



REGULATORY REFORM CAN AMOUNT TO A PROGRESSIVE TAX REFUND, IF DONE RIGHT

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Legislative Hearing on H.R. 348, the “Responsibly and Professionally Invigorating Development Act of 2015” (RAPID Act); H.R. 712, the “Sunshine for Regulatory Decrees and Settlements Act of 2015”; and H.R. _____, the “Searching for and Cutting Regulations That Are Unnecessarily Burdensome Act of 2015” (SCRUB Act)

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INTRODUCTION

Chairman Marino, Ranking Member Johnson, and members of the committee: thank you for inviting me to testify today. As an economist and senior research fellow at the Mercatus Center at George Mason University, I focus my primary research on regulatory accumulation and the regulatory process, so it is my pleasure to testify on today’s topic.

In previous research and testimony, I have highlighted the fact that regulatory accumulation creates substantial drag on economic growth by impeding innovation and entrepreneurship.¹ Today, I have three main points that may help you to examine the reforms under consideration. First, I will discuss the regressive effects of regulatory accumulation—or, to put it another way, why retrospective analysis of regulations can result in a what amounts to a progressive tax refund, with benefits going largely to lower-income Americans.

1. Patrick A. McLaughlin, “The Searching for and Cutting Regulations That Are Unnecessarily Burdensome Act of 2014” (Testimony before the House Committee on the Judiciary, Subcommittee on Regulatory Reform, Commercial, and Antitrust Law, Mercatus Center at George Mason University, Arlington, VA, February 11, 2014), <http://mercatus.org/publication/searching-and-cutting-regulations-are-unnecessarily-burdensome-act-2014>; Patrick A. McLaughlin and Robert Greene, “The Unintended Consequences of Federal Regulatory Accumulation,” *Economic Perspectives*, Mercatus Center at George Mason University, May 8, 2014, <http://mercatus.org/publication/unintended-consequences-federal-regulatory-accumulation>.

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Second, I will highlight how an increasingly long and complex regulatory code can actually make the task of achieving risk reduction in the workplace more difficult.

Third, I will argue that not all attempts at regulatory reform are equal. In my research, I have found several factors that tend to contribute to meaningful and successful regulatory and governmental reform efforts. The most important of these is the use of an independent group or commission to identify regulations that need to be modified or eliminated. Any retrospective analysis effort that leaves this task in the hands of the same agencies that created the regulations in the first place is unlikely to succeed. I highlight some other important principles as well, but the independence of the reviewers is the most important.

REGRESSIVE EFFECTS OF REGULATIONS

Regulations can be regressive, particularly in their effects on prices paid by consumers.² A regressive regulation is one whose burden disproportionately falls on lower-income individuals and households. When regulations force producers to use more expensive production processes or inputs, some of those production cost increases are passed along to consumers in the form of higher prices. For example, in 2005, the Food and Drug Administration banned the use of chlorofluorocarbons as propellants in medical inhalers, such as the inhalers that millions of Americans use to treat asthma.³ This ban was enacted because of environmental concerns rather than health or safety concerns. Since the implementation of that ban, the average price of asthma inhalers has tripled.⁴ While individuals with high incomes might be able to absorb this price increase, the higher price may force people with low incomes to make the choice not to buy an inhaler and instead leave the asthma untreated—potentially leading to a real human cost if the person suffers an asthma attack without an inhaler available.

When regulations cause the prices of goods and services to increase, lower-income households have to make a choice: no longer buy those goods, substitute them with something else if possible, or buy less of the more expensive good. This can have the unintended consequence of causing lower-income families not to be able to purchase some good or service that is a medical necessity or that would have reduced the risk of accidental death or injury. I have attached a study by economist Diana Thomas that gives more details on the regressive effects of regulations.

The cumulative cost of regulations amounts to a hidden, regressive burden. But it's a burden that could be lightened. In fact, one way of viewing that burden is as an opportunity: retrospective analysis that eliminates a portion of the regulatory cost burden would act as a progressive tax refund. Let me explain with an example that will illustrate how reducing the regulatory burden is similar to a tax refund that primarily benefits poorer Americans.

While economists have not yet reached consensus on how to calculate the total cost of regulation, several estimates exist. For example, economists John Dawson and John Seater estimate that regulatory accumulation slows economic growth by about 2 percent per year.⁵ The latest OIRA report to Congress on the benefits and costs of regulations estimates that a small subset of regulations reviewed cost the economy between \$57 billion and \$84 billion in 2001 dollars.⁶ Converted to 2014 dollars, this range is from \$76.19 billion to \$112.29 billion.⁷ At the other

2. Diana Thomas, "Regressive Effects of Regulation" (Working Paper No. 12-35, Mercatus Center at George Mason University, Arlington, VA, November 2012), <http://mercatus.org/publication/regressive-effects-regulation>.

3. Department of Health and Human Services, Food and Drug Administration, Use of Ozone-Depleting Substances; Removal of Essential-Use Designations, 70 Fed. Reg. 17168 (April 4, 2005).

4. Laurie Tarkan, "Rough Transition to a New Asthma Inhaler," *New York Times*, May 13 2008, http://www.nytimes.com/2008/05/13/health/13asth.html?_r=0.

5. John W. Dawson and John J. Seater, "Federal Regulation and Aggregate Economic Growth," *Journal of Economic Growth* 18, no. 2 (2013): 137-77.

6. Office of Management and Budget, *2014 Draft Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities*, 2014, http://www.whitehouse.gov/sites/default/files/omb/infocreg/2014_cb/draft_2014_cost_benefit_report-updated.pdf.

