only if the shipper can show that switching is necessary to prevent or remedy some anticompetitive abuse committed by the railroad serving its facilities.<sup>79</sup>

Instead of demonstrating with evidence that anticompetitive abuse is widespread, the STB proposal simply claimed that proving anticompetitive abuse is too difficult.<sup>80</sup> The sole evidence cited in support of this claim is that very few competitive switching cases have been brought before regulators since the current policy was adopted in 1985, and shippers have never won a case.<sup>81</sup> But these facts are not sufficient proof. An absence of anticompetitive abuse cases could indicate either that the cur-

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<sup>73</sup> Paul Rose and Christopher J. Walker, *The Importance of Cost-Benefit Analysis in Financial Regulation* (Ctr. for Capital Mkts. Competitiveness Report 27, 2013), available at <http://www.centerforcapitalmarkets.com/wp-content/uploads/2010/04/CBA-Report-3.10.13.pdf>.

<sup>74</sup> *Id.* But see *Nat'l Ass'n of Mfrs. v. Sec. and Exch. Comm'n*, No. 13-cv-635 (RLW), 2013 U.S. Dist. LEXIS 102616, at \*35–36 (D.D.C. Jul. 23, 2013) (explaining that reading the requirement to consider competition, capital formation, and efficiency to require “that the SEC conduct some sort of broader, wide-ranging benefit analysis simply reads too much into this statutory language.”).

<sup>75</sup> SEC Division of Risk, Strategy, and Financial Innovation and the Office of General Counsel, *supra* note 17.

<sup>76</sup> Ellig, *supra* note 19.

<sup>77</sup> Resources: ICC Information, SURFACE TRANSPORTATION BOARD, [https://www.stb.gov/stb/public/resources\\_icc.html](https://www.stb.gov/stb/public/resources_icc.html).

<sup>78</sup> Surface Transportation Board, Petition for Rulemaking to Adopt Revised Competitive Switching Rules; Reciprocal Switching, Notice of Proposed Rulemaking, 81 Fed. Reg. 51, 149–51, 165 (Aug. 3, 2016).

<sup>79</sup> See *id.*

<sup>80</sup> See *id.*

<sup>81</sup> See *id.*

rent STB procedures are too cumbersome or that little anticompetitive abuse is occurring. A thorough regulatory impact analysis would have systematically examined evidence of anticompetitive abuse to determine whether a major problem exists, and if so, what caused the problem. Armed with an evidence-based explanation of the problem's cause, the STB could then assess the likely results of alternative solutions.

The STB's competitive switching proposal was accompanied by little or no analysis of alternative solutions that might be more effective or less burdensome. If current policy is so vague and cumbersome that it allows significant anticompetitive abuse to occur, then an obvious solution would be for the STB to provide clear guidance on the types of evidence a shipper must present to demonstrate anticompetitive abuse in its particular situation. Another solution was proposed in 2015 by a Transportation Research Board committee on which I served. We suggested that the STB should develop a screening model that uses rate data to identify whether a shipper appears to be paying unusually high rates, and then allow a shipper found to be paying unusually high rates to take its case to an arbitrator. The shipper could ask for competitive switching as a remedy.<sup>82</sup> A thorough regulatory impact analysis would have evaluated the pros and cons of these reasonable alternatives.

### 3. Benefits: High-Powered Magnets as Desktop Toys

A 2016 court decision remanding the Consumer Product Safety Commission's (CPSC's) safety standard for magnet sets illustrates some significant flaws in the CPSC's analysis of prospective benefits.<sup>83</sup> Around 2009, several companies began marketing sets of small, high-powered rare earth magnets as desktop toys and stress relievers for adults.<sup>84</sup> In response to reports of injuries to children who ingested magnets, the CPSC in 2011 sent notices of noncompliance to companies that appeared to be marketing or labeling these magnets to appeal to children younger than age 14, and it warned other companies that they should not market or label the magnets to appeal to this age group.<sup>85</sup> In 2012, the CPSC negotiated agreements with 10 of the 13 distributors to cease importation.<sup>86</sup> In 2014, the CPSC adopted a final rule requiring all magnet sets to meet the strength and size standards that previously applied only

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<sup>82</sup> COMMITTEE FOR A STUDY OF FREIGHT RAIL TRANSPORTATION AND REGULATION, TRANSPORTATION RESEARCH BOARD, MODERNIZING FREIGHT RAIL REGULATION 210–14 (2015).

<sup>83</sup> *Zen Magnets, LLC v. Consumer Product Safety Comm'n*, 851 F.3d 1141 (10th Cir. 2016).

<sup>84</sup> *Id.* at 1144.

<sup>85</sup> *Id.* at 1145.

<sup>86</sup> *Id.* at 1146.

to magnet sets marketed as children's toys.<sup>87</sup> Essentially, this rule meant that the high-powered magnet sets could no longer be sold, even to adults.<sup>88</sup> The one remaining importer, which required its retailers to restrict sales of the magnets to customers 18 years of age or older, sued the CPSC.<sup>89</sup>

The court found two problems that inflated the CPSC's estimate of prospective benefits. First, to estimate the number of injuries the standard would prevent, the analysis used data on emergency room visits linked to magnet sets from January 2009 through June 2012.<sup>90</sup> This created an artificially high baseline number of injuries because it ignored the fact that injuries dropped substantially after 2012 as a result of the commission's enforcement actions in 2011 and 2012.<sup>91</sup> Second, it is not clear whether the injury data employed by the commission accurately reflected the number of injuries caused by magnets.<sup>92</sup> Ninety percent of the injury reports only "possibly" involved ingestion of magnets.<sup>93</sup> In the absence of any further assessment, the actual number of injuries attributable to magnets could vary by a factor of 10.<sup>94</sup>

In this case, the errors were caught because the CPSC is required to conduct benefit-cost analysis for product safety standards, and courts can review that analysis as part of the record.<sup>95</sup> As CPSC Commissioner Joseph Mohorovic noted, "Although having a rule thrown out is not pleasant for the agency, if we take to heart this reminder of the importance of the . . . analysis, our future rules will be better and sounder for the effort."<sup>96</sup>

The CPSC could have prevented these mistakes, and perhaps could have avoided or won the lawsuit, if it had simply followed OMB guidance for preparing regulatory impact analysis. Additionally, if CPSC regulations were subject to review by the Office of Information and Regulatory Affairs (OIRA), these clear violations of OMB guidance likely would have been caught during OIRA's review.

