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Regulatory Insight

Regulatory Impact Analysis for Financial Regulations

Three principles to guide economic analysis of financial regulations.

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Abstract

Financial regulators in the United States have come under increased pressure to improve the economic analysis that informs their regulatory decisions. Economic theory and empirical analysis both suggest that economic analysis of financial regulations should be no more difficult than economic analysis of other types of regulations. Financial regulatory agencies can produce useful economic analysis to inform regulatory decisions if they keep three principles in mind: (1) Focus on regulatory impact analysis (RIA), not just benefit-cost analysis (BCA); (2) The analysis is not the decision; and (3) Build institutional capacity to support objective analysis.

Introduction

During the past decade, financial regulators in the United States have come under increased pressure from the courts and Congress to conduct benefit-cost analysis before they promulgate regulations.¹ The decade has also seen a lively academic debate over precisely what kind of benefit-cost analysis it is reasonable to expect regulatory agencies to produce.²

This insight 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.

¹ 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 (2017).

² See, e.g., Id.; John C. Coates IV., Cost-Benefit Analysis of Financial Regulations: Case Studies and Implications, 124 YALE LAW J. 882 (2015); Jeffrey N. Gordon, The Empty Call for Benefit-Cost Analysis in Financial Regulation, 43 J. LEGAL STUD. S351 (2014); John H. Cochrane, Challenges for Cost-Benefit Analysis of Financial Regulation, 43 J. LEGAL STUD. S63 (2014); Eric A. Posner & E. Glen Weyl, Benefit-Cost Paradigms in

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.³ Empirical research suggests that economic analysis of financial regulations is no more or less difficult than economic analysis of economic, environment, health, safety, security, or healthcare regulations. For example, a systematic assessment of the quality of regulatory impact analyses (RIAs) for economically significant financial regulations proposed by executive branch agencies between 2008 and 2011 found that the quality of analysis accompanying financial regulations was comparable to the average quality of analysis for other types of regulations.⁴ An econometric analysis of those data that controlled for other factors that might affect the quality of analysis found that the quality of analysis for financial regulations was statistically indistinguishable from the quality of analysis for economic regulations.⁵

Independent financial regulators that are not required to produce RIAs have received substantial criticism for the quality of their economic regulatory analysis. However, the Securities and Exchange Commission's (SEC's) experience demonstrates that independent financial regulators can substantially improve the quality of their economic analysis if they follow analytical guidelines similar to those employed by agencies that produce RIAs and make managerial changes to support high-quality analysis. After the SEC lost a series of significant cases in the D.C. Circuit due to insufficient economic analysis, ⁷ the SEC issued new guidance ⁸ on economic analysis of regulations in 2012, more than doubled the number of PhD financial economists, and made other managerial changes intended to involve economists more extensively in regulatory development. ⁹

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); Cass Sunstein, Financial Regulation and Cost-Benefit Analysis, 124 Yale Law J. F. (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 (2013).

³ Posner & Weyl (2014), Id. at S30; Posner & Weyl (2015), Id. at 70; Paul Rose & Walker, Id. at 17-19.

⁴ 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 463, 472-74 (2016).

⁵ Jerry Ellig, *Evaluating the Quality and Use of Regulatory Impact Analysis: The Mercatus Center's Regulatory Report Card*, 2008-2013 80, Working Paper, Mercatus Center at George Mason University (July 2016).

⁶ 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); Revesz, supra note 1; Posner & Weyl (2004), supra note 2, at S1, S30; Rose & Walker, supra note 2.

⁷ 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).

⁸ 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).

⁹ Jerry Ellig, *Agency Economists*, Final Report Prepared for Consideration of the Administrative Conference of the United States 18-20 (September 3, 2019), https://www.acus.gov/report/final-report-agency-economists.

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. Deveral law review articles have identified improvements in SEC economic analysis for individual rules, and a recent econometric study finds that the quality of SEC economic analysis improved significantly after the 2012 guidance. 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. Thus, the available evidence seems most consistent with Eric Posner and Glen Weyl's contention that "CBA [cost-benefit analysis] is at least as well suited to financial regulation as to other forms of regulation."

Financial regulatory agencies can produce useful economic analysis to inform regulatory decisions if they keep three principles in mind:

- Focus on RIA, not just benefit-cost analysis (BCA).
- The analysis is not the decision.
- Build institutional capacity to support objective analysis.