7. Converted to 2014 dollars using the Bureau of Labor Statistics CPI Inflation Calculator: <http://data.bls.gov/cgi-bin/cpicalc.pl>.

end of the spectrum, Clyde Wayne Crews estimates the annual cost of regulations to be around \$1.882 trillion.⁸ For this example, I'll use the midpoint between \$57 billion and \$1.882 trillion, which is \$969 billion. Consider this the annual regulatory burden shared across all households in the economy. As of 2013, there were 115,610,216 households in the United States. We can estimate the regulatory burden per household by simply dividing the midpoint cost estimate, \$969 billion, by the number of households. This division yields about \$8,386 per household.

Now consider a regulatory reform that would reduce this cost burden by 15 percent. If the regulatory cost burden per household is \$8,386, then a 15 percent reduction would equal about \$1,258 per household per year. This reduction in cost burden is effectively an annual regulatory cost refund and would have different impacts to low-, middle-, and high-income households. In this example, I define a low-income household as a family of five with three children under the age of 18 earning a household income exactly equal to the Census poverty threshold for 2014: \$28,252. For the middle-income household, I use the median household income in 2013 (the latest year available): \$51,900. For the high-income household, I follow Diana Thomas's calculations and use a household income equal to 10 times the poverty threshold: \$282,520. Table 1 shows what a reduction in regulatory costs of \$1,258 would equal, relative to household income and in percentage terms.

Table 1. A Regulatory Cost Refund Relative to Household Income across Income Groups

Household	Household income	Cost reduction	Percentage of income
Low-income	\$28,252	\$1,258	4.5%
Middle-income	\$51,900	\$1,258	2.4%
High-income	\$282,520	\$1,258	0.4%

As table 1 shows, a reduction in regulatory burden of \$1,258 would have a much larger effect on the purchasing power of the low-income household than the middle- or high-income households. To the low-income household, the regulatory cost refund would equal nearly 5 percent of one year's household income. Conversely, to the high-income household, it would equal only 0.4 percent of one year's income. This example shows that a regulatory cost refund of any amount would work just like a progressive tax cut, helping low- and middle-income households relatively more than high-income households. Even better, unlike one-time tax rebates, this regulatory cost refund would repeat every year.

INCREASING INABILITY TO PRIORITIZE COMPLIANCE

One concern that accompanies regulatory accumulation is called regulatory overload. Firms are compelled by law to comply with regulations, regardless of whether the regulations are effective at solving a particular problem. In a 2011 study, psychologist Andrew Hale and his coauthors find that as the number of rules increase, the rules themselves become less effective.⁹ They also find that as the number of rules increase, companies tend to rely on more rigid, checklist-style compliance strategies to ensure compliance with the letter of the law rather than proactive risk management strategies that may be more effective at reducing health and safety risks in the workplace. They call these problems regulatory overload.

Certainly, as regulations accumulate, risk managers' attention will be spread across a greater number of rules. If any of those rules are not actually effective in reducing risk, the attention paid to those rules will detract from compliance with functional rules.

8. Clyde Wayne Crews Jr., "Tip of the Costberg: On the Invalidity of All Cost of Regulation Estimates and the Need to Compile Them Anyway," 2015 ed. (working paper, Competitive Enterprise Institute, Washington, DC, 2015).

9. Andrew Hale, David Borys, and Mark Adams, "Regulatory Overload: A Behavioral Analysis of Regulatory Compliance" (Working Paper No. 11-47, Mercatus Center at George Mason University, Arlington, VA, November 2011), <http://mercatus.org/publication/regulatory-overload>.

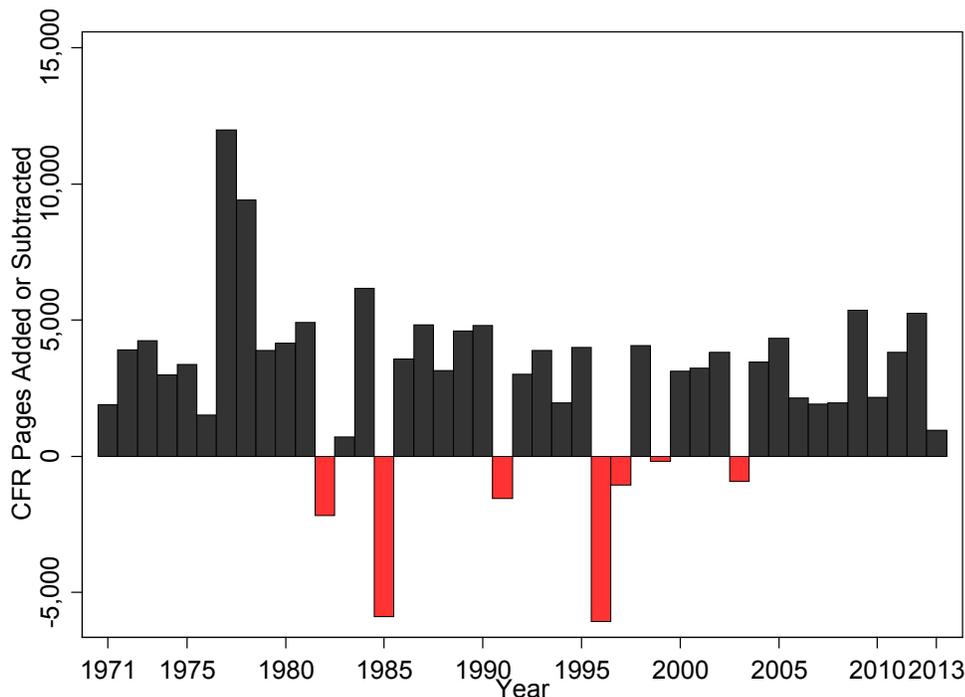
PRINCIPLES FOR SUCCESSFUL REFORM

As I have previously testified,¹⁰ the need to eliminate or modify nonfunctional regulations from the accumulated stock has been widely recognized by members of Congress and every president since Carter.¹¹ Functional rules address current, significant risks; mitigate some amount of those risks through compliance with the regulations; and do not have significant unintended effects or excessive compliance costs relative to their benefits. Nonfunctional rules are missing one or more of these features. The key to achieving significant amelioration of the problem of regulatory accumulation is first identifying as many nonfunctional rules as possible and then either eliminating them or changing them so that they become functional.