OMB Circular A-4 clearly states that when identifying the baseline, analysts should take into account evolution of the marketplace, changes

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<sup>87</sup> Consumer Product Safety Commission, Final Rule: Safety Standard for Magnet Sets, 79 Fed. Reg. 59, 962–59, 989 (Oct. 3, 2014).

<sup>88</sup> See *Zen Magnets* at 1146.

<sup>89</sup> *Id.* at 1146–47.

<sup>90</sup> *Id.* at 1149.

<sup>91</sup> See *id.* at 1149–50.

<sup>92</sup> *Id.* at 1150.

<sup>93</sup> *Id.* at 1151.

<sup>94</sup> See *id.* at 1151–52.

<sup>95</sup> See *id.* at 1147.

<sup>96</sup> Joseph P. Mohorovic, *Improving Regulatory Analysis at Independent Agencies*, THE REGULATORY REVIEW (Jan. 10, 2017), <https://www.theregreview.org/2017/01/10/mohorovic-improving-regulatory-analysis-independent-agencies/>.

in regulations, and the degree of compliance by regulated entities with other regulations<sup>97</sup>—precisely the factors the CPSC neglected. For example, the CPSC explicitly declared that changes in the marketplace induced by its enforcement activity before the new rule should not be included in the baseline.<sup>98</sup>

OMB's instructions on treatment of uncertainty are likewise quite specific and describe precisely what the CPSC failed to do in this case:

When benefit and cost estimates are uncertain . . . you should report benefit and cost estimates (including benefits of risk reductions) that reflect the full probability distribution of potential consequences. Where possible, present probability distributions of benefits and costs and include the upper and lower bound estimates as complements to central tendency and other estimates.

If fundamental scientific disagreement or lack of knowledge prevents construction of a scientifically defensible probability distribution, you should describe benefits or costs under plausible scenarios and characterize the evidence and assumptions underlying each alternative scenario.<sup>99</sup>

The CPSC estimated that the new magnet standard would create \$28.6 million in benefits annually by preventing injuries, at a cost of at least \$6 million annually.<sup>100</sup> The cost figure includes only lost profits to producers, not lost value to consumers. But if the benefits were overstated up to tenfold, the costs easily could have outweighed the benefits. Clearly a more careful analysis of the benefits would have been helpful.

#### 4. Costs: Federal Communications Commission's Digital Television Receiver Mandate

In 2002, as part of the transition from analog to digital television broadcasts, the FCC phased in a requirement that new television sets must have the capability to receive broadcast digital TV signals.<sup>101</sup> The FCC cited some cost figures submitted by various interested parties, but

<sup>97</sup> U.S. OFFICE OF MGMT. & BUDGET, *supra* note 25, at 15.

<sup>98</sup> "Because CPSC compliance actions have significantly altered the state of the market, the environment before these actions occurred represents the best approximation of how the market would have operated in the absence of CPSC intervention and is the appropriate reference baseline for evaluating the impact of the rule." Consumer Product Safety Commission, *supra* note 87, at 59, 978.

<sup>99</sup> U.S. OFFICE OF MGMT. & BUDGET, *supra* note 25, at 18.

<sup>100</sup> Consumer Product Safety Commission, *supra* note 87, at 59, 979–82.

<sup>101</sup> Federal Communications Commission, *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Second Report and Order 2* (Aug. 9, 2002).

it did not perform its own independent cost analysis.<sup>102</sup> A consultant's study submitted by broadcasters estimated that a digital tuner would increase the cost of a TV set by \$16 in 2006.<sup>103</sup> The Consumer Electronics Association claimed that a tuner would cost \$200.<sup>104</sup> The FCC appeared to place most credibility in estimates from two individual manufacturers that ranged between \$50 and \$75.<sup>105</sup>

Without further analysis or elaboration, the Commission asserted simply that "the potential price increases under our phase-in plan are within an acceptable range."<sup>106</sup> There was no analysis of benefits or other results attributable to this mandate that could be compared with costs to determine whether the costs were acceptable. This omission was especially glaring because, as one Commissioner pointed out, about 85 percent of consumers at the time received television signals from cable or satellite companies.<sup>107</sup> These consumers were not receiving over-the-air broadcast signals, but the regulation required them to pay for an over-the-air digital tuner they did not need.<sup>108</sup> The D.C. Circuit Court of Appeals ruled that the FCC acted within its authority when it made this decision, because "such a shifting of the benefits and burdens of a regulation is well within the authority of the responsible agency."<sup>109</sup> But just because the FCC had the legal authority to make this decision does not mean that the decision was either a fair one or the lowest-cost way to achieve the regulatory objective of ensuring that broadcast households could continue to receive TV signals when analog broadcasts would be phased out.

A thorough cost analysis would have included the following features:

- A projected baseline future trend for purchase of TV sets with digital tuners by consumers who actually needed them—the consumers who received only broadcast TV.

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<sup>102</sup> See *id.* at 6–7, 10, 24.

<sup>103</sup> *Id.* at 7.

<sup>104</sup> *Id.* at 8.

<sup>105</sup> *Id.* at 20–21.

<sup>106</sup> *Id.* at 21.

<sup>107</sup> Commissioner Kathleen Q. Abernathy, Separate Statement, *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Second Report and Order*, Fed. Comm'n. Comm'n 1 (Aug. 8, 2002), available at <https://www.fcc.gov/document/review-commissions-rules-and-policies-affecting-conversion-digital-television-0>.

<sup>108</sup> Commissioner Kevin J. Martin, Dissenting Statement, *Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, Second Report and Order*, Fed. Comm'n. Comm'n 1 (Aug. 8, 2002), available at <https://www.fcc.gov/document/review-commissions-rules-and-policies-affecting-conversion-digital-television-0>.

<sup>109</sup> *Consumer Electronics Ass'n v. FCC*, 347 F.3d 291, 301 (2003).