RIA, not just BCA

The framework for benefit-cost analysis most commonly employed by federal agencies is based on the analytical principles and requirements articulated in President Clinton's Executive Order 12,866¹⁴ (which has been reaffirmed by every president since) and OMB Circular A-4. 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 alternatives. These steps are, essentially, the application of rational

¹⁰ Securities and Exchange Commission, Office of Inspector General, *Use of the Current Guidance on Economic Analyses in SEC Rulemakings* ii (2013).

Ellig & Peirce, supra note 6, at 431-35; Revesz, supra note 1, at 570; 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); 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).

¹² Jerry Ellig, *Improvements in SEC Economic Analysis After* Business Roundtable: *A Structured Assessment*, 19 FL. ST. UNIV. BUS. REV. 51 (Spring 2020).

¹³ Posner and Weyl (2015), *supra* note 2, at 262.

¹⁴ Exec. Order No. 12866, 58 Fed. Reg. 51,735 (Oct. 4, 1993).

¹⁵ U.S. Office of Management and Budget, CIRCULAR A-4, REGULATORY ANALYSIS (2003). (Hereinafter "Circular A-4")

policy analysis to regulation. ¹⁶ "[R]egulatory analysis is nothing more than sound strategic planning and performance management applied to regulation." ¹⁷

The most common and accurate term for this type of analysis is "regulatory impact analysis," because a full RIA involves more than just estimation of benefits and costs of a regulation. 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. ¹⁹ The analysis should assess the benefits and costs of the regulation and of alternatives, so decision-makers can compare the consequences of alternatives. An RIA can include analyses other than benefit-cost analysis, such as cost-effectiveness analysis (which is especially helpful if benefits cannot be quantified) and distributional analysis (which assesses effects on sub-populations of particular interest to decision-makers, such as low-income or minority communities, rural communities, or small financial institutions).

Circular A-4 does not explicitly address financial regulation and generally draws its examples from health, safety, and environmental regulation. This reflects the fact that most of the health, safety, and environmental regulatory agencies are subject to Executive Order 12,866, and OMB wrote the guidance after these agencies had spent 20 or more years developing techniques for economic analysis of their regulations. However, Circular A-4 discusses numerous concepts that are critical for evidence-based analysis of banking and financial regulation, such as market power, ²⁰ inadequate or asymmetric information, ²¹ externalities, ²² other social purposes (such as a congressional desire to aid specific groups); ²³ diverse alternative regulatory approaches; ²⁴ and the distinction between benefits, costs, and transfers. ²⁵ 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. ²⁶ It is reasonable to expect that more detailed guidance for economic analysis of

¹⁶ Thomas O. McGarity, Reinventing Rationality: The Role of Regulatory Analysis in the Federal Bureaucracy 112 (1991).

¹⁷ Jerry Ellig & Jerry Brito, *Toward a More Perfect Union: Regulatory Analysis and Performance Management*, 8 FL. STATE UNIV. BUS. REV. 16 (2009).

¹⁸ This term of art appears nowhere in Executive Order 12866. It originated in President Reagan's Exec. Order 12291, 46 Fed. Reg. 13,193 (Feb. 17, 1981), § 3. The name stuck.

¹⁹ Exec. Order12,866, §1(b)(1).

²⁰ Circular A-4 at 4-5.

²¹ Id. at 5.

²² Id. at 4.

²³ Id. at 5.

Options most relevant to 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.

²⁵ Id. at 38.

²⁶ Id. at 6-7.

financial regulations, together with examples, will emerge as independent financial regulators gain greater experience and further develop their analytical techniques.²⁷

Why problem analysis comes first

The analysis should include an evidence-based assessment of the existence, extent, and cause of the problem the regulation seeks to address. An accurate problem analysis helps the regulator determine whether regulation is necessary and, if so, what type of regulation would best address the problem.

Financial regulations address two distinct types of problems, and financial regulators need to know which kind of problem they are addressing in a specific case in order to devise an effective remedy. Some regulations seek to prevent large-scale financial crises; they control behavior by financial firms, investors, or other customers that could have spillover effects on the broader financial system and economy. Others are consumer protection regulations intended to combat fraud, deception, information asymmetry, unfairness, or other harms that primarily affect the investors or customers who use financial markets or services.

