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REGULATORY BENEFITS: EXAMINING AGENCY JUSTIFICATION FOR NEW REGULATIONS

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Abstract

This study attempts to shed some light on whether the benefits claimed by the federal agencies are likely to be achieved. In contrast to other validation studies, the study focuses on the agencies' benefit claims rather than the actually measured benefits. Since agencies justify their regulatory decisions based on expected benefits, examining the quality of these claims is important. To do that, the study focuses on two aspects of the agencies' regulatory impact analysis: (1) whether the analysis demonstrates the existence of a systemic failure, and (2) whether the analysis provides a program theory that explains how the regulation would lead to beneficial outcomes. The study uses the Mercatus Center's Regulatory Report Card to construct its dataset.

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Regulatory benefits, cost benefit analysis, regulatory impact analysis, need for regulation, systemic failure, program theory, Regulatory Report Card

Regulatory Benefits:

Examining Agency Justification for New Regulations

Many debates over regulation focus mainly on costs. Critics argue that, among other things, the weight of regulations depresses economic activity,¹ reduces productivity,² and discourages new businesses formation.³ Additionally, regulations confer special privileges on incumbents⁴ and disproportionately impact smaller businesses.⁵ All this results in diminished prosperity and foregone opportunities for the public. Numerous attempts to quantify the regulatory burden resulted in estimates ranging from hundreds of billions⁶ to well over a trillion dollars.⁷

In contrast, regulation advocates claim that many regulatory burden estimates exaggerate the costs.⁸ More importantly, they point out that regulation critics focus exclusively on the costs

¹ Norman V. Loayza, Ana Maria Oviedo, and Luis Servén, *The Impact of Regulation on Growth and Informality - Cross-Country Evidence* (Washington, DC: World Bank Publications, 2005); Richard Williams, *The Impact of Regulation on Investment and the U.S. Economy*, Research Summary (Mercatus Center, George Mason University, January 11, 2011).

² Stefan Ambec, et al., *The Porter Hypothesis at 20: Can Environmental Regulation Enhance Innovation and Competitiveness?*, Discussion Paper (Resources for the Future, January 18, 2011), <http://www.rff.org/rff/documents/rff-dp-11-01.pdf>.

³ Thomas J. Dean, Robert L. Brown, and Victor Stango, "Environmental Regulation as a Barrier to the Formation of Small Manufacturing Establishments: A Longitudinal Examination," *Journal of Environmental Economics and Management* 40, no. 1 (July 2000): 56–75; Simeon Djankov, et al., "The Regulation of Entry," *The Quarterly Journal of Economics* 117, no. 1 (February 1, 2002): 1–37; Leora Klapper, Luc Laeven, and Raghuram Rajan, "Entry Regulation as a Barrier to Entrepreneurship," *Journal of Financial Economics* 82, no. 3 (December 2006): 591–629.

⁴ Bruce Yandle, "Bootleggers and Baptists in Retrospect," *Regulation* 22, no. 3 (1999): 5–7; Ernesto Dal Bó, "Regulatory Capture: A Review," *Oxford Review of Economic Policy* 22, no. 2 (June 20, 2006): 203–225.

⁵ Dean, Brown, and Stango, "Environmental Regulation as a Barrier to the Formation of Small Manufacturing Establishments"; Anthony Heyes, "Is Environmental Regulation Bad for Competition? A Survey," *Journal of Regulatory Economics* 36, no. 1 (2009): 1–28.

⁶ Office of Management and Budget, *Draft 2012 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* (Washington, DC: Office of Management and Budget, 2012), http://www.whitehouse.gov/sites/default/files/omb/oira/draft_2012_cost_benefit_report.pdf.

⁷ Nicole V. Crain and W. Mark Crain, *The Impact of Regulatory Costs on Small Firms* (Washington, DC: Small Business Administration, September 2010), <http://archive.sba.gov/advo/research/rs371tot.pdf>.

⁸ Frank Ackerman, "The Unbearable Lightness of Regulatory Costs," *Fordham Urban Law Journal* 33, no. 4 (2006): 1071–1096; Lisa Heinzerling, "Regulatory Costs of Mythic Proportions," *The Yale Law Journal* 107, no. 7 (1998): 1981–2070.

and overlook the benefits of regulation.⁹ These benefits can be substantial. For example, the Environmental Protection Agency (EPA) estimated that Clean Air Act regulations generated \$22 trillion in net benefits during the period from 1970 to 1990.¹⁰ The Office of Management and Budget (OMB) summed up agencies' benefit estimates and found that aggregate benefits of major regulations issued in 2001–2011 ranged between \$141 billion and \$700 billion,¹¹ while aggregate costs within the same period ranged between \$43 billion and \$67 billion.¹² While conceding the critics' point that regulations may be costly, advocates claim that regulations' benefits justify their costs.