Executive branch attempts to examine and revise or eliminate existing nonfunctional regulations have primarily relied on executive orders for review of the need for regulations rather than creating a streamlined and evidence-based, analytical process that could accomplish large-scale reform. In a 2014 study I coauthored with economist Richard Williams (attached), we examine previous efforts at regulatory reform led by every president since Reagan and conclude that these episodes yielded only marginal improvements at best. Most notably, none of these efforts resulted in either substantial reductions relative to the total size of the *Code of Federal Regulations* (CFR) or sustained changes in the rate of adding new regulations to the CFR.¹²

Figure 1 shows just how little the regulatory process has changed, despite these presidential efforts. Since 1975, the CFR has expanded in 30 of 37 years. In those 30 expansionary years, 117,294 pages were added to the CFR. In contrast, in the seven contractive years, 17,871 pages were subtracted from the CFR—for net growth of nearly 100,000 pages. Previous efforts to eliminate obsolete regulations have removed only very small percentages of existing regulations from the books.

Figure 1. Pages Added to or Subtracted from the *Code of Federal Regulations*, 1976–2012



10. McLaughlin, “Searching for and Cutting Regulations That Are Unnecessarily Burdensome Act of 2014.”

11. Michael Mandel and Diana G. Carew, “Regulatory Improvement Commission: A Politically-Viable Approach to U.S. Regulatory Reform” (Policy Memo, Progressive Policy Institute, Washington, DC, May 2013), 3–4, <http://www.progressivepolicy.org/2013/05/regulatory-improvement-commission-a-politically-viable-approach-to-u-s-regulatory-reform/>.

12. Patrick A. McLaughlin and Richard Williams, “The Consequences of Regulatory Accumulation and a Proposed Solution” (Working Paper 14-03, Mercatus Center at George Mason University, Arlington, VA, February 2014), <http://mercatus.org/publication/consequences-regulatory-accumulation-and-proposed-solution>.

The failure of past regulatory review efforts likely stems from a fundamental misalignment of incentives: agencies, despite direction from the president, have incentives to maintain and increase their regulations to maximize their budgets and control over their portion of the economy. In turn, to retain regulations that would be eliminated otherwise, agencies may either hide or fail to produce information that would help identify obsolete or ineffective regulations in the first place. We should not expect agencies to give any better assessments of their own rules than professors would expect of students grading their own tests.

Similarly, individuals in agencies have little incentive to provide information that would lead to a rule's elimination or the choice not to produce a rule.¹³ In general, employees—including economists—are professionally rewarded for being part of teams that create new regulations or expand existing regulatory programs.¹⁴ Conversely, employees are rarely rewarded for deciding that a regulation should not be created. This is unfortunate, because specialists in agencies are likely to have some relevant information about which rules are nonfunctional.

However, the issues that have plagued previous, executive branch–led efforts at regulatory reform can be overcome. In previous research, I identified 11 characteristics of successful regulatory reform, derived from lessons learned by studying the Base Realignment and Closure (BRAC) process, regulatory reform in other countries, and previous attempts at retrospective review in the United States.¹⁵ I highlight a few of these below, for the purposes of assessing the reforms currently under consideration.

1. The process of identifying rules for modification or elimination should entail *independent* assessment of whether regulations are functional.

To be classified as functional, a rule must

1. address a current risk,
2. address a significant risk,
3. not result in ongoing costs (including unintended consequences) that more than offset the ongoing benefits of the rule, and
4. not interfere with or duplicate other rules.

It is vital that the assessment of a rule with respect to each of these criteria be performed objectively. If the body tasked with the analysis of a rule has incentive to find that the rule is functional or is nonfunctional, the review risks becoming an exercise in advocacy rather than objective analysis. The SCRUB Act, for example, creates a commission with the authority to hire analysts and experts necessary for such an assessment and to collect essential information for those purposes. The SCRUB Act sets forth criteria for regulatory assessment that are not very different from how I define “nonfunctional” rules in my own research. While it is wise to build in flexibility for the commission to devise new criteria in response to future lessons learned, it is equally important that any commission be required to publicly disclose its complete assessment criteria and take comments from the public on them.

2. The identification process must be broad enough to identify potentially duplicative regulations.

Duplication and redundancy across agencies may be a large source of nonfunctional rules. For example, multiple agencies through different regulations may address food safety. In light of this source of nonfunctional rules, analysis that is focused on individual rules or the rules of a single agency may not capture factors (e.g., conflicts, duplication) that indicate certain rules are in fact nonfunctional.

13. McLaughlin and Williams, “Consequences of Regulatory Accumulation.”

14. Richard Williams, “The Influence of Regulatory Economists in Federal Health and Safety Agencies” (Working Paper No. 08-15, Mercatus Center at George Mason University, Arlington, VA, July 2008), <http://mercatus.org/publication/influence-regulatory-economists-federal-health-and-safety-agencies>. Williams quotes one economist as saying, “Success is putting out 10 regulations a year and bigger regulations are bigger successes.”

15. McLaughlin and Williams, “Consequences of Regulatory Accumulation.”

3. The analysis of the functionality of rules should use a standard method of assessment that is difficult to subvert. Nobel Prize–winning economist Ronald Coase famously said, “If you torture the data long enough, it will confess to anything.” So it goes with any analysis: those who perform the analysis can choose the data to examine, how to analyze them, and the framework within which to present results. This is a primary reason why I recommend that retrospective analysis of regulations not be left in the hands of agencies that have incentive to find specific results.