- An assessment of how various types of mandates would have affected the per-unit and total costs of producing digital tuners, as well as the rate of adoption.
- A distributional analysis showing how much of the cost would be paid by cable and satellite households who did not need digital broadcast converters.
- A comparison of the cost of mandating digital tuners to the costs of alternatives, such as the subsidies for set-top converters that Congress ultimately adopted in 2005.<sup>110</sup> If there had been no FCC mandate for digital tuners in new TVs, the additional cost of providing subsidized set-top boxes to consumers who bought TVs without digital tuners during the transition period could have been far lower than the cost of mandating digital tuners in all new TVs.<sup>111</sup> The FCC undertook no rigorous comparison of alternatives that would have answered this question before it imposed the mandate.

### III. KEY STEPS FOR BETTER REGULATORY IMPACT ANALYSIS

Five key steps are necessary to ensure that an agency conducts sound regulatory impact analysis and considers it carefully when making regulatory decisions. Some of these steps are best practices that already have been implemented at some independent agencies. Others are based on lessons drawn from the experience of executive branch agencies that have been conducting this type of analysis for more than three decades.

First, the agency needs to organize and manage economists in a way that promotes high-quality, objective analysis. Second, the agency should establish standards for regulatory impact analysis. Third, the analysis should be conducted before regulatory decisions are made. Fourth, the agency should clearly explain how the analysis affected regulatory decisions. Fifth, the agency should invite OIRA to review its regulations and the accompanying analysis, just as OIRA does for executive branch regulations.

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<sup>110</sup> Department of Commerce, National Telecommunications and Information Administration, Rules to Implement and Administer a Coupon Program for Digital-to-Analog Converter Boxes, 72 Fed. Reg. 12,097–12,121 (March 15, 2007).

<sup>111</sup> As a participant in the subsidy program, the author received two \$40 coupons that allowed him to acquire two simple set-top boxes for a pair of old analog TVs at no additional cost.



A. *Organize and Manage Economists to Promote High-Quality, Objective Analysis*

The purpose of regulatory impact analysis is to provide decision makers with objective and reliable information about the consequences of alternative courses of action. For this reason, analysts should be organized and managed in a fashion that best protects their ability to produce high-quality, objective analysis.

1. Functional Organization of Economists

Organization theory and the actual experience of federal agencies both suggest that placement of economists in a separate office or bureau managed by economists is the structure that best protects economists' independence.<sup>112</sup> This structure is sometimes referred to as "functional" organization, because the agency's professionals are organized on the basis of their functions. This organizational structure facilitates better quality control of the economists' work, makes identifying and rewarding economic expertise easier, encourages development of a common framework for analysis, encourages economists to share and develop ideas on new analytical methods, and facilitates recruitment of better economists.<sup>113</sup>

A recent study that interviewed 16 senior economists and 16 senior environmental assessors at federal agencies found a strong consensus among the analysts that they have greater independence and greater ability to disagree with decisions of the agency's program office when they are not under the supervision of the staff that makes the decisions they are analyzing.<sup>114</sup> One economist noted, "It's very difficult to conduct a [benefit-cost analysis] if your boss wrote what you are analyzing."<sup>115</sup> Another economist suggested that the situation would be even better if the economists who analyze regulations were placed in another federal agency.<sup>116</sup> When the SEC's Chairwoman sought to improve the quality and use of economic analysis in 2012, the chief economist became head of the division that housed most of the Commission's economists and started reporting directly to the Chair.<sup>117</sup>

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<sup>112</sup> "Another way to promote objective analysis is to separate agency economists from the program offices that propose regulations." PRESIDENT'S COUNCIL ON JOBS & COMPETITIVENESS, *supra* note 10, at 45.

<sup>113</sup> Luke M. Froeb et al., *The Economics of Organizing Economists* 10–11, 13–14 (Vanderbilt L. & Econ. Working Paper No. 08-18, 2008), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1155237](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1155237).

<sup>114</sup> Stuart Shapiro, *Structure and Process: Examining the Interaction between Bureaucratic Organization and Analytical Requirements*, 34(5) REV. POL'Y RES. 682 (2017).

<sup>115</sup> *Id.* at 691.

<sup>116</sup> *Id.*

<sup>117</sup> Peirce, *supra* note 59, at 585.

The experience of the Federal Trade Commission (FTC) is instructive. Most FTC economists are in a separate Bureau of Economics, which has helped the economists remain an independent voice as administrations have changed.<sup>118</sup> A 2015 evaluation by the FTC's Office of Inspector General noted, "Virtually all stakeholders interviewed recognized the importance of the [Bureau of Economics'] purpose in providing unbiased and sound economic analysis to support decision-making—a function that is facilitated by its existence as a separate organization."<sup>119</sup>

The influence of economics at the FTC is widely acknowledged to be both pervasive and difficult to measure.<sup>120</sup> In contrast to many regulatory agencies, a great deal of the FTC's workload—and hence a great deal of its economic analysis—focuses on enforcement cases under the antitrust and consumer protection laws rather than actually writing regulations. An empirical study found that Bureau of Economics' recommendations have a statistically significant effect on FTC decisions in merger cases, but not as large an effect as the Bureau of Competition's recommendations.<sup>121</sup> Jonathan Baker, who served as director of the FTC's Bureau of Economics during the Clinton administration, argues that institutionalizing the Bureau's role in Commission decisions has created "continuous regulatory reform" in the form of routine application of benefit-cost analysis in decision-making.<sup>122</sup> He contends that the FTC's Bureau of Consumer Protection often reconsiders or revises its proposals if it appears they will fail a benefit-cost test.<sup>123</sup>

The FTC's "unfairness" standard illustrates the influence of economic thinking at the Commission. The FTC Act prohibits "unfair" acts and business practices.<sup>124</sup> The Commission commenced numerous consumer protection rulemakings in the 1970s, when the Commission's authority to issue rules became clear, but these rulemakings were often based on vague and wide-ranging definitions of what counted as unfair or deceptive.<sup>125</sup> In 1978, the Bureau of Economics established the Consumer Protection Division, and economists became significantly in-

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<sup>118</sup> Paul A. Pautler, *A History of the FTC's Bureau of Economics* 117 (American Antitrust Institute Working Paper No. 15-03, 2015), available at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=2657330](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2657330).