The OMB report, however, has major shortcomings. It only includes regulations with monetized cost and benefit estimates. Since only a fraction of regulations monetize benefits, the OMB report leaves out the majority of significant regulations. In addition, the estimate's validity is uncertain. The OMB report acknowledges that it depends on the federal agencies for its overall estimate, yet the analysis quality varies widely between agencies.¹³ The few studies that have examined the accuracy of agencies' cost and benefit estimates using retrospective analysis yielded mixed evidence.¹⁴ These studies suggested that agencies tended to overestimate both

⁹ Sidney Shapiro, Ruth Ruttenberg, and James Goodwin, *Saving Lives, Preserving the Environment, Growing the Economy: The Truth About Regulation*, White Paper (Center for Progressive Reform, July 2011), http://www.progressivereform.org/articles/RegBenefits_1109.pdf; Ruth Ruttenberg and Associates, Inc., *Not Too Costly, After All: An Examination of the Inflated Cost Estimates of Health, Safety and Environmental Protections*, Prepared for Public Citizen Foundation (Washington, DC: Public Citizen Foundation, February 2004), <http://www.citizen.org/documents/ACF187.pdf>.

¹⁰ Environmental Protection Agency, *The Benefits and Costs of the Clean Air Act, 1970 to 1990* (Washington, DC: Environmental Protection Agency, October 1997).

¹¹ Office of Management and Budget, *Draft 2012 Report to Congress*.

¹² *Ibid.*

¹³ *Ibid.*, 9–10.

¹⁴ Office of Management and Budget, *Validating Regulatory Analysis: 2005 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities* (Washington, DC: Office of Management and Budget, 2005), http://www.whitehouse.gov/sites/default/files/omb/inforeg/2005_cb/final_2005_cb_report.pdf; Winston Harrington, Richard D. Morgenstern, and Peter Nelson, "On the Accuracy of Regulatory Cost Estimates," *Journal of Policy Analysis and Management* 19, no. 2 (2000): 297–322; Winston Harrington, *Grading Estimates of the Benefits and*

benefits and costs. However, they disagreed on whether agencies were more likely to overestimate benefits than costs.

In this paper, I take a different approach. Using a dataset constructed from the Mercatus Center's Regulatory Report Card, I examine the likelihood that agencies realize the benefits they claim for regulations. To do that, I ask two questions:

1. Does a regulation address a systemic problem such as market or government failure?
2. Does a regulation explain how it would solve the problem?

The logic behind this exercise is straightforward. In their analysis, federal agencies have to clearly identify and demonstrate the existence of the problem they are trying to solve through regulation. Only significant problems that are unlikely to be solved without a government action warrant federal regulation. When agencies fail to demonstrate that the problem exists and is systemic, they are less likely to achieve the beneficial outcomes that they seek through regulation. Similarly, if agencies fail to explain how their regulation will fix the problem, the regulation may not deliver the intended results.

The goal of the paper is twofold. First, I attempt to shed some light on the validity of regulatory benefits claimed by the federal agencies. Second, using case studies, I point out the shortcomings in agencies' regulatory analysis practices when it comes to estimating benefits. In contrast to traditional validation studies, I do not check the accuracy of the agencies' estimates. Instead, I examine the logic of the regulatory analysis to determine whether the regulation will likely deliver the promised benefits. The advantage of this approach is that it is not limited to regulations with monetized benefits. Rather, it exposes the overall trends in the federal agencies' regulatory analysis practices.

Regulatory Report Card

Mercatus Center scholars Jerry Ellig and Patrick McLaughlin developed the Regulatory Report Card as a tool to measure both the quality and use of regulatory analysis in federal agencies.¹⁵

The authors developed their qualitative framework guided by the requirements and regulatory philosophy outlined in President Clinton's Executive Order 12866 and OMB's Circular A-4.¹⁶

The executive order and the accompanying OMB guidance lay out best regulatory practices, which are widely accepted by regulatory experts and enjoy bipartisan support.

Since 2008, the Report Card has evaluated economically significant regulations proposed by executive agencies. Executive Order 12866 defines economically significant regulations as regulations that “have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal government or communities.”¹⁷

The Report Card limits its evaluation to economically significant regulations since they are subject to more stringent oversight and analytical requirements. Specifically, Executive Order 12866 requires agencies to produce a Regulatory Impact Analysis (RIA) to accompany each economically significant regulation that quantifies benefits and costs to the greatest extent possible. In addition, the order requires the Office of Information and Regulatory Affairs (OIRA) to review the analysis for all significant regulations. It is the economic analysis contained in the RIAs that the Report Card evaluates.

¹⁵ Jerry Ellig and Patrick A. McLaughlin, “The Quality and Use of Regulatory Analysis in 2008,” *Risk Analysis* 32, no. 5 (2012): 855–880.

¹⁶ “Executive Order 12866: Regulatory Planning and Review,” *Federal Register* 58, no. 190 (October 4, 1993): 51735–51745; Office of Management and Budget, *Circular A-4: Regulatory Analysis* (Washington, DC: Office of Management and Budget, 2003), http://www.whitehouse.gov/sites/default/files/omb/assets/regulatory_matters_pdf/a-4.pdf.

¹⁷ “Executive Order 12866,” 51738.