However, a similar logic applies to an independent body that analyzes regulations. In the long run, we would have to worry about whether the body can maintain its independence and whether political or other pressure would be exerted on the body to subvert its analyses to serve an agenda. The best way to prevent such subversion is to require a simple, transparent, and replicable methodology of assessment.

Under the SCRUB Act, the commission is required to specify a methodology for assessment. Doing so publicly and before beginning the assessment will help achieve a transparent, objective end product.

4. Whatever the procedure for assessment, assessments of specific regulations or regulatory programs should focus on whether and how they lead to the outcomes desired.

The SCRUB Act lists as one of the criteria for assessment “whether the rule or set of rules is ineffective at achieving the rule or set’s purpose.” To meet my criteria, this phrase should mean achieving desired *outcomes*, as opposed to producing *outputs*. A rule may lead to an increase in an output, such as increased safety inspections, but that does not guarantee that there has been an increase the outcome, safety.

5. Congressional action—such as a joint resolution of disapproval—should be required to stop the recommendations, as opposed to a vote to enact or not enact.

The SCRUB Act could be improved if it were modified to limit formally Congress’s ability to subvert the process of selecting rules for elimination or modification. As the creators of the BRAC process recognized, every base targeted for closure had a champion defending it in Congress: the member whose constituency would be affected by the closure. So it would likely be with regulations slated for revocation. A better solution would be to follow the BRAC experience and require that a SCRUB Act commission’s recommendations take effect automatically unless Congress were to enact a joint resolution of disapproval of the entire set of recommendations—with no amendments allowed.

6. The review process should repeat indefinitely.

The SCRUB Act provides for a dissolution of the commission by a specific date. Given the possibility that the commission cannot evaluate all regulations before that date, it may be worthwhile to extend the life of the commission until all regulations are evaluated at least once, or even have the commission continue on an ongoing basis. The regulatory process will lead to regulatory accumulation again. This commission could balance the tendency to accumulate regulations with a deliberate and streamlined process for eliminating nonfunctional regulations if and when they appear.

CONCLUSIONS

Regulatory accumulation in the United States, with its adverse impact on economic growth by impeding innovation and entrepreneurship, is now a widely recognized problem. Furthermore, the costs of regulation are disproportionately borne by low-income households and the accumulation of regulations may make us less safe overall as compliance becomes more thinly spread between functional and nonfunctional rules. Regulatory reform that reduces the overall burden of regulations would act as a progressive tax refund for American households. Nonetheless, the problem has not been meaningfully addressed despite the efforts of several administrations.

One reason it has been hard to address regulatory accumulation is the difficulty of identifying nonfunctional rules—rules that are obsolete, unnecessary, duplicative, or otherwise undesirable. An independent group or commission—not regulatory agencies—seems required to successfully identify nonfunctional rules.

The SCRUB Act has several characteristics that make it more likely to succeed where previous attempts have failed. First, it appoints an independent commission to identify nonfunctional rules. Second, the act requires that the commission establish a methodology before beginning the assessment of rules, thereby minimizing opportunities for the assessment to be subverted by special interests. Third, the act establishes criteria that the commission would use to identify nonfunctional rules, and these criteria are primarily based on fundamental problem-solving and sound economic thinking.

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REGRESSIVE EFFECTS OF REGULATION

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Regressive Effects of Regulation

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Abstract

This paper highlights the unacknowledged burden regulation of health and safety has placed on low-income households. Billions of dollars are spent every year to reduce life-threatening risks that arise from auto travel, air travel, air and water pollution, food, drugs, construction, and the list goes on. Today, some form of regulation affects nearly every aspect of our lives (Shleifer 2010). All of it intends (at least nominally) to make consumers better off. The types of risks subject to regulation, however, are often negligible. By focusing on the mitigation of low-probability risks with higher cost, regulation reflects the preferences of high-income households and effectively redistributes wealth from the poor to the middle class and the rich. This suggests that beyond the well-known knowledge and information problems associated with intervention, there is an additional redistributive effect.

JEL codes: H23, H31, H41, I18, L5

1. Introduction

Today, some form of regulation affects nearly every aspect of our lives (Shleifer 2010). We spend billions of dollars every year to reduce life-threatening risks that arise from auto travel, air travel, air and water pollution, food, drugs, construction and many other potential perils of modern life. At least nominally, these expenditures intend to make consumers better off.¹ The types of risks that are regulated, however, are often small, especially compared to the risks we face from various common events and activities that cause illness, injury, and death. In particular, many of the risks we manage privately are significantly larger than those regulatory agencies manage. For example, people make private decisions determining their diets, how safe of a car to buy, whether to install smoke detectors, the type of neighborhood in which to live, and counseling for drug and alcohol problems. As regulatory agencies address smaller and smaller risks—thereby driving up the prices of many consumer goods and lowering wages of workers in regulated industries—they crowd out expenditures people would make in their private lives that address larger risks and perhaps cost less than government risk regulation. This crowding out phenomenon will affect the less well off before it affects the wealthy because lower-income consumers may face higher risks in some areas of their lives and might wish to spend less on risk reduction overall. In this sense, regulation of health and safety risks, particularly regulation of small risks that are expensive to mitigate, can have a regressive effect on household income. By driving up the prices of the goods and services people consume and lowering wages, such regulations force low-income households to contribute financially to the mitigation of risks they

¹ Although the stated justification is typically to improve consumers' lives, much regulation is done at the behest of specialized groups who benefit from regulations. Wildavsky (1981) argues that regulation is an attempt to identify excessive risks that adversely affect specific groups and to buy risk reductions for such groups at the expense of society as a whole.

might not mitigate privately.² To illustrate this regressive effect of regulation in more detail, this paper estimates the private cost of mitigating particular risks for low-income households and compares them to the costs of different types of regulation.