The analysis should include evidence demonstrating that the problem is significant and widespread. In other words, the evidence should be systematic and generalizable, not just anecdotes about the behavior of a few bad actors. ²⁸ For example, in 2008 the Department of Housing and Urban Development (HUD) initiated a rulemaking to revise the mandatory disclosures about closing costs that mortgage lenders must provide to borrowers. ²⁹ The rationale for revision was based in part on a Federal Trade Commission (FTC) study which showed that substantial percentages of consumers could not understand basic facts -- such as the interest rate, the total up-front charges, or which of two loans was less expensive – based on the then-current required disclosures. ³⁰ Several empirical studies suggested that consumer misunderstanding led to higher closing costs. ³¹ Field-testing of

²⁷ Whether that guidance will emerge from individual agencies, OMB, or a coordinating entity such as the Financial Stability Oversight Council is, of course, an open question

²⁸ Timothy J. Muris, *Rules Without Reason* 20-26 REGULATION (1982).

²⁹ HUD was required to produce an RIA for this regulation under Executive Order 12866; the Dodd-Frank Act transferred regulatory authority over mortgage disclosures to the Consumer Financial Protection Bureau (CFPB). See "CFPB Consumer Laws and Regulations: RESPA," https://files.consumerfinance.gov/f/201503 cfpb regulation-x-real-estate-settlement-procedures-act.pdf.

³⁰ James M. Lacko and Janis K. Pappalardo, *Improving Consumer Mortgages Disclosures -- An Empirical Assessment of Current and Prototype Disclosure Forms*, Staff Report, Federal Trade Commission, Bureau of Economics, Washington DC (2007).

Susan E. Woodward, A Study of Closing Costs for FHA Mortgages, Urban Institute for U.S. Department of Housing and Urban Development, Office of Policy Development and Research, Washington, DC (2008); Signe-Mary McKernan, Doug Wissoker, and William Margrabe, Descriptive Analysis of FHA Loan Closing Costs, Urban Institute for U.S. Department of Housing and Urban Development, Washington DC (2007).

alternative disclosure formats by both HUD and the FTC revealed that revised disclosures could significantly improve consumer understanding.³²

The Consumer Financial Protection Bureau (CFPB) provides a more recent example of the importance of problem analysis. The preambles to the CFPB's 2017 and 2020 rules on payday, vehicle title, and high-cost installment loans devote a substantial amount of space to discussing evidence of whether these lenders cause or are likely to cause substantial consumer injury that borrowers cannot avoid if the lender makes a loan without assessing whether the individual borrower can pay back the loan.³³ This problem assessment is in effect required by language of the Dodd-Frank Act's standard for determining whether a business practice is unfair.³⁴

Choosing the right baseline

Several financial regulators have grappled with the question of whether to use a pre- or post-statutory baseline when analyzing regulations that are required by statute.³⁵ 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 agency actually has discretion to make.

The fact that a pre-statutory baseline could require assessment of the statute is a feature, not a bug. The information in the RIA is important not just for decision-makers in the regulatory agency, but also 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.³⁶ Therefore, an analysis by an expert regulatory agency may be the only opportunity for systematic economic analysis of the effects of rules mandated by a statute. Although an agency cannot refuse to implement a statute, Congress can re-examine major rules under the Congressional Review Act and can re-examine any rule when it conducts oversight hearings,

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³² Lacko and Pappalardo, supra note 30, at 70-80; HUD, Office of the Assistant Secretary for Housing, Real Estate Settlement Procedures Act (RESPA): Simplification and Improvement of the Process of Obtaining Home Mortgages and Reducing Consumer Costs, Regulatory Impact Analysis (March 14, 2008). For a brief summary and evaluation of HUD's analysis, see Ellig and Soliman, supra note 4, at. 474-85.

Bureau of Consumer Financial Protection, "Payday, Vehicle Title, and Certain High-Cost Installment Loans: Final Rule" (2020, Docket No. CFPB-2019-006, https://files.consumerfinance.gov/f/documents/cfpb_payday_final-rule-2020-revocation.pdf; Bureau of Consumer Financial Protection, "Payday, Vehicle Title, and Certain High-Cost Installment Loans: Final Rule," 82 FR 54,472 (2017).

³⁴ Bureau of Consumer Financial Protection (2020) Id. at 25.