The Report Card scores the quality of regulatory analysis based on 12 criteria grouped into three categories (see Appendix A for details):

1. Openness – how easily can a reasonably intelligent, interested citizen find the analysis, understand it, and verify the underlying assumptions and data?
2. Analysis – how well does the analysis define and measure the outcomes or benefits the regulation seeks to accomplish, define the systemic problem the regulation seeks to solve, identify and assess alternatives, and evaluate costs and benefits?
3. Use – how much did the analysis affect decisions in the proposed rule, and what provisions did the agency make for tracking the rule’s effectiveness in the future?

To ensure consistency, each regulation is scored by at least two trained experts. Individual scores are then combined through deliberation. While qualitative evaluation can be subjective and vary from one rater to the next, the Report Card authors designed the process to ensure high inter-rater reliability. Inter-rater reliability refers to the degree to which raters agree with each other’s subjective evaluations on a given subject. In the ex post test of inter-rater reliability, Ellig and McLaughlin found high level of consistency and agreement among the raters’ scores.¹⁸

For each criterion, the raters assign a score ranging from zero (no useful content) to five (comprehensive analysis with potential best practices, see Appendix B). Thus, a regulation can receive a maximum score of 60 points. The four questions within the *Analysis* category include several sub-questions to reflect the different aspects of regulatory analysis. Similar to the main criteria, the sub-questions are scored on a zero to five scale. The sub-question scores are averaged to produce the final score for the question.

¹⁸ For a detailed discussion of the scoring process and inter-rater reliability, see Ellig and McLaughlin, “The Quality and Use of Regulatory Analysis in 2008.”

Constructing the Indices

The study focuses on two aspects of the regulatory analysis: (1) whether the analysis demonstrates the need for regulation, and (2) whether the analysis demonstrates that the regulatory action will address the problem. Failure to produce a clear, empirically supported analysis on these questions increases the likelihood that agencies will fail to realize the beneficial outcomes they seek through regulation.

To be effective, a regulation must address a real systemic problem. Executive Order 12866 requires each regulatory agency to “identify the problem that it intends to address (including, where applicable, the failures of private markets or public institutions that warrant new agency action) as well as assess the significance of that problem.”¹⁹ This means that agencies have to present evidence that the regulation is indeed necessary: the problem is significant enough to warrant the federal government’s involvement and is not likely to be resolved on its own. As stated in the executive order, market and government failures generally justify a regulatory action.

Market failures refer to situations where markets do not yield efficient results. Common examples of market failures are public goods such as defense, externalities such as pollution, and information asymmetry, which is common to used car markets. In these cases, market participants may not have sufficient incentives to solve problems on their own. Consequently, these problems are likely to persist and may require government to intervene. In contrast, government failures refer to problems created by previous government actions. For example, government guarantees for home or business loans may reduce creditors’ incentives to exercise due diligence when making such loans.

¹⁹ “Executive Order 12866,” 51735.

A good regulatory analysis should present evidence demonstrating market or government failure. If agencies address problems that could be resolved or improved without regulation, they are likely to overstate a regulation's benefits, since at least a portion of benefits would be attributable to private actions. Agency analysis should also demonstrate that the problem is significant enough to warrant federal regulation.

In addition, a good regulatory analysis must demonstrate that the proposed regulatory action will lead to the intended beneficial outcomes. OMB Circular A-4 requires agencies to "explain how the actions required by the rule are linked to the expected benefits."²⁰ The analysis has to present a cohesive, empirically testable causality theory that explains how the proposed regulation is likely to achieve its stated goals, i.e., demonstrate the logical link between the agency's actions and the regulation's outcomes. The theory should be supported by empirical evidence. In other words, before expending substantial societal resources on a given problem, agencies have to be confident that their actions will solve it.

In order to evaluate agencies' analyses along these dimensions, this study constructs two *Benefits* indices. The *Systemic Problem* index assesses whether the analysis identifies and demonstrates the existence of a systemic problem. The *Program Theory* index evaluates whether the analysis presents an empirically supported causality theory explaining how the regulation will achieve the expected benefits. Both indices are constructed using the scores from the sub-questions in the Report Card's *Analysis* category (see Table 1).

²⁰ Office of Management and Budget, *Circular A-4*, 2.

Table 1. Benefit Indices

Benefits Index	Report Card Sub-Questions
<i>Systemic Problem</i>	6A) Does the analysis identify a market failure or other systemic problem? 6B) Does the analysis outline a coherent and testable theory that explains why the problem (associated with the outcome above) is systemic rather than anecdotal? 6C) Does the analysis present credible empirical support for the theory?
<i>Program Theory</i>	5C) Does the analysis provide a coherent and testable theory showing how the regulation will produce the desired outcomes? 5D) Does the analysis present credible empirical support for the theory?

The threshold that the study establishes for agency analysis is set deliberately low. The constructed indices are binary; they score the RIAs using a Pass/Fail grading scheme. An RIA fails on either index if it scores no more than one on each of the index’s sub-questions. In the Report Card’s grading system, an RIA scores zero if it provides no useful content on the issue; it scores one if it provides only a perfunctory statement with little explanation or documentation (see Appendix B). Thus, in order to fail under the constructed indices, an RIA has to contain virtually no analysis on the index’s dimension. An RIA that provides even minimal information would receive a passing grade.