<sup>119</sup> FEDERAL TRADE COMMISSION, OFFICE OF INSPECTOR GENERAL, EVALUATION OF THE FEDERAL TRADE COMMISSION'S BUREAU OF ECONOMICS 9 (2015).

<sup>120</sup> Pautler, *supra* note 118, at 115–17.

<sup>121</sup> Malcolm B. Coate, *Merger Enforcement at the Federal Trade Commission in Three Presidential Administrations*, 45 ANTITRUST BULL. 323, 340–46 (2000).

<sup>122</sup> Jonathan B. Baker, "Continuous" Regulatory Reform at the Federal Trade Commission, 49 ADMIN. L. REV. 859, 868–69 (1997).

<sup>123</sup> *Id.* at 871.

<sup>124</sup> Federal Trade Commission, *Policy Statement on Unfairness* (Dec. 17, 1980), available at <https://www.ftc.gov/public-statements/1980/12/ftc-policy-statement-unfairness>.

<sup>125</sup> J. Howard Beales III, *Brightening the Lines: The Use of Policy Statements at the Federal Trade Commission*, 72 ANTITRUST L.J. 1057, 1061 (2005).

volved in consumer protection rulemakings for the first time.<sup>126</sup> “Economists brought a different set of questions to their analysis. The core questions an economist asks revolves around the costs and benefits of regulatory proposals, whether they are pursued through rules or individual cases.”<sup>127</sup> After a series of highly controversial rulemakings created significant public backlash,<sup>128</sup> the Commission, in December 1980, adopted a policy statement to guide future unfairness enforcement actions.<sup>129</sup> To be considered unfair, an action or practice must create substantial injury to consumers, must not be outweighed by any benefits to consumers, and must be an injury that consumers could not reasonably have avoided.<sup>130</sup> Political furor over some of the FTC’s regulatory initiatives created a strong incentive for the Commission to limit its own discretion in some way, but economic logic provided the solution.

The FTC’s history also suggests that putting most of the agency’s economists under the legal divisions reduces the economists’ independence. Fritz Mueller, who became the FTC’s chief economist in 1963, faced the task of rebuilding the bureau after most of its economists had been moved into the legal divisions in the 1950s.<sup>131</sup> He observed the following:

I think the reason the economists were moved out of the Bureau of Economics into the legal division was an outgrowth of the controversy between economists and attorneys . . . . The economists . . . disagreed vehemently with the economic approach being taken by the legal division, and the lawyers wanted greater control over the economists. I think it’s a terrible idea myself.<sup>132</sup>

The FTC moved its economists back into the Bureau of Economics under Mueller, where most FTC economists have served to this day.<sup>133</sup>

Former FCC chief economist Thomas Hazlett succinctly summarized the structure and role of an economic analysis office in an independent agency:

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<sup>126</sup> *Id.* at 1062.

<sup>127</sup> *Id.* at 1062–63.

<sup>128</sup> *Id.* at 1064–65.

<sup>129</sup> *Id.*

<sup>130</sup> Federal Trade Commission, *supra* note 124.

<sup>131</sup> FEDERAL TRADE COMMISSION, BUREAU OF ECONOMICS, ROUNDTABLE WITH FORMER DIRECTORS OF THE BUREAU OF ECONOMICS 28 (2003).

<sup>132</sup> *Id.*

<sup>133</sup> Economists occasionally fill other management roles outside the Bureau of Economics. For example, J. Howard Beales served as director of the Bureau of Consumer Protection from 2001 to 2004. The author served as deputy director of the Commission’s Office of Policy Planning from 2001 to 2003.

The basic requirements for creating an Office of Economic Analysis at the FCC [are] that a critical mass of economic expertise be assembled in one location; that the office be directed by an economist of high rank and authority within the agency; that the office be given latitude to select research teams, relevant study projects, and to thereby acquire deep knowledge of relevant markets and policies; that the staff professionals be active in scholarly research; and that this sophisticated analytical base [ ] productively participates in FCC policy-making.<sup>134</sup>

## 2. Basis for Performance Evaluation

A separate but related issue is the criteria for evaluation of economists' performance for purposes of pay and promotion.

Unfortunately, regulatory agencies often act as if their job is to produce regulations rather than to produce outcomes.<sup>135</sup> As one agency economist noted, "Success is putting out 10 regulations a year and bigger regulations are bigger successes. They don't say, 'we examined 10 [situations] and we decided that 8 did not warrant regulation . . .'"<sup>136</sup> Pay, bonuses, career advancement, plaques, and other forms of recognition go to staff members who successfully complete regulatory proceedings.<sup>137</sup>

The purpose of regulatory impact analysis is to provide high-quality, objective information to inform decisions. Therefore, the performance of individual analysts should be evaluated in part on the basis of whether they produce high-quality and relevant analysis.<sup>138</sup> Economics bureaus in government agencies also often perform an R&D function, developing new data, new methods, and original empirical findings to address critical policy questions.<sup>139</sup> Analysts should also be rewarded on the basis of the quality and usefulness of such work.

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<sup>134</sup> Thomas W. Hazlett, *Economic Analysis at the Federal Communications Commission: A Simple Proposal to Atone for Past Sins* 19 (Resources for the Future Discussion Paper 11-23, 2011).

<sup>135</sup> Jerry Ellig & Richard Williams, *Reforming Regulatory Analysis, Review, and Oversight: A Guide for the Perplexed* Aug. 13, 2014), (unpublished manuscript) (on file with Mercatus Center at George Mason University), available at <https://www.mercatus.org/publication/reforming-regulatory-analysis-review-and-oversight-guide-perplexed>.

<sup>136</sup> Williams, *supra* note 38, at 7.

<sup>137</sup> *Id.*

<sup>138</sup> "The work of agency economists should be evaluated by other economists, with compensation and career advancement tied to the quality of their analysis, not on whether the analysis supports decisions already made." PRESIDENT'S COUNCIL ON JOBS & COMPETITIVENESS, *supra* note 10, at 45.