³⁵ See, e.g., Federal Deposit Insurance Corporation, "Request for Information on a Framework for Analyzing the Effects of FDIC Regulatory Actions," 84 FED. REG. 65,810 (2019); Ellig & Pierce, *supra* note 6, at 372 (discussing whether the SEC employs a pre-statutory or post-statutory baseline in its economic analysis).

³⁶ Jerry Ellig and Michael Horney, *Statutory Delegation, Agency Authority, and the Asymmetry of Impact Analysis*, 7 THE THEORY AND PRACT. OF LEGIS. 228 (2019).

reauthorization hearings, or considers amending a statute. 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 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.³⁷

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. For example, a recent study reveals that 49 percent of economically significant, prescriptive regulations proposed by executive branch agencies between 2008 and 2013 were required by statute. 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. 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 agency 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.

³⁷ Circular A-4 at 17.

³⁸ 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.

³⁹ Ellig & Horney, *supra* note 36, at 235.

Benefits, Costs, and Transfers

Partial equilibrium analysis

When the primary effects of a regulation fall on financial firms and their customers (or investors), most of the major effects can be identified by assessing the impacts of the regulation and its alternatives on the price, quantity, and quality of financial services in the markets subject to regulation. ⁴⁰ In economists' jargon, a partial equilibrium analysis that determines how the regulation and alternatives affect cost and demand curves may be sufficient. For example, a regulation that curbs market power can expand the value of output produced; this increase in value would be a primary benefit of the regulation. Alternatively, a regulation may reduce output by increasing costs; the decrease in the value of output would be a primary cost of the regulation. The analysis may also need to account for how the regulation may affect innovation – factors that shift costs or customer preferences over time.

Dodd-Frank's language defining an unfair business practice again provides a useful illustration. The CFPB cannot declare a practice to be unfair unless the practice creates a substantial injury to consumers that consumers cannot reasonably avoid, and the practice does not create any benefits to consumers or competition that outweigh the injury. This formulation essentially creates a benefit-cost standard for determining whether a practice is unfair, although the primary focus is on benefits and costs to consumers rather than benefits and costs to all of society. Nevertheless, the standard comes closer to weighing social benefits and costs than would a standard that merely compared harms to consumers with the industry's compliance costs. Focusing solely on compliance costs would ignore the foregone benefits to consumers or competition that might outweigh the consumer injury.

The special case of systemic risk

Financial regulations that are intended to prevent a systemic financial crisis essentially involve externalities: benefits or costs not borne directly by financial firms or their customers. Estimating the benefits of such regulations requires an estimate of the cost of a financial crisis and the extent to which the regulation would reduce the risk of a financial crisis. This is undoubtedly a daunting task, but it is perhaps no more daunting than assessing the cost and risk of other high-impact events, such as a major terrorist attack, the social cost of carbon, or the cost of the COVID-19 pandemic. There is currently no widely-accepted default figure or range of figures for the cost of a major

⁴⁰ I define "quality" here very broadly, so that, for example the probability of being deceived is one aspect of quality.

⁴¹ 12 U.S.C. 5531(c)(1).

⁴² The language is similar to the FTC Act's unfairness provisions and the FTC's Unfairness Policy Statement. CFPB (2020), *supra* note 33, at 25. For an explanation of the benefit-cost logic underlying the FTC's Unfairness Policy Statement, see J. Howard Beales, III, *Brightening the Lines: The Use of Policy Statements at the Federal Trade Commission*, 72 ANTITR. L. J. 1063-67 (2005).

financial crisis to the U.S. economy. Two noted scholars suggest that \$1-2 trillion in lost gross domestic product would be supported by existing research on the costs of economic fluctuations. ⁴³ A collaborative, interagency effort to establish a reasonable range of estimates could help make benefit-cost analyses of financial-crisis-related regulations more tractable. ⁴⁴

Economics is not an exact science, and where there is uncertainty about the direction or size of a regulation's effects, the analysis should acknowledge the uncertainty, explain the evidence supporting the various estimates, and conduct a sensitivity analysis to show how the results vary when input values vary. When there are uncertainties, it is good for the analysis to show that a range of outcomes is possible. It is even better if the analyst can quantify the likelihood of various outcomes. OMB guidance even requires agencies to conduct a formal quantitative analysis of uncertainties for regulatory impact analyses that accompany regulations with \$1 billion or more in annual benefits or costs.