Section 2 explains the idea of the regressive effect of regulation in more detail. Section 3 introduces two sample households, one low-income household and one high-income household. Section 4 estimates the cost of private risk-mitigation strategies for low-income households. Section 5 describes the costs of various regulatory risk-mitigation strategies and compares them to the cost of the private risk-mitigation strategy estimated in section 4. Section 6 concludes.

2. The Regressive Effect of Regulation of Risk and Safety

Before we look in more detail at the risks mitigated through regulation, it makes sense to get a better idea of what types of risks the average American is exposed to and what the major causes of death are each year. Table 1 lists the major causes of death from various activities and events and their annual fatality rate per 10,000 people for 2009 (Kochanek et al. 2011). Overall, Americans faced about an 79.4 in 10,000 chance of dying in 2009.³ The major causes of death were heart disease (19.5 in 10,000), cancer (18.5 in 10,000), lung disease (4.5 in 10,000), stroke (4.2 in 10,000), accidents (3.8 in 10,000), and Alzheimer's (2.6 in 10,000). Among the accidents or unintentional causes of death, motor-vehicle accidents lead (1.2 deaths in 10,000 of population). Following motor-vehicle fatalities are poisoning, at 1 death per 10,000, and falls, at

² Baumol and Oats (1975, 191) show theoretically that environmental policy in particular may have redistributive effects of this sort. Such regulations represent the preferences of the wealthy but lower-income households primarily pay for them in the form of higher prices and lower wages.

³ The mortality rate measures the number of deaths, usually per 1000 of population. It is distinct from the morbidity rate, which measures the number of newly appearing cases of a specific disease.

0.8 deaths per 10,000. Both heart disease and cancer are the result primarily of private choices and expenditures (largely diet).

In comparison, the initial death rates for risks mitigated by regulation are much lower than risks individuals face from activities they personally control. Work-related fatalities, which are often the target of regulation, happen with an annual frequency of only 0.2 in 10,000 people. Some types of occupational health and safety regulation seem to target greater probability risks: regulation of occupational arsenic exposure, for example, mitigates an initial annual risk of death of 18 in 10,000 (Morrall 2003). This risk applies only to the exposed population; the risk to the general population is much lower and is due primarily to arsenic in drinking water. Examples of regulation that target even lower initial annual risks are floor emergency lighting on airplanes and regulations regarding seat-cushion flammability. The initial annual death rate associated with an absence of floor emergency lighting on airplanes was estimated at roughly 2.2 in 100 million or 0.00022 in 10,000 of exposed population (Morrall 2003). Table 2 lists the top and the bottom five types of regulation in order of associated initial annual risk of death from Morrall (2003).⁴

In addition to the generally low levels of risk addressed, the cost effectiveness of these different types of regulation varies greatly. Tengs et al. (1995) estimate the cost per life year saved for 500 life-saving interventions. They find that the median cost of health care regulation is \$19,000 per life year saved while the median cost of environmental regulation is \$4,200,000

⁴ This paper considers only mortality risks addressed by regulation. Reductions in morbidity and secondary effects on mortality are difficult to quantify and therefore not considered here or in most of the existing literature on the relative cost and benefits of regulation. The estimates presented in later sections of the paper may understate the overall benefits of regulation as regulation often results in a reduction in disease morbidity without directly affecting mortality. Similarly, the indirect effects of regulation on health and mortality—for example, the fact that requiring infant seats on airplanes drives up the number of infants injured in car crashes—are ignored. However, the estimates presented for the cost and benefits of private risk-mitigation strategies in section 3 are similarly limited, so a comparison of the two may still be of interest.

per life year saved. These costs of regulation, like the incidence of taxation, are usually borne by both consumers and producers.⁵ The share of the burden borne by each group depends importantly on the relative elasticity of demand and supply for the good produced by the industry taxed or regulated. Taxes and costs of regulation imposed on goods that have a particularly inelastic demand curve, like gasoline, will be passed on to consumers almost entirely.⁶ Taxes and the cost of regulation imposed on goods that have an elastic demand curve, on the other hand, will be borne mostly by producers. Any costs borne by producers will be shared between the owners of capital (in the form of lower profits) and labor (in the form of lower wages). A number of recent empirical and theoretical studies conclude that labor, not capital, bears the majority of the cost of corporate income taxation (more than 50 percent).⁷ If we assume these studies are correct and that regulation can be treated as similar in its effects to taxation, then the majority of any tax or regulatory burden is borne primarily by consumers in the form of higher prices and by workers in the form of lower wages.

Lower wages and regulation-induced expenditures on consumer goods reduce disposable income and, therefore, private expenditures on the reduction of health and safety risks. Such reductions in disposable income affect low-income households most severely because the cost of public risk mitigation crowds out their ability to privately mitigate greater probability health and safety risks privately. Empirical evidence suggests that people spend additional income in ways that lowers their private mortality risk.⁸ With increasing income, individuals will spend greater

⁵ Economists treat regulation as a cost imposed on producers and consumers, similar to taxation. See any standard microeconomics textbook for more detail.

⁶ For a recent empirical study on the incidence of gasoline taxation, see, for example, Alm, Sennoga, and Skidmore (2008). For a recent theoretical study on the same topic, see Marion and Muehlegger (2011).

⁷ For a survey of the recent empirical literature on the incidence of corporate taxation, see Gravelle (2011). For a survey of both empirical and theoretical contributions on the topic, see Jensen and Mathur (2011).