<sup>139</sup> Thomas W. Hazlett, *Economic Analysis at the Federal Communications Commission: A Simple Proposal to Atone for Past Sins* 19 (2011), <http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-11-23.pdf>.

### *B. Establish Agency-Wide Standards for Regulatory Impact Analysis*

OMB Circular A-4 provides a great deal of useful guidance on how to conduct regulatory impact analysis.<sup>140</sup> An agency can demonstrate its commitment to conducting high-quality analysis by issuing its own standards that incorporate the concepts in Circular A-4 and explain how to apply them to the particular types of regulations written by the agency. Agency-specific standards explicitly commit the agency to regulatory impact analysis as a matter of policy and help communicate how to carry out the analysis in practice.

#### 1. Basic Elements

At a bare minimum, an agency's standards for regulatory impact analysis should identify the four major items any good regulatory impact analysis should cover: analysis of the problem, alternatives, and estimation of the benefits and the costs of each alternative.<sup>141</sup> The SEC's guidance is one example of a document that addresses these items, and it explicitly refers to OMB's much more detailed guidance in Circular A-4.<sup>142</sup>

#### 2. Agency-Specific Factors

Other agencies have gone much further than the basic elements, authoring guidance that helps explain how to conduct various aspects of the analysis for the specific types of regulations written by the agency. The Nuclear Regulatory Commission's guidance includes examples relevant to nuclear power plant safety, lists specific categories of benefits and costs that should be included, and contains a special section on regulatory analysis of "backfits" applicable to existing nuclear power plants.<sup>143</sup> The US Department of Transportation maintains a list of "rulemaking requirements" that refer the reader to relevant executive orders and OMB guidance documents on regulatory analysis.<sup>144</sup> The department also periodically revises and posts on its website the default

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<sup>140</sup> U.S. OFFICE OF MGMT. & BUDGET, *supra* note 25.

<sup>141</sup> *Id.*

<sup>142</sup> *Id.*

<sup>143</sup> U.S. NUCLEAR REGULATORY COMMISSION, OFFICE OF NUCLEAR REACTOR REGULATION, REGULATORY ANALYSIS GUIDELINES OF THE U.S. NUCLEAR REGULATORY COMMISSION: DRAFT REPORT FOR COMMENT (2017), available at <https://www.nrc.gov/docs/ML1710/ML17100A480.pdf>.

<sup>144</sup> Neil Eisner, *U.S. Department of Transportation Rulemaking Requirements* 23–24 (March 2012), available at <https://www.transportation.gov/regulations/rulemaking-requirements-2012>.

values for consumers' travel time and the value of a statistical life to be used in regulatory impact analysis.<sup>145</sup>

### 3. The Role of Benefit-Cost Analysis and Cost-effectiveness Analysis

The purpose of benefit-cost analysis is to determine whether a government action can improve economic efficiency and to compare the effects of alternative government actions on economic efficiency.<sup>146</sup> Regulation can improve economic efficiency if it remedies a "market failure."<sup>147</sup> Commonly discussed forms of market failure include externalities, monopoly, public goods, and asymmetric information.<sup>148</sup> A market failure occurs when the private marginal benefits or costs faced by decision makers deviate from the social marginal benefits or costs.<sup>149</sup> This deviation of private and social benefits or costs means that private decisions will not produce the economically efficient result.<sup>150</sup> Governments can also fail to produce the economically efficient result, because the private benefits and costs faced by government decision makers may deviate from social benefits and costs.<sup>151</sup> In cases of both market and government failure, benefit-cost analysis is necessary to determine whether a change in policy will improve economic efficiency.<sup>152</sup> A benefit-cost analysis of alternatives can identify the alternative with the greatest "net benefits" (benefits minus costs).<sup>153</sup>

Not all statutory mandates or regulations are intended to improve economic efficiency by remedying market or government failures. Many regulatory policies are intended primarily to ensure fairness in some way that involves redistribution of wealth or income.<sup>154</sup> Others seek to reduce

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<sup>145</sup> See *Economic Values Used in Analyses*, US DEPARTMENT OF TRANSPORTATION (December 21, 2016), <https://www.transportation.gov/regulations/economic-values-used-in-analysis>.

<sup>146</sup> RICHARD O. ZERBE, JR., & DWIGHT D. DIVELY, *BENEFIT-COST ANALYSIS IN THEORY AND PRACTICE* 10 (1994).

<sup>147</sup> *Id.*

<sup>148</sup> For a highly readable and brief description of market failures, see SUSAN E. DUDLEY & JERRY BRITO, *REGULATION: A PRIMER* 12–20 (2012).

<sup>149</sup> ZERBE *supra* note 146 at 14.

<sup>150</sup> *Id.*

<sup>151</sup> See MANCUR OLSON, *THE LOGIC OF COLLECTIVE ACTION* (1965); George J. Stigler, *The Theory of Economic Regulation*, 2 BELL J. ECON. 3 (1971); Sam Peltzman, *Toward a More General Theory of Regulation*, 19 J. LAW & ECON. 211 (1976).

<sup>152</sup> ZERBE *supra* note 146 at 13.

<sup>153</sup> ZERBE *supra* note 146 at 3.

<sup>154</sup> Regulation of rates that freight railroads can charge shippers who lack other transportation options for goods, for example, primarily affects the division of profits between the railroad and the shipper; it reflects a congressional preference that a shipper who lacks other transportation options should not pay dramatically different rates than a similar shipper who has other transportation options. Similarly, the FCC's universal service programs that subsidize broadband and phones for low-income and rural residents do not have much of an eco-

risks to some level that policymakers have decided is desirable, even if that level is below the economically efficient level.