The study sets the low threshold in order to account for the fact that sometimes agencies have to regulate even if solid evidence-based research on the subject is unavailable. The study’s goal is to highlight cases where agencies failed to provide any justification for their actions and not to penalize them for regulating in areas that are exceedingly complex. For that reason, an RIA fails the index only if it fails on each sub-question. An RIA that simply states what market or government failure it seeks to solve would pass the *Systemic Problem* index, even if it provides no theory or empirical evidence to support its claim. Similarly, an RIA that describes why the agency thinks its actions will solve the problem would pass the *Program Theory* index.

Results

Between 2008 and 2011, the Report Card has scored 134 economically significant regulations, which are included in the dataset.²¹ The list includes 94 prescriptive and 40 budget regulations.²² The Mercatus Center stopped scoring budget regulations in 2010.²³ Thus, the dataset includes budget regulations for 2008 and 2009 only. Budget regulations tended to have lower quality regulatory analysis. They scored an average of 20 points in 2008–2009 compared to an average score of 32 points for prescriptive regulations.²⁴ In addition, there is some evidence that OIRA tends to treat budget regulations differently.²⁵ Similarly, agencies proposing budget regulations focus mainly on their impact on the federal budget and not on their economic analysis.²⁶ This led the Mercatus Center to focus exclusively on prescriptive regulations.

The data in Table 2 show the number of regulations that fail on either the *Systemic Problem* or the *Program Theory* indices. The *Total* column shows the number of regulations that failed on either index. It is smaller than the sum of the two indices since some regulations failed on both. As the data show, 83 percent of budget regulations fail to show what their benefits are or how they plan to achieve them. The same is true for almost a third of prescriptive regulations. With budget regulations, agencies generally failed on both indices. In prescriptive regulations' case, agencies were three times more likely to fail to demonstrate the need for regulation than to fail to explain how their regulations would produce the beneficial outcomes.

²¹ Data from Mercatus Center's Regulatory Report Card website, available at <http://mercatus.org/reportcard>

²² In contrast to the traditional prescriptive regulations, budget regulations implement federal spending and revenue laws. A typical example of a budget regulation is a Department of Health and Human Services' regulation recalculating Medicare payment rates.

²³ Jerry Ellig, Patrick A. McLaughlin, and John F. Morrall, "Continuity, Change, and Priorities: The Quality and Use of Regulatory Analysis across US Administrations," *Regulation & Governance* (2012).

²⁴ *Ibid.*

²⁵ Patrick A. McLaughlin and Jerry Ellig, "Does OIRA Review Improve the Quality of Regulatory Impact Analysis? Evidence from the Final Year of the Bush II Administration," *Administrative Law Review* 63, no. Special Edition (2011): 179–202.

²⁶ Eric A Posner, "Transfer Regulations and Cost-Effectiveness Analysis," *Duke Law Journal* 53, no. 3 (2003): 1067–1111.

Table 2. Regulations Failing Benefits Indices

	Systemic Problem	Program Theory	Total
Prescriptive	23 / 94 (24%)	7 / 94 (7%)	28 / 94 (30%)
Budget	33 / 40 (83%)	25 / 40 (40%)	33 / 40 (83%)

Table 3 lists all the prescriptive regulations that failed on either index. Similar to the Report Card authors, this study focuses mainly on prescriptive regulations, since budget regulations are less likely to be driven by economic analysis. As the data in Table 3 indicate, the overall regulatory analysis quality ranges from well below average (14 points) to slightly above average (37 points). The average quality for the list is 29 points, which is still below the average for all prescriptive regulations within the time period (32 points).

In addition to the indices, Table 3 provides agency estimates for the rules' total costs and benefits. The table reports only monetized benefits and costs; otherwise it reports the estimates as not available. In the latter cases, the RIA may in fact measure and provide a qualitative description of benefits but not monetize them. While many rules have only qualitative benefits, their costs give some indication of the benefits' magnitude. Executive Order 12866 requires agencies to ensure that the rule's benefits justify its costs. Where agencies did not quantify benefits, they must have concluded that the benefits were large enough to justify the rule's substantial costs.