⁸ See Duleep 1986; Williams 1990; Graham, Hung-Chang, and Evans 1992; Chapman and Hariharan 1994; Wildavsky 1981.

amounts of money to mitigate ever smaller risks. Put differently, economists consider health and safety to be a normal good. Like all normal goods, this implies that wealthier households will spend more money on health and safety, while low-income households spend less. In addition, the marginal benefit of increasing expenditures on health and safety has to be decreasing, as households address high-probability, high-severity risks first (taking costs of risk mitigation into account), before addressing lower-probability and lower-severity risks, for which the benefit of risk reduction to the households is lower.⁹ This suggests that low-income households will focus on the mitigation of high-probability, high-severity risks that are lower cost per unit of risk, but they are less willing to pay to reduce small-probability risks with higher costs per unit of risk. At some point, both rich and poor households decide that some low risks are not worth reducing. Higher-income households pursue risk-reduction strategies that address much lower risks and are therefore more expensive. Figure 1 shows this phenomenon.

Figure 1: Private Risk-Reduction Preferences of Low- and High-Income Households

⁹ “Diminishing marginal utility” is an economics term that applies to most goods. It means that as people get more of something, they become less enamored with it. For example, one might pay a great deal for the first glass of water in a day or for the first personal computer. But it would be expected that people would be willing to pay a great deal less, because it is not as valuable to them, for the 10th or 20th personal computer.

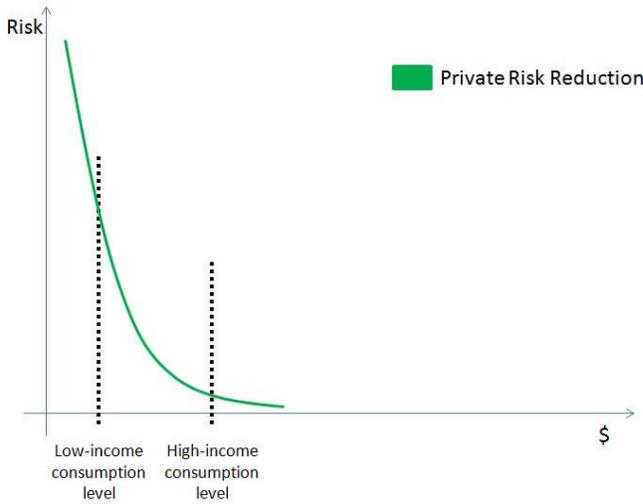
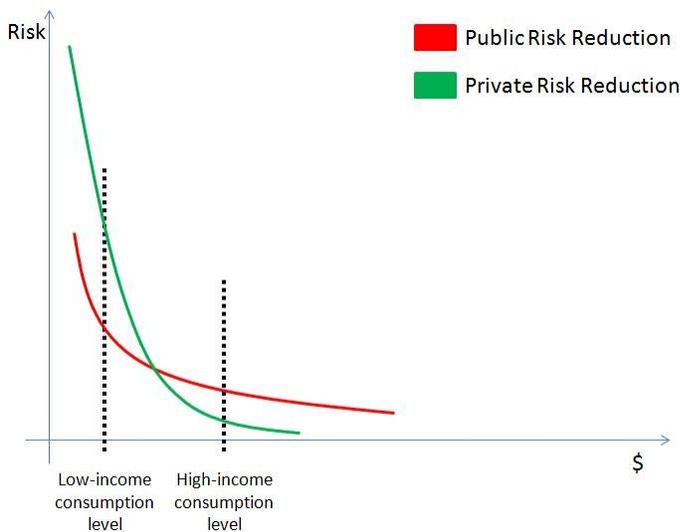


Figure 2 includes possible public risk-reduction strategies and the preferred consumption levels for low- and high-income households for both private and public risk-reduction strategies.

Chart 2: Private and Public Risk Reduction Preferences of Low and High-Income Households



The red line represents a set of opportunities to reduce risk through public measures, the green line opportunities to reduce risk privately. The figure suggests that for higher levels of risk, public risk-reduction strategies are less costly than private risk-reduction strategies, but for lower levels of risk, private risk-reduction strategies are

cheaper than their public equivalent. This is plausible as long as the costs of public risk-reduction measures are affected by both economies of scale and knowledge problems.¹⁰ Economies of scale will make some public risk-reduction strategies cheaper than private risk-reduction strategies as long as a large enough subgroup of the population benefits from them. Knowledge problems counteract this beneficial effect of scale economies in risk reduction. Because centrally administered risk-reduction strategies cannot take local knowledge and information into consideration, they will always be less efficient than privately chosen risk-reduction strategies. For example, dietary choices represent large risks but, because of the heterogeneity of choices that need to be made, it is likely that the costs of many kinds of public risk reduction efforts in this area will exceed private risk reduction efforts. In addition, private risk-mitigation strategies can, in some cases, account for both the heterogeneity of individual risk and cost-effective risk-mitigation strategies. Scale economies can outweigh knowledge and heterogeneity issues for large-scale risks (with large benefits of mitigation) that affect a large group of the population. When the group of beneficiaries gets smaller, however, the costs associated with knowledge problems outweigh the benefits of economies of scale.

Figure 2 indicates that at the level of expenditure for risk reduction low-income households are willing to make, public risk-reduction strategies would focus on higher levels of risk. Higher-income households, on the other hand, prefer the elimination of lower-level risks. At the level of risk reduction preferred by high-income households, public

¹⁰ F.A. Hayek (1945) explains that prices solve the problem of knowledge aggregation in the market context. When price signals are absent, as is the case with any publicly provided good, the knowledge problem persists because the institutions that effectively aggregate information are absent and only poorly replaced by alternative institutions for the aggregation of knowledge.

risk-reduction measures seem to be more expensive than similar private measures. At first glance, this might suggest that the current regulatory environment does not actually reflect the preferences of high-income households. However, since the cost of reducing lower-level risks is born by all taxpayers, high-income households will not bear the full burden of the cost as indicated in the figure. Similarly, low-income households are forced to consume a higher level of risk mitigation than they would choose privately and, accordingly, are paying more for risk reduction than they otherwise would, essentially subsidizing the risk-reduction preferences of the wealthy.