In such cases, a cost-effectiveness analysis can inform decision makers about the lowest-cost way to achieve a desired policy outcome.<sup>155</sup> For example, “universal service” programs that subsidize telephone service for low-income and rural subscribers are intended to reduce the number of households that lack telephones.<sup>156</sup> A cost-effectiveness analysis conducted to inform the reform of universal service programs by the Public Utility Commission of Texas found that the low-income subsidies increased subscribership at an average social cost of \$663 per new subscriber annually, subsidies in rural areas served by large phone companies cost an average of \$13,622 per new subscriber, and subsidies in rural areas served by small phone companies cost an average of \$11,184 per new subscriber.<sup>157</sup>

#### 4. Distributional Analysis

A conventional benefit-cost analysis identifies the net benefits of each alternative. The people who bear the costs, however, may not always be the same people who receive the benefits. When these groups are significantly different, a separate distributional analysis that identifies disparate impacts may be helpful to decision makers. Distributional analysis should identify who bears costs, who receives benefits, and who has net gains and net losses from the regulation. This seemingly simple type of distributional analysis is rare even in regulatory impact analyses from executive branch agencies.<sup>158</sup>

In recent years, the effect of regulations on employment has become a contentious issue. The question of who gains or loses jobs as the result of an individual regulation is primarily a distributional issue.<sup>159</sup> If employment effects are included in the regulatory impact analysis of an individual regulation, they should be addressed in the distributional analysis.

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conomic efficiency rationale; they reflect a congressional desire that all citizens have affordable access to a minimal level of communications services.

<sup>155</sup> Eric A. Posner, *Transfer Regulations and Cost-Effectiveness Analysis*, 53 DUKE L.J. 1067, 1069 (2003) (finding that transfer regulations are not suitable to cost-benefit analysis and arguing for cost-effectiveness analysis).

<sup>156</sup> Jerry Ellig & Joseph Rotondi, *Outcomes and Alternatives for Universal Telecommunications Service: A Case Study of Texas*, 12 TX REV. L. & POL. 1, 45 (2007).

<sup>157</sup> *Id.*

<sup>158</sup> See Lisa A. Robinson et al., *Attention to Distribution in U.S. Regulatory Analyses*, 10 REV. ENVTL. ECON. & POL'Y 308 (2016).

<sup>159</sup> DOES REGULATION KILL JOBS? (Cary Coglianese, Adam M. Finkel & Christopher Cargan eds., 2015).



## 5. Standards of Evidence

An honest, objective analysis should meet the standard of evidence articulated in Executive Order 12866: “Each agency shall base its decisions on the best reasonably obtainable scientific, technical, economic, and other information concerning the need for, and consequences of, the intended regulation.”<sup>160</sup> This means that analysts should not selectively choose data or studies to support predetermined conclusions. When different studies or data lead to different conclusions, the analyst should use them to identify the range of possible outcomes, identify the most likely outcome, and support this determination with evidence.

## 6. Full Disclosure

The agency’s guidance should commit it to full disclosure of all reports, analysis, and data it relied upon when developing the regulation. As recommended by the American Bar Association, this practice would give affected parties a fuller opportunity to evaluate and comment on the factual basis for the regulation.<sup>161</sup>

### C. Conduct Analysis Before Making Decisions

A regulatory impact analysis should inform decisions, not simply justify decisions that have already been made for other reasons. Four steps can help mitigate the tendency for “ready-fire-aim” rulemaking.

First, involve economists on cross-functional teams early in the process, when program staff members are initially considering whether a new regulation is necessary and developing options.<sup>162</sup> Cross-functional teams help mitigate a potential disadvantage of the functional organization recommended earlier. Placed in a separate organization, the economists could miss opportunities to influence decisions at an early stage; by the time they are included, a decision may have already been made.<sup>163</sup> Several examples suggest that cross-functional teams help solve this potential problem. The cross-functional teams approach has been credited with some of the recent improvement in the SEC’s economic analysis.<sup>164</sup>

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<sup>160</sup> Exec. Order No. 12866, §1(b)(7), 58 Fed. Reg. 51,735, 51,736 (Oct. 4, 1993).

<sup>161</sup> Christopher J. Walker, *Modernizing the Administrative Procedure Act*, 69 ADMIN. L. REV. 629 (2017).

<sup>162</sup> Froeb et al., *supra* note 113, at 11–13.

<sup>163</sup> *Id.*; Shapiro, *supra* note 114, at 692.

<sup>164</sup> A former SEC attorney notes that the SEC staff’s 2012 economic analysis guidance had precisely this effect at that agency: “The 2012 Guidance has in effect amended the micro-constitution of the SEC staff, elevating the economists to the status of a co-equal branch of the agency.” See Bruce R. Kraus, *Economists in the Room at the SEC*, 124 YALE L.J. FORUM 280, 302 (2015), <http://www.yalelawjournal.org/forum/economists-in-the-room-at-the-sec>. For evidence of improvement in the SEC’s economic analysis after issuance of the 2012 Guidance, see Ellig, *supra* note 19.



Similarly, some agencies that house environmental assessors in a separate unit from the program office involve the assessors from the outset by including them on cross-functional teams.<sup>165</sup> The FTC has employed this approach for decades, both for regulations and for enforcement decisions.<sup>166</sup> Over time, attorneys have become adept at using the economic framework to assess both antitrust and consumer protection issues.<sup>167</sup> Within an economics bureau, economists can be organized into subunits that match the agency's different regulation-writing divisions, so that individual analysts and their managers can more easily coordinate their workflow with the regulation writers and the enforcement units.

Second, create an incentive for program staff to consider the economists' advice by allowing the economics office to make its own, independent recommendations to the decision makers.<sup>168</sup> Functional organization of economists should give them greater freedom to offer objective advice and provide greater odds that their advice will reach the ears of higher-level decision makers in the organization.<sup>169</sup> In addition to giving economists greater independence to reach their own conclusions, the FTC also gives the Bureau of Economics independent opportunities to make recommendations to the commission.<sup>170</sup> On the majority of matters before the FTC, the Bureau can offer its views both in writing and orally at Commission meetings.<sup>171</sup> Economic and legal staffs write separate memoranda to the Commission both when the Commission is deciding whether to open an investigation and when the matter is ready for final decision.<sup>172</sup> This approach gives the economists' views greater clout in two ways. First, it ensures that the Commissioners can directly hear advice which incorporates an economic perspective.<sup>173</sup> Second, it creates an incentive for the attorneys working on a case or other matter to take the economists' advice seriously and reach consensus with the economists before the matter goes to the Commission.<sup>174</sup> The inspector general's report states that less than 10 percent of the Bureau of Economics'

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<sup>165</sup> See Shapiro, *supra* note 114, at 691.