Table 3. Prescriptive Regulations Failing on Benefit Indices

Proposed Rule	RIN	Agency	Score	Systemic Problem	Program Theory	Benefits \$ mln	Costs \$ mln
Modifications to the HIPAA Privacy, Security, and Enforcement Rules	0991-AB57	HHS	14	Fail	Fail	N/A	166
State-Specific Inventoried Roadless Area Management: Colorado	0596-AC74	USDA	19	Fail		N/A	N/A
Renewable Fuels Program	2060-A081	EPA	21	Fail		(618) – 31,862	N/A
Maximum Operating Pressure for Gas Transmission Pipelines	2137-AE25	DOT	21		Fail	103	27
Application of the Fair Labor Standards Act to Domestic Service	1235-AA05	DOL	24	Fail		N/A	46
Employment Eligibility Verification	9000-AK91	FAR	24	Fail		N/A	669
Hazard Communications Standard	1218-AC20	DOL	24		Fail	851*	97*
HIPAA Electronic Transaction Standards	0938-AM50	HHS	25	Fail		3151	942
Mandatory Inspection of Catfish and Catfish Products	0583-AD36	USDA	25	Fail		N/A	10.6*
Positive Train Control	2130-AC03	DOT	26	Fail		931	13,849
NESHAP: Mercury Cell Chlor-Alkali Plants, Amendments	2060-AN99	EPA	27	Fail		22 – 43	13
Energy Conservation Standards for Fluorescent Lamps	1904-AA92	DOE	27		Fail	N/A	77 – 139
Basel II: Standardized Option	1557-AD07	TREAS	27		Fail	N/A	71
Refuge Alternatives for Underground Coal Mines	1219-AB58	DOL	28	Fail		N/A	43*
Seat Belts on Motorcoaches	2127-AK56	DOT	30	Fail		N/A	N/A
Motor Vehicle Safety Standards, Ejection Mitigation	2127-AK23	DOT	31	Fail		583	1,605 – 1,680

NSPS/Emission Guidelines for Sewage Sludge Incinerators	2060-AP90	EPA	31	Fail		130 – 320	92
Revising Underground Storage Tank Regulations	2050-AG46	EPA	32	Fail		330 – 770*	210*
Criteria and Standards for Cooling Water Intake Structures	2040-AE95	EPA	33	Fail		453	9,874
National Standards to Prevent, Detect, and Respond to Prison Rape	1105-AB34	DOJ	34	Fail	Fail	N/A	4,195
Energy Conservation for Commercial Freezers and Refrigerators	1904-AB59	DOE	34	Fail		234*	92*
Nondiscrimination by Public/Commercial Facilities	1190-AA44	DOJ	34	Fail		53,900	22,800
Greenhouse Gas Mandatory Reporting Rule	2060-AO79	EPA	34		Fail	N/A	127*
Federal Motor Vehicle Safety Standard, Rearview Mirrors	2127-AK43	DOT	35	Fail		778	1,861
Electronic On-Board Recorders and Hours of Service Supporting Documents	2126-AB20	DOT	35	Fail		2,699*	1,952*
Portland Cement NESHAP	2060-AO15	EPA	35	Fail		4,400 – 11,000	368
Nondiscrimination in State/Local Government Services	1190-AA46	DOJ	35	Fail		53,900	22,800
Hours of Service	2126-AB26	DOT	37	Fail		12,040	8,748

Note: Total benefits and costs are reported in millions at a 3 percent discount rate. RIAs with only annualized estimates are marked with an asterisk. Negative values are given in parenthesis.

Regulations failing on the *Benefits* indices originate from various departments. While the Environmental Protection Agency and the Department of Transportation account for a larger share of failing regulations, this may simply reflect the fact that they issued more prescriptive regulations in 2008–2011 than other agencies. In order to understand what the failing scores on either index signify, let’s examine a few RIAs in more detail.

Systemic Problem Index

When an RIA fails on the Systemic Problem index, it can be due to one of three reasons:

1. The problem the RIA addresses is not systemic
2. The problem does not require government action
3. The RIA addresses a systemic failure but fails to communicate this in the analysis

Scenario 1: No Evidence of a Problem

In the first scenario, an RIA fails when it points to a problem but provides little evidence that the problem exists. One example is HIPAA modification rule (RIN: 0991-AB57). Issued by the Department of Health and Human Services (HHS) in July 2010,²⁷ the HIPAA Modification rule was one of only two rules in Table 3 that failed on both indices. In addition, it had the poorest quality analysis, scoring only 14 points. The rule modified HIPAA requirements for privacy, security, and enforcement under the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009.

²⁷ Department of Health and Human Services, “Modifications to the HIPAA Privacy, Security, and Enforcement Rules under the Health Information Technology for Economic and Clinical Health Act,” *Federal Register* 75, no. 134 (July 14, 2010): 40868–40924.

The rule's requirements generally fell into three categories. In the first category, the rule imposed more stringent privacy and disclosure rules. For example, one provision required healthcare providers to procure an individual's authorization before selling personal health information to third parties or sending marketing communications. Another provision required healthcare providers to allow individuals to opt out of marketing and fundraising communications. The rule also required healthcare providers to inform individuals of their new privacy rights.

The second category included provisions that eased individuals' access to their health information. For example, healthcare providers would be required to make personal health information available to individuals in an electronic format. They would also be able to release proof of a child's immunization without parents' written authorization, although at least an oral authorization would still be required. In the third category, the provisions were mostly deregulatory, making it easier for scientists to receive disclosures from individuals or permitting access to personal health information 50 years after an individual's death.