As outlined above, public risk reduction through regulation often involves the mitigation of small-probability, high-cost risks, and these cases are more likely to represent the preferences of high-income households. Left to their own devices, low-income households would demand a much lower level of risk reduction than high-income households. Because both low- and high-income households pay for the regulatory mitigation of risks through higher prices, however, public risk-reduction strategies crowd out private risk-mitigation strategies of low-income households. Put differently, regulation has a regressive effect: It redistributes wealth from lower-income households to higher-income households by causing lower-income households to pay for risk reduction worth more to the wealthy. If lower-income households can avoid purchasing higher-priced products regulated to extremely low risk levels, basically expressing their preferences through the market, it mitigates some of the regressive nature of the regulation.

Consider the following example. The National Highway Traffic Safety Administration (NHTSA) recently proposed a mandate requiring all automakers to put rearview cameras in all

passenger vehicles by 2014.¹¹ Currently, such features can be found only in luxury models or are part of upgrade packages, suggesting that the demand for them is limited to higher-income households. The expected benefit of this particular regulation is a reduction in the number of fatalities resulting from drivers backing up and hitting pedestrians. Approximately 228 individuals die annually in such accidents (44 percent are under age five). This particular regulation is expected to reduce the number of fatalities to between 133 and 116 individuals per year (Department of Transportation [DOT] 2010). This is equivalent to a reduction in the risk of being a victim of a backover accident from 1 in every 200,000 children under age five to roughly 1 in every 400,000 children under age five.¹² For the overall number of fatalities without consideration of age, it represents a reduction in the risk of being a victim of a backover accident from currently roughly 1 in every 1.5 million people to 1 in every 3 million people.¹³ In comparison, the mortality risk associated with pregnancy is roughly 1 in every 300,000. The risk of being in a backover accident is much smaller.¹⁴

In the example of rearview cameras, the cost per life saved would be roughly \$24 million (this is roughly four times the value that DOT uses to calculate the average benefit on ex ante lives saved, \$5.8 million).¹⁵ The NHTSA estimates the total cost of the measure for the auto

¹¹ The proposed rule is not yet final. However, the most recent report by the NHTSA (Department of Transportation 2010) suggests that the final rule will mandate rearview cameras for all vehicles. NHTSA delayed the release of a final rule for the second time in February 2012 and is expected to release a final rule in December 2012. The Cameron Gulbransen Kids Transportation Safety Act of 2007 originally required NHTSA to provide a final rule by the end 2011. See *Cameron Gulbransen Kids Transportation Safety Act of 2007*, Public Law 110-189, *U.S. Statutes at Large* 122 (2008): 639, <http://www.gpo.gov/fdsys/pkg/PLAW-110publ189/pdf/PLAW-110publ189.pdf>.

¹² This calculation uses 2010 Intercensal Estimates of the Resident Population of children under age five from the Census Bureau, which was 20,899,181. See U.S. Census Bureau, "Population Estimates: National Intercensal Estimates (2000–2010)," <http://www.census.gov/popest/data/intercensal/national/nat2010.html>.

¹³ This calculation uses the July 2010 Intercensal Estimates of the Resident Population of the United States, which was 309,349,689. See *Ibid.*

¹⁴ See Kochanek et al. (2011) for a list of the 2009 death rates for 113 selected causes, which includes the mortality risk associated with pregnancy, reported as 0.3 in 100,000.

¹⁵ Department of Transportation, "Value of Statistical Life and Injuries", March 18, 2009, <http://www.dot.gov/regulations/value-statistical-life-and-injuries>

industry at roughly \$2.7 billion, or roughly \$200 per vehicle, which would be passed on to consumers (Department of Transportation 2010). Low-income households have the least resources to absorb and manage those costs. Even if they are initially able to avoid paying the costs of the regulation by purchasing a used car, the greater demand for used cars that results will drive up the price of cars, regardless of whether they have the added security feature. If you further consider an individual's willingness to pay for a specific reduction in the risk of an accident as a function of income, interventions like this are even more difficult to justify. Risk-mitigation strategies like rearview cameras are unlikely to be part of a private risk-mitigation strategy of a low-income household because they offer a very low reduction in risk for a very high cost. Low-income households would be forced to pay for this low-risk, high-cost risk-mitigation strategy once the rule is implemented because it will affect the cost of new and used vehicles.¹⁶ In this sense, such regulations are regressive: They impose the preferences of the rich on lower-income households and force them to share in the cost of risk reduction they are unlikely to pursue privately.¹⁷

From a societal perspective, the effect of regulation of low-probability risks like this is to redistribute income from poor households to richer households. A low-income household's willingness to pay to reduce low-probability risks is less likely to be great enough to cover the cost of regulation. In those cases where the benefit, based on willingness to pay, is greater for the wealthy than for the poor and the costs are shared equally, regulations are regressive. This would

¹⁶ When the relative price of new cars increases, demand for used cars (a substitute) increases, which drives up the price of used cars. For more information on the effect of a change in the price of a substitute on the market for a particular good, see any introductory microeconomics textbook.

¹⁷ There are potential secondary consequences of this kind of risk-reducing regulation. When low-income households are forced to pay higher prices for new cars as a result of this type of regulation, they may be forced into the market for used cars instead and end up purchasing a car that has neither the newly regulated safety feature, nor other important safety features, thereby leaving them with an overall less safe vehicle. Alternatively, they may forgo the purchase of other safety features that might have offered more benefits to the particular household because of the extra cost of the newly regulated safety feature.

be true of any regulation, but the opportunity costs of regulating extremely small and expensive risks are greater for low-income individuals. To some extent, these regressive effects may be mitigated when low-income individuals can avoid purchasing those kinds of regulated products. Note that this implies also that households may be worse off because they are discouraged from buying a product they may have otherwise wanted to buy.