<sup>166</sup> Federal Trade Commission, *supra* note 131, at 89–90, 151–52. See also Froeb et al., *supra* note 113, at 12–13; Baker, *supra* note 122, at 869 (“Together, the legal and economic staff review documents, interview witnesses, develop theories explaining how the conduct under review might be beneficial or harmful to the public, and identify possible remedies.”).

<sup>167</sup> Federal Trade Commission, *supra* note 131, at 100–01, 142–43.

<sup>168</sup> Froeb et al., *supra* note 113, at 16–17.

<sup>169</sup> Shapiro, *supra* note 163, at 691–92.

<sup>170</sup> Pautler, *supra* note 118, at 113.

<sup>171</sup> *Id.* at 114.

<sup>172</sup> Jonathan B. Baker, *supra* note 122, at 869.

<sup>173</sup> Pautler, *supra* note 118, at 111.

<sup>174</sup> *Id.* at 113.

recommendations to the Commission disagree with those from the other bureaus.<sup>175</sup>

Third, consult with stakeholders about the need for a regulation and alternative approaches before writing a regulation. A recent study found that agencies tend to produce more thorough analyses when they consult with stakeholders such as state, local, or tribal governments.<sup>176</sup>

Fourth, publish a preliminary analysis of the problem the agency seeks to solve and the benefits and costs of alternatives before publishing a regulation.<sup>177</sup> There is evidence that agencies produce more thorough analyses when they first seek public comment on a prior proposal, publish a preliminary analysis, or ask the public for data before they propose a new regulation.<sup>178</sup>

#### D. *Explain How the Analysis Affected Decisions*

Some commentators present regulatory impact analysis or benefit-cost analysis as a decision-making procedure that substitutes the economist's calculations for the decision maker's judgment.<sup>179</sup> The decision maker need merely choose the alternative that produces the greatest difference between benefits and costs—the maximum net benefit.<sup>180</sup>

This approach presumes that the decision maker's goal is maximization of economic welfare. For regulations that are intended solely to remedy market failures, this is the appropriate goal. If the decision maker is reasonably certain that all significant benefits and costs have been measured and converted to monetary values accurately, the analyst's calculations can greatly simplify decision-making.

<sup>175</sup> FEDERAL TRADE COMMISSION, OFFICE OF INSPECTOR GENERAL, *supra* note 119, at 9.

<sup>176</sup> Jerry Ellig and Rosemarie Fike, *Regulatory Process, Regulatory Reform, and the Quality of Regulatory Impact Analysis*, 7 J. BEN.-COST ANALYSIS 523, 537 (2016).

<sup>177</sup> In 2009, coauthors of a Resources for the Future monograph recommended that "a preliminary RIA [regulatory impact analysis] be prepared at least six months in advance of final agency review of proposed and final regulations. Understandably, a preliminary RIA may be incomplete and subject to greater uncertainties than the full study. At the same time, this preliminary RIA would characterize the full set of options being analyzed and would provide at least rough estimates of the benefits and costs of each option." Winston Harrington et al. eds., *What We Learned, in REFORMING REGULATORY IMPACT ANALYSIS*, *supra* note 30, at 225. Similarly, Carrigan and Shapiro propose that agencies should be incentivized to produce simpler preliminary analyses that examine a wide scope of alternatives before they propose regulations. See Christopher Carrigan & Stuart Shapiro, *What's Wrong with the Back of the Envelope: A Call for Simple (and Timely) Benefit-Cost Analysis*, 11 REG. & GOVERNANCE 203 (2016). In 2011, President Obama's Jobs Council recommended expanding the use of advance notices of proposed rulemaking without making it a requirement. See PRESIDENT'S COUNCIL ON JOBS & COMPETITIVENESS, *supra* note 10, at 43.

<sup>178</sup> Ellig & Fike, *supra* note 176, at 537.

<sup>179</sup> See Graham, *supra* note 21, at 432.

<sup>180</sup> See *id.* Former OIRA Administrator John Graham referring to this as the "hard" benefit-cost test.

However, some regulations address distributional concerns, unmonetized values, or statutory considerations that are neither benefits nor costs. For these types of regulations, decision makers surely should be aware of the benefit and cost consequences, but benefits and costs may not be the only factors driving the decisions. This is the “soft” benefit-cost test implied by the language in Executive Order 12866 specifying that agencies should regulate only when the benefits “justify” the costs.<sup>181</sup> It is precisely what many federal regulatory economists recommend when surveyed.<sup>182</sup>

For this reason, the agency should explain any aspect of the analysis that affected its regulatory decisions—not just present a calculation of net benefits of alternatives. Perhaps the agency did not choose the alternative that maximized net benefits, but the assessment of the problem helped identify the most effective or cost-effective alternative. If unquantified benefits and costs, or values that are neither benefits nor costs, affected regulatory decisions, the agency should explain these factors and present evidence that they are significant to citizens.<sup>183</sup>

#### *E. Invite Review by the Office of Information and Regulatory Affairs*

Independent agencies’ regulations and analyses are not currently subject to OIRA review.<sup>184</sup> An independent agency could take a more controversial, but potentially productive, step by inviting OIRA to review its regulations and accompanying regulatory analysis.

Evidence shows that the requirements in the executive orders, coupled with review by OIRA, have induced agencies to engage in more thorough analysis than they would undertake otherwise. For example, “prescriptive” regulations that contain mandates or prohibitions receive more intensive OIRA review than regulations that implement budget programs; prescriptive regulations also tend to have more thorough regulatory impact analysis.<sup>185</sup> Agencies produce higher-quality analysis when

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<sup>181</sup> *Id.*

<sup>182</sup> Williams, *supra* note 38, at 6 (“No economist I interviewed thought that the results of a well-done economic analysis, specifically identifying the option that maximizes net benefits, should dictate decisions to a decision maker. But none thought decision makers should be free to ignore the results of benefit-cost analysis, particularly when, for some aspects of regulatory decisions, there were large costs and very small benefits.”). See also Al McGartland, *Thirty Years of Economics at the Environmental Protection Agency*, 42 AG. & RES. ECON. REV. 436, 450 (2013) (“Some stakeholders believe that benefit-cost analysis dictates what to do. Not so.”).