Despite its good intentions, the rule presented no evidence that the regulatory action was necessary. The agency simply claimed to implement the statutory requirements contained in the HITECH Act. Thus, the RIA presented no evidence that under the current HIPAA regulations healthcare providers systematically abused their clients' privacy by selling personal information to third parties or by spamming their clients with marketing and fundraising communications. In addition, the RIA admitted that the provisions increasing individuals' access to health information would likely result in no differences to the procedures currently in place. Even for the deregulatory provisions, the RIA presented no evidence that the current regulations hinder medical research by reducing access to personal health information. In fact, for each provision,

the RIA asked the public to comment on the extent of the problem, potential benefits, and regulatory burdens.

In theory, the privacy and security problems outlined by the rule could arise. In practice, HHS found no evidence that the issues the rule addressed actually existed. The agency admitted that rules and procedures currently in place were apparently sufficient to ensure individuals' privacy and access to health information. The lack of evidence that the problem is systemic puts the rule's benefits in doubt. While HHS did not monetize the rule's benefits, it estimated the rule's cost at \$166 million. Since the rule's costs must justify the benefits, it is likely that HHS expected the rule's benefits to be of similar or greater magnitude. Its analysis, however, provides no basis for expecting the agency to achieve the expected benefits.

Scenario 2: No Need for Regulation

In the second scenario, an RIA identifies a real problem but fails to demonstrate the need for regulation. Typically this means that the RIA fails to show that there is a market or government failure that requires a government response. Often, private actors have already responded to the problem, making regulation redundant. For example, Employment Eligibility Verification rule (RIN: 9000-AK91) sought to reduce the number of unauthorized workers hired by federal contractors by establishing mandatory verification procedures; yet the rule failed to account for the voluntary compliance by the federal contractors.

Adopted at the end of the Bush administration's term, the rule amended the Federal Acquisition Regulation's hiring process. The rule required federal contractors and subcontractors

to verify the employment eligibility of the new hires and current employees using E-Verify, an Internet-based system administered by the U.S. Citizenship and Immigration Services.²⁸

The Employment Eligibility Verification rule outlined the outcomes it seeks to achieve but failed to demonstrate the need for regulation. The rule's RIA claimed that mandating E-Verify would improve the existing employment eligibility verification process and reduce employment of unauthorized workers by federal contractors. While the federal contractors could already enroll in E-Verify voluntarily, the RIA noted that enrollment levels remained low. The RIA attributed the low enrollment levels to the fact that many contractors did not bear the full costs of hiring unauthorized workers, especially if they could pass on these costs to the federal government. Alternatively, some contractors may have decided that the likelihood of a worksite enforcement action was too low to justify the costs of E-Verify enrollment.

While the RIA's argument seems logical, it fails on two accounts. First, the RIA failed to estimate how many unauthorized workers employed by the federal contractors went undetected through the current verification process. Thus, it failed to demonstrate that the problem was indeed systemic rather than anecdotal. In addition, it failed to estimate the rule's benefits. The RIA claimed that mandatory E-Verify enrollment would improve the screening process, yet it failed to estimate how many fewer unauthorized workers would be employed by federal contractors under the new system. Despite seeking to expend substantial resources (\$669 million) to implement the rule, the RIA provided little information as to whether such expense was justified.

Second, the RIA failed to demonstrate the need to mandate E-Verify enrollment. The RIA implied that in the absence of regulation the current low E-Verify enrollment levels would

²⁸ General Services Administration, "Federal Acquisition Regulation; FAR Case 2007-013, Employment Eligibility Verification - Proposed Rule," *Federal Register* 73, no. 114 (June 12, 2008): 33374-33381.

continue. However, the number of employers registered with E-Verify grew rapidly even prior to this rule. From January 2006 to January 2009 (before the rule took effect), E-Verify enrollment expanded from 5,300 employers representing 23,000 hiring sites to 103,000 employers representing 414,000 hiring sites.²⁹ Thus, voluntary enrollment experienced an almost twenty-fold increase in only three years. A continuing trend of increased enrollment would significantly reduce the rule's benefits, which could make the rule redundant.

Scenario 3: Lack of Transparency

In the third scenario, an RIA addresses a systemic failure but fails to communicate this in its analysis. One example is the combined RIA for the two Nondiscrimination on the Basis of Disability rules (RIN: 1190-AA44 and 1190-AA46) proposed by the Department of Justice (DOJ) in 2008.³⁰ The rules implemented the improved accessibility standards for people with disabilities under the Americans with Disabilities Act of 1990 (ADA). The first rule applied the standards to commercial facilities while the second rule applied to state and local government services.

The rules pursued an important social goal by providing people with disabilities with equal access to commercial and government facilities. The RIA estimated the current baseline (i.e., accessibility level under the current standards) and the benefits that would result from adopting the new standards. The RIA demonstrated that the problem it addressed was real and

²⁹ Andorra Bruno, *Unauthorized Employment in the United States: Issues, Options, and Legislation*, CRS Reports (Washington, DC: Congressional Research Service, March 2, 2009), 4.

³⁰ Department of Justice, "Nondiscrimination on the Basis of Disability by Public Accommodations and in Commercial Facilities," *Federal Register* 73, no. 117 (June 17, 2008): 34508–34557; Department of Justice, "Nondiscrimination on the Basis of Disability in State and Local Government Services," *Federal Register* 73, no. 117 (June 17, 2008): 34466–34508.

widespread. Yet DOJ failed to explain in its RIA why it thought the rules were necessary. The RIA simply stated that it was implementing the ADA.