In some cases, uncertainties may be large enough that the decision might change depending on which uncertain outcome occurs. For example, the upper bound of the possible costs could exceed the lower bound of the possible benefits, even if benefits exceed costs under other scenarios. This kind of uncertainty is an important factor for decision-makers to know about, and part of the analyst's job is to make decision-makers aware of the relevant uncertainties. Decision-makers, not analysts, are responsible for determining how much uncertainty about a regulation's effects they are willing to tolerate.

Benefits and costs vs. transfers

Financial regulations often create transfers, in addition to benefits and costs. As Circular A-4 notes, the analysis should avoid counting transfers as benefits or costs. HUD's RIA accompanying its mortgage disclosure regulation provides a clear example. The RIA estimated that improved disclosures would save borrowers approximately \$8.35 billion annually in closing costs. It correctly identified these cost savings as a transfer from loan originators and service providers to borrowers, not a social benefit. The social benefit of the regulation is the expansion in output projected to occur due to reduced closing costs. HUD estimated that savings from the regulation would lead 100,000-400,000 households to become homeowners, along with 500,000-3 million additional refinancings.⁴⁵

The Analysis is Not the Decision

Executive orders and laws requiring economic analysis of regulations reflect a bipartisan consensus that the analysis should inform, but not dictate, regulatory decisions. The purpose of the

⁴³ Eric Posner and E. Glen Weyl, Benefit-Cost Analysis for Financial Regulation, 103 AM. Ec. Rev. 2 (2013).

⁴⁴ Revesz, *supra* note 1, at 575-83.

⁴⁵ HUD, *supra* note 32, at 3-98, 3-103, 3-121 – 3-124.

analysis is to ensure that regulators base their decisions on knowledge of the likely consequences of regulations, "rather than on dogmas, intuitions, hunches, or interest group pressures." ⁴⁶

Regulatory impact analysis is a method for identifying and comparing the expected effects of alternative regulatory proposals. A good analysis is evidence-based, positive economics – the analysts' most honest effort at ascertaining the likely consequences of alternative actions. There may be uncertainties and judgment calls about input values, but these should be discussed transparently, with a range of possible outcomes presented when there are significant uncertainties.

Production of this information is separate from the question of how decision-makers should use the information in decisions. The normative choice of a decision rule is a choice for the decisionmakers, not the economists or other analysts.

Decision-makers might wish to adopt the most economically efficient alternative – the one with the largest difference between benefits and costs ("maximize net benefits," in economics jargon). Or they might merely wish to ensure that the regulation they adopt has benefits that exceed its costs, even if it is not the most efficient approach. Or they might be focused more on equity or distribution or other public interest objectives different from economic efficiency. ⁴⁷ Statutes often require regulators to make decisions based on criteria other than economic efficiency, or trade off some efficiency to achieve other goals. Regardless of the decision criteria, a good RIA assists decision-makers and stakeholders by clarifying the tradeoffs that different courses of action entail. If an objective analysis shows that the costs of a proposed regulation exceed the benefits, then the regulators ought to be able to explain the other reasons that motivate them to adopt the regulation – such as a statutory requirement, distributional concerns, or other public interest objectives.

The goal is to make consequences and tradeoffs clearer to decision-makers – not to substitute the analyst's value judgments for those of the decision-makers. As one prominent textbook on benefit-cost analysis notes, "Decisions are made by decision makers, and benefit-cost analysis is properly regarded as an aid to decision making and not the decision itself." ⁴⁸

Several examples from executive branch agencies that have produced RIAs for decades illustrate how RIAs can provide valuable information even if the regulators pursue goals other than maximizing net benefits.

⁴⁶ Sunstein, *supra* note 2, at 263.

⁴⁷ For a discussion of the different ways decision-makers might use the results of regulatory impact analysis in decisions, see John Graham, *Saving Lives Through Administrative Law and Economics*, 157 U. PA. L. REV. 432-38 (2008).

⁴⁸ Richard O. Zerbe and Dwight D. Dively, *Benefit-Cost Analysis in Theory and Practice* 2 (1994).