<sup>183</sup> Ellig & Williams, *supra* note 135, at 28–30.

<sup>184</sup> Executive Order 12866, 58 Fed. Reg. 51,735 (Oct. 4, 1993).

<sup>185</sup> See Patrick A. McLaughlin & Jerry Ellig, *Does OIRA Review Improve the Quality of Regulatory Impact Analysis? Evidence from the Final Year of the Bush II Administration*, 63 ADMIN. L. REV. (SPECIAL EDITION) 179 (2011).

OIRA reviews the regulation for a longer time.<sup>186</sup> Agencies also produce higher-quality analysis when the OIRA review is concluded under a presidentially appointed OIRA administrator rather than an acting administrator; OIRA has more clout in the administration when the administrator is a presidential appointee.<sup>187</sup>

The concept of submitting independent agencies' regulations and analyses to OIRA is controversial because it appears to limit their independence from the executive branch.<sup>188</sup> Some argue that the primary reason for creating independent agencies in the first place is to insulate them from political pressure and capture by special interests.<sup>189</sup> If one believes that this type of capture is more likely when the agency is responsible to the president, then the argument against having OIRA review independent agencies' regulations is straightforward.<sup>190</sup> Another traditional argument for independent agencies, however, is that they are more likely to make decisions based on facts and expertise.<sup>191</sup> OIRA review can facilitate this goal by coordinating input from other expert agencies and providing a fresh perspective on the agency's economic analysis.<sup>192</sup>

A voluntary arrangement for OIRA review could take one of several forms. OIRA could simply offer comments privately on the agency's proposed regulations and analysis, which could be considered technical assistance rather than formal OIRA review or oversight.<sup>193</sup> Alternatively, the agency and OIRA could agree that OIRA could publicize any concerns about the regulation or the analysis; if the agency disagrees with OIRA, it would have to go on record acting contrary to OIRA's advice. Finally, the agency could agree that it will not move forward with a regulation unless it addresses OIRA's significant concerns with the regulation or the analysis. This approach effectively means that the agency has allowed OIRA to return regulations to the agency for further work, just as OIRA does with executive branch agencies.

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<sup>186</sup> See Ellig & Fike, *supra* note 176, at 540; Stuart Shapiro & John F. Morrall III, *Does Haste Make Waste? How Long Does It Take to Do a Good Regulatory Impact Analysis?*, 48 ADMIN. & SOC'Y 367 (2016).

<sup>187</sup> Ellig & Fike, *supra* note 176, at 540.

<sup>188</sup> Rachel E. Barkow, *Insulating Agencies: Avoiding Capture through Institutional Design*, 89 TX L. REV. 15, 16 (2010).

<sup>189</sup> *Id.* at 16.

<sup>190</sup> *Id.* at 34–36.

<sup>191</sup> *Id.* at 19–21.

<sup>192</sup> *Id.* at 33–34. Barkow also notes that OIRA may lack some of the specialized expertise of the agency proposing the regulation. *Id.* at 34.

<sup>193</sup> See, e.g., OFFICE OF INFORMATION AND REGULATORY AFFAIRS AND U.S. COMMODITY FUTURES TRADING COMMISSION, MEMORANDUM OF UNDERSTANDING (2012), available at [https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/regpol/oira\\_cftc\\_mou\\_2012.pdf](https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/regpol/oira_cftc_mou_2012.pdf).

## CONCLUSION

This article outlines the role regulatory impact analysis can play at independent regulatory agencies, documents deficiencies in current practice, and suggests five steps that an agency can take to produce and use high-quality, objective regulatory impact analysis. Any agency so inclined faces one additional challenge: how to credibly commit to this change for the long term. Fortunately, credible commitment mechanisms are available.

One commitment mechanism is bureaucratic inertia. The organizational, incentive, and cultural changes outlined in Part IV will require significant initial effort to accomplish. For this reason, they will also be difficult to reverse once established.

An agency seeking a stronger commitment mechanism can institutionalize many of the policies and procedures described in Part IV by formally adopting them in the *Code of Federal Regulations* (CFR). For example, when the US Department of Energy considers whether to issue energy efficiency or water efficiency standards for appliances, it follows procedures that are extensively documented in an appendix to the relevant section of the CFR.<sup>194</sup> The department commits to issuing an advance notice of proposed rulemaking that identifies potential standards and discloses all analytical work produced to date, in order to gather stakeholder input before it completes the analysis and selects a standard to propose as a regulation.<sup>195</sup> The appendix outlines the major factors to be considered by the department's analysis, such as the engineering analysis; effects on manufacturers and consumers; and the effectiveness of nonregulatory alternatives.<sup>196</sup> It explains how the analysis of these factors will be conducted and establishes timetables for stakeholder feedback.<sup>197</sup> The appendix also explains how the department will use the results of the analysis to make decisions.<sup>198</sup>

The Department of Energy states that these commitments do not create new grounds for judicial review of its regulations, but commits to (1) providing notice and explanation of any deviations in specific instances, and (2) publishing a notice in the Federal Register if it permanently alters any of the policies or procedures.<sup>199</sup> An independent agency that wanted to offer an even more credible commitment could specify that noncompliance with its policies and procedures published in the CFR could be grounds for judicial review.

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<sup>194</sup> Energy and Water Conservation Standards, 10 C.F.R. pt. 430C, app'x A.

<sup>195</sup> *Id.* § 4(c).

<sup>196</sup> *Id.* §§ 9–12.

<sup>197</sup> *Id.* §§ 4, 9–12.

<sup>198</sup> *Id.* § 5.

<sup>199</sup> *Id.* § 14.

From railroads to broadband and from toy magnets to financial derivatives, regulation by independent agencies is now a pervasive feature of the US economy. Yet many independent agencies are not required to systematically assess the economic effects of regulations before making regulatory decisions. This article demonstrates why regulatory impact analysis is necessary and explains how independent agencies can build the capacity to conduct objective analysis to inform decisions.