Technically, the issue the rules address constitutes neither market nor government failure. It is not a government failure since the current lower accessibility of commercial and governmental facilities does not stem from a previous government action. It is not a market failure since commercial businesses could potentially provide people with disabilities with improved access facilities if they could charge a premium for access. The market solution, i.e., charging people with disabilities for better accessibility, raises legitimate equity and civil rights concerns. It is, therefore, deemed unacceptable. In the absence of an acceptable market solution, DOJ was probably required under existing statutes to regulate.

As in previous scenarios, the RIA failed to explain the need for regulation. In this case, however, the need for regulation can be reasonably inferred from context. The omission results from DOJ's failure to communicate its reasoning. It does not necessarily put the agency's ability to achieve its claimed benefits in doubt.

In the above scenarios, agencies are least likely to realize the expected benefits when they address hypothetical issues. The benefits resulting from resolving an issue that does not affect any individual will likely accrue to no one. These benefits may be equally hypothetical. Agencies are more likely to realize benefits when they regulate, even though private actors have taken steps to reduce the problem. In this scenario, agency actions are at least partially redundant. Agencies can claim only a portion of benefits resulting from reducing or eliminating the problem, with the rest attributable to the private action.

Finally, when agencies address systemic failures, even if they fail to communicate the evidence in their analyses, they are more likely to produce the benefits they claim. Poor

presentation may affect agencies' transparency in the rulemaking process but does not directly impact their ability to achieve the desired outcomes.

Program Theory Index

Similar to the *Systemic Problem* index, an RIA may fail the *Program Theory* index for one of the following reasons:

1. Little evidence that the regulatory action will result in beneficial outcomes
2. Program theory is valid but not communicated in the RIA

Scenario 1: No Program Theory

In the first scenario, an RIA fails to demonstrate that its proposed actions are related to the beneficial outcomes the regulation seeks to achieve. For example, the Standardized Option rule (RIN: 1557-AD07), proposed jointly in 2008 by the Treasury Department, the Federal Reserve System, and the Federal Deposit Insurance Corporation, sought to improve the risk sensitivity of the existing risk-based capital rules.³¹ It set new standards for assessing capital requirements for operational risk. To reduce its burden, the rule allowed banks to opt in to the new risk-based capital requirement framework. The rule ultimately sought to improve social welfare by increasing banking activity while maintaining the same degree of confidence in bank safety and soundness.

The Standardized Option rule stated which systemic failures it sought to correct. First, creditors faced information asymmetry when it came to discerning banks' actual risk and capital

³¹ Department of the Treasury, Federal Reserve System, and Federal Deposit Insurance Corporation, "Risk-Based Capital Guidelines; Capital Adequacy Guidelines: Standardized Framework," *Federal Register* 73, no. 146 (July 29, 2008): 43982–44060.

adequacy. Second, deposit insurance, which protected creditors from losses, created a moral hazard by reducing creditors' incentive to restrain banks from undertaking excessive risk. As a result of these systemic failures, banks failed to fully take into account the positive externalities or public benefit generated by a sound banking system.

Where the RIA fell short was presenting a credible theory that would link the rule's requirements to its intended outcomes. The RIA also offered no evidence that any of the proposed requirements would lead to increased economic activity or a safer and more sound banking system. Thus, while the rule's stated goals were laudable, the RIA provided little evidence that it would actually achieve them. It is unclear whether the rule's requirements would lead to any improvement in economic activity levels or banking safety. The rule's objectives might not be achieved or might be achieved only partially. In addition, the lack of underlying causality theory undermines the agencies' ability to evaluate the rule's effectiveness or to attribute any improvements in outcomes to the rule's requirements.

Scenario 2: Lack of Transparency

In the second scenario, the causality theory can be implied from the context, but the RIA does a poor job communicating the theory to its audience. One example is the Department of Energy rule that set energy conservation standards for fluorescent lamps and incandescent reflector lamps (RIN: 1904-AA92).³² The rule imposed more stringent energy standards on lamps in order to reduce household energy consumption and lessen the environmental impacts of producing energy.

³² Department of Energy, "Energy Conservation Program: Energy Conservation Standards for General Service Fluorescent Lamps and Incandescent Reflector Lamps," *Federal Register* 74, no. 69 (April 13, 2009): 16920–16968.

The RIA offered no explanation as to how the more stringent standards would lead to lower energy consumption and environmental benefits. The implied theory is that 100 percent compliance with the rule would replace less efficient lamps currently available on the market with more efficient ones. The use of energy-efficient lamps would in turn reduce the household energy consumption. The implied theory is logical, making it likely that the rule would achieve its stated benefits. However, it is not properly communicated in the RIA.

In the scenarios above, RIAs lacking program theory are less likely to produce the intended beneficial outcomes. While the rules may still produce benefits, the outcome is less certain since the mechanism through which the rules are supposed to deliver results is not fully explored. In contrast, the rules that simply fail to explain the program theory that guided their actions are likely to realize the benefits they claim to produce. While the rules' transparency may be an issue, it may not directly impact the rules' outcomes.