Example 1: No alternative has positive net benefits

The Environmental Protection Agency (EPA) adopted a rule under the Clean Water Act in 2009 to limit effluent from construction and development sites. The RIA indicated that none of the options under consideration had monetized benefits that exceeded monetized costs. Nevertheless, the analysis furnished critical information to inform EPA's decisions.

For toxic and nonconventional pollutants, the Clean Water Act mandates that the EPA require firms to adopt the "Best Available Technology" that is technologically and economically achievable. The EPA assesses economic achievability by evaluating the costs in relation to industry revenues to determine whether the technology would create a significant financial hardship for the industry or a significant number of firms.

The net benefits of the three options were -\$114 million, -\$1.6 billion, and -\$3.3 billion. EPA chose the option with -\$1.6 billion in net benefits as the best available technology because the estimated compliance cost would exceed one percent of annual revenues for just 0.9 percent of firms likely to be covered by the regulation, and estimated compliance costs would exceed three percent of revenues for just 0.1 percent of firms. EPA rejected the more expensive option because the additional cost (\$1.9 billion annually) was very large compared to the value of the additional benefits (\$137 million).

Example 2: Distributional factors tip the balance

In 2012, the Department of Agriculture's Food Safety and Inspection Service proposed to alter inspection procedures at poultry processing plants that would simultaneously allow faster line speeds and reduce food-borne illnesses. All processing plants would have been required to adopt additional procedures to prevent contamination by pathogens or fecal matter. In addition, firms had the option of adopting a new inspection system that would require the firm's workers to sort carcasses and remove those unlikely to pass inspection before they are presented to the inspector. The regulatory impact analysis considered five alternative approaches. The alternative with the greatest difference between benefits and costs was rejected, because small businesses did not have sufficient volume to offset the annualized cost of approximately \$600,000 it would have imposed on them. Instead, the agency proposed to adopt an alternative that had slightly lower net benefits but imposed lower burdens on small businesses by making the new inspection system voluntary for them.⁵⁰

⁴⁹ Environmental Protection Agency, "Effluent Limitations Guidelines and Standards for the Construction and Development Point Source Category; Proposed Rule," 73 FED. REG. 72,562, 72,578-72,580 (2008).

⁵⁰ Department of Agriculture, Food Safety and Inspection Service, "Modernization of Poultry Slaughter Inspection: Proposed Rule," 77 FED. REG. (Jan. 27, 2012), Table 17.

Example 3: Statutory requirement has costs exceeding benefits

In 2009, the Federal Railroad Administration (FRA) adopted a regulation requiring railroads to implement positive train control systems on certain types of routes. Positive train control is an automatic system that stops trains to avoid accidents caused by human error. Positive train control regulations were mandated in the Rail Safety Improvement Act of 2008 (RSIA08), enacted in the wake of several high-profile train wrecks.

FRA's RIA estimated that the cost of positive train control would be 15 times as large as the safety benefits. This result is consistent with prior studies by the FRA and the FRA's Rail Safety Advisory Committee, which found that the safety benefits of positive train control are small compared to the costs. Positive train control produces benefits exceeding costs only if one assumes that it produces significant business benefits for railroads – an assumption the railroads disputed.⁵¹

FRA adopted the positive train control mandate because it was required to do so by statute. The RIA notes, "The costs would make the rule significant, and the costs would far exceed the benefits, but FRA is constrained by the requirements of RSIA08, which does not give FRA any latitude to avoid promulgating the proposed rule, or one which achieves the same ends." Nevertheless, FRA did not feel compelled to produce an analysis "proving" that the safety benefits exceeded the costs.

Build Institutional Capacity to Support Objective Analysis

Analysts responsible for producing RIAs frequently express concern that their agencies expect them to create an analysis that supports decisions that have already been made, rather than an objective analysis that informs choices. For this reason, it is critical that financial regulatory agencies not just understand how to conduct a thorough analysis, but also that they consciously build their institutional capacity to support objective analysis. Building institutional capacity does not merely mean hiring more economists. More importantly, it means aligning the agency's organizational structure, procedures, practices, and culture to ensure that analysts can conduct their analysis before regulatory decisions are made, that they have the freedom to produce objective analysis, and that they have the opportunity to communicate the results of that analysis to decision-makers.