Conclusions

In this study I attempt to shed some light on whether the benefits claimed by federal agencies are likely to be achieved. In contrast to other validation studies, I focus on the agencies' benefit claims rather than the actually measured benefits. Since agencies justify their regulatory decisions based on expected benefits, examining the quality of these claims is important. To do that, I focus on two aspects of the agencies' regulatory analysis: (1) whether the analysis demonstrates the need for regulation; and (2) whether the analysis explains how the regulation would lead to beneficial outcomes. I use the Mercatus Center's Regulatory Report Card to construct the dataset for this study.

The study finds that, even based on a very low threshold, nearly one in four prescriptive rules fails to demonstrate the evidence for a systemic problem it intends to address. Some RIAs fail to prove that the problem is widespread and systemic. In other words, they fail to show that the problem deserves the federal government's attention. This often goes hand in hand with agencies failing to quantify the regulation's benefits. Instead, agencies give a qualitative description of benefits, which may be justified given that some social and environmental benefits are difficult to express in monetary terms. The issue arises when agencies imply that the problem they address is widespread and substantial. This in turn implies that the regulation's qualitative benefits are substantial, justifying the regulation's significant costs. Yet if the underlying problem is relatively minor or rare, the regulation's actual benefits in solving the problem will be small. Thus, when agencies fail to demonstrate that problems they address are systemic, they are less likely to realize the benefits that would justify the regulation's costs.

In other cases, RIAs fail to show that the problem would not be solved in the absence of regulation. In a few cases, existing trends indicated that the problem would be at least partially addressed by private actors without regulation. Regulatory benefits in these cases would be improvements above and beyond those achieved without agency actions. The RIAs for these regulations, which attribute the outcomes of both private and agency actions to the regulation's impact alone, most likely overestimate their benefits.

Finally, in a few cases, RIAs address a systemic problem but fail to communicate this in their analysis. These RIAs are likely to achieve the benefits that they claim. The main issue with their analysis is lack of transparency. It is difficult for the public to evaluate and comment on agency analysis if crucial components are missing.

Lack of program theory is less common. In only a few cases, regulations provide little evidence that their proposed actions will lead to beneficial outcomes. The problems that these regulations address are often real and substantial, as are the benefits resulting from improving on or eliminating these problems. Yet there is little evidence that the regulation, as proposed, would actually have an impact. If there is logic behind agencies' actions in these cases, the RIAs fail to communicate it. Otherwise, agencies' actions may as well be random. Without any causality theory or empirical evidence, it is hard to judge whether these regulations would lead to the expected beneficial results. Yet it is very possible that agencies will miss the mark.

Similar to the previous criterion, some RIAs may have a valid program theory but fail to communicate it. In these cases, the main issue again is lack of transparency rather than poor analysis. While important, lack of transparency does not necessarily reflect on the regulation's ability to deliver the promised results.

To summarize, the study finds that many economically significant regulations may not fully realize the beneficial outcomes they claim. Agencies exaggerate the underlying problem or wrongly attribute the results of private actions to the regulation's impact. In a few cases, agencies fail to show that the regulation would actually lead to the beneficial outcomes. Consequently, the study suggests that some skepticism with regard to the substantial regulatory benefits claimed by regulatory agencies may be warranted.

Appendix A: Regulatory Analysis Assessment (RIA) Criteria

Openness

1. **Accessibility:** How easily were the RIA, the proposed rule, and any supplementary materials found online?
2. **Data Documentation:** How verifiable are the data used in the analysis?
3. **Model Documentation:** How verifiable are the models and assumptions used in the analysis?
4. **Clarity:** Was the RIA comprehensible to an informed layperson?

Analysis

5. **Outcomes:** How well does the analysis identify the desired benefits or other outcomes and demonstrate that the regulation will achieve them?
6. **Systemic Problem:** How well does the analysis identify and demonstrate the existence of a market failure or other systemic problem the regulation is supposed to solve?
7. **Alternatives:** How well does the analysis assess the effectiveness of alternative approaches?
8. **Benefit-Cost Analysis:** How well does the analysis assess costs and benefits?

Use

9. **Use of Analysis:** Does the proposed rule or the RIA present evidence that the agency used the Regulatory Impact Analysis?
10. **Net Benefits:** Did the agency maximize net benefits or explain why it chose another option?
11. **Measures and Goals:** Does the proposed rule establish measures and goals that can be used to track the regulation's results in the future?
12. **Retrospective Data:** Did the agency indicate what data it will use to assess the regulation's performance in the future and establish provisions for doing so?

Appendix B: Explanation of Scores

Score	Explanation
0	Little or no relevant content
1	Perfunctory statement with little explanation or documentation
2	Some relevant discussion with some documentation of analysis
3	Reasonably thorough analysis of some aspects
4	Reasonably thorough analysis of most aspects and/or shows at least one “best practice”
5	Complete analysis of all or almost all aspects, with one or more “best practices”