⁵¹ Frank D. Roskind, Department of Transportation Federal Railroad Administration, 49 CFR Parts 229, 234, 235, and 236 [Docket No. FRA-2006-0132, Notice No. 1] RIN 2130-AC03: Positive Train Control Systems: Regulatory Impact Analysis, Federal Railroad Administration (December 8, 2009).

⁵² Id. at ii.

⁵³ Ellig, supra note 9, at 34-35; Stuart Shapiro, Structure and Process: Examining the Interaction Between Bureaucratic Organization and Analytical Requirements, 34 Rev. Pol'y Res. 682-99 (2017); Richard Williams, The Influence of Regulatory Economists in Federal Health and Safety Agencies, Working Paper, Mercatus Ctr. at George Mason Univ. (2008).

The following steps can help accomplish this:

- Ensure that economists who produce RIAs report to, and are managed and evaluated by, other economists, not the regulation-writers whose decisions they are evaluating. The simplest way to achieve this is to place economists (and other complementary analysts) in a separate division or bureau headed by a chief economist or similar official. ⁵⁴ If economists are located in a bureau or program office headed by other staff who write regulations, placing a senior economist over them as their manager can provide a degree of independence. ⁵⁵
- Ensure that economists directly communicate to decision-makers the results of the RIA
 and any recommendations based on that analysis. Many agencies accomplish this by giving
 the chief economist or similar official the right to review all regulatory actions and
 accompanying economic analysis and provide advice directly to the agency head or
 commissioners.⁵⁶
- Publicly commit to the topics the economic analysis of a regulation should cover.⁵⁷ The SEC's guidance memo on economic analysis is a good example. It lists five major topics an economic analysis should cover justification for the rule, baseline, alternatives, benefits, and costs⁵⁸ -- which correspond to major topics listed in OMB Circular A-4.
- Involve economists early in the regulatory development process. This helps promote communication between the analysts and the regulation-writers to ensure that the analysis is relevant to decisions. ⁵⁹ The SEC's economic analysis guidance again provides a good example. It 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. ⁶⁰
- Utilize pre-proposal methods of gathering data useful for an RIA, such as advance consultation with stakeholders and advance notices of proposed rulemaking.⁶¹ Empirical research finds that these practices are associated with more thorough RIAs.⁶² Scholars suggest that the most effective form of preproposal notice would include preliminary

⁵⁴ Ellig, *supra* note 9, at 49.

⁵⁵ Id. at 47.

⁵⁶ Id. at 46-47.

⁵⁷ Id. at 45.

⁵⁸ SEC, supra note 8.

⁵⁹ Ellig, *supra* note 9, *at* 42-44; 47.

⁶⁰ SEC, supra note 8.

⁶¹ Jerry Ellig, *Why and How Independent Agencies Should Conduct Regulatory Impact Analysis*, 28 CORNELL J. LAW & PUB. POL'Y 1, 30 (2018).

⁶² Jerry Ellig and Rosemarie Fike, *Regulatory Process, Regulatory Reform, and the Quality of Regulatory Impact Analysis*, 7 J. BEN.-COST ANAL. 523, 537, 548-49 (2016).

- analysis of a wide variety of alternatives the agency is considering.⁶³ This would allow stakeholders to offer initial responses and furnish data or studies that could assist the agency with its economic analysis.
- Arrange for assistance from OIRA. Empirical evidence shows that the analytical requirements in executive orders, coupled with OIRA review, have improved the quality of regulatory agencies' analysis. ⁶⁴ Most financial regulators are considered independent agencies. To date, executive orders on regulatory analysis and review have not required independent agencies to produce RIAs or submit their regulations and the accompanying economic analysis to OIRA for review. But there is no reason an independent agency could not negotiate an agreement with OIRA for technical assistance, or even for regulatory review. The CFTC has had a memorandum of understanding for OIRA to furnish technical assistance since 2012. ⁶⁵ A negotiated agreement could be tailored to the individual agency's particular circumstances. ⁶⁶

⁶³ Christopher Carrigan & Stuart Shapiro, What's Wrong with the Back of the Envelope: A Call for Simple (and Timely) Benefit-Cost Analysis, 11 REG. & Gov. 203 (2016).

⁶⁴ See the sources cited in Ellig, *supra* note 61, at 31-32.

⁶⁵ 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.

⁶⁶ Bridget Dooling, *Bespoke Regulatory Review*, __ OH. ST. L. J. __ (forthcoming), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3550234.