3. Sample Families

This section introduces a low-income and a high-income household by reviewing some descriptive census statistics for each household. In addition, this section presents the average mortality-risk profile for primarily high- and low-income counties in New York State to offer some insight into the respective risks each of our two households may face.

Both households are family households with two income earners and three children under age 18. The income of the low-income family is \$26,023, which is the 2010 Census poverty threshold for a family of five with three children under age 18. The income of the high-income family is \$260,230, which is 1000 percent of the 2010 Census poverty threshold for a family of five with three children under age 18.

Table 3 provides some statistical characteristics of U.S. households with income levels similar to the two sample households. The income level of our low-income household (between \$25,000 and \$29,999) is representative of 5.7 percent of all U.S. households, while the high-income household's level of income (income above \$200,000) is representative of 4.0 percent of all U.S. households. Among households with incomes between \$25,000 and \$29,999, 81 percent live in metropolitan areas, while 94 percent of high-income households live in metro areas. Fifty-nine percent of the lower-income households are family households, and 4.5 percent are five-

people households.¹⁸ For the higher-income household category, 89 percent are family households and 11 percent are five-people households. Fifty-three percent of the high-income households have two earners, while only 15 percent of the low-income category households have two income earners. Thirty-four percent of the lower-income households are headed by a person that has completed high school, but only 16 percent hold a bachelor's degree or higher. In contrast, 77 percent of the heads of household of the high-income households have a bachelor's degree or higher.

In addition to differing demographic characteristics for our two sample households, they also face different risk profiles. To illustrate these different risk profiles in more detail, I provide average mortality rates based on county-level data for the 16 counties with the highest incomes and the 16 counties with the lowest incomes in New York, which I obtained from the Center for Disease Control's (CDC) Wonder Online Database. Table 4 reports the annual death rate for various causes of death for the top quartile of counties with the greatest percentage of low-income households and for the top quartile of counties with the greatest percentage of high-income households.¹⁹ As may be expected, the annual death rate for all causes of death is higher in low-income counties than in high-income counties, which supports the idea that low-income households spend less on private mitigation of risk and are therefore exposed to greater levels of risk than high-income households on average. Overall, an individual living in a low-income

¹⁸ The U.S. Census Bureau defines a family household as " a household in which there is at least 1 person present who is related to the householder by birth, marriage or adoption. For further information see U.S.Census Bureau, "About Family and Living Arrangements" last accessed November 14, 2012, <http://www.census.gov/hhes/families/about/>

¹⁹ The information given in table 4 was obtained from the Census Bureau's American Fact Finder Database (for household income) and from the CDC's Wonder Online Database (for mortality data by county) for 62 New York counties. I divide the counties into quartiles first based on the percentage of households with annual labor and benefits income of less than \$35,000. I do the same for the percentage of households with annual income of more than \$200,000. Out of 62 New York counties, the 16 with the greatest percentage of low-income households had an average of 41.75 percent low-income households (<\$35,000), while the top 16 counties in terms of percentage of high-income households had an average of 7.45 percent high-income households (annual income > \$200,000).

county faced a 97 in 10,000 chance of death in 2007, while an individual living in a high-income county faced only a 73 in 10,000 chance of death in the same year.²⁰

These results suggest that the low-income family presented in this section is on average subject to much greater private risks than the high-income family to which it is being compared.²¹

4. Private Cost of Risk Reduction

One potential criticism of aggregating mortality risks beyond the individual level is that risks vary greatly from person to person depending on an individual's genetic makeup, risk-taking habits, diet, exercise routine, and so on. The public health literature suggests, however, that neighborhood-level socioeconomic characteristics still matter for individual mortality risk, even after controlling for individual-level characteristics such as income, education, and diet.²² This section uses existing empirical evidence for neighborhood-level adult-mortality and pediatric-injury risks to estimate the approximate cost and benefits of a potential private risk-mitigation strategy: moving to a higher-income neighborhood. Obviously, moving to a higher-income neighborhood will reduce mortality risk only for risks independent of the individual's private risk-taking behaviors. The empirical results I use to calculate the reduction in mortality

²⁰ Note, the annual all-cause mortality rate for the United States was roughly 80 in 10,000. Note also that these data are based on the existing regulatory regime; arguably, death rates might otherwise be higher.

²¹ There are obvious problems with relying on aggregate data to discuss private risk-mitigation strategies: Most of the mortality risks we face are importantly influenced by individual behaviors such as diet, exercise, and education. However, the next section will make the case that despite the fact that mortality data are difficult to aggregate beyond the level of the individual, neighborhood-level mortality effects persist and have been shown to be empirically relevant.

²² Bosma et al. (2001) show, for example, that all-cause mortality is significantly influenced by neighborhood-level socioeconomic factors; Dubowitz et al. (2008) show that neighborhood socioeconomic status is significant in explaining individual fruit and vegetable intake; Durkin et al. (1994) estimate the risk of pediatric injury for different census tracts in northern Manhattan using measures of average income in a census tract; and Cubbin, LeClere, and Smith (2000) show that neighborhood socioeconomic determinants affect individual injury mortality rates. For a somewhat dated review of the literature, see Adler and Ostrove (1994).

from moving to a higher-income neighborhood therefore control for individual-level variables such as income, education, employment status, and race. Because I rely on existing empirical data and back of the envelope calculations to arrive at these estimates, the implications of this study are limited. They allow a glimpse, however, at the relative cost and benefit of private risk-mitigation strategies.

Durkin et al. (1994) show that after controlling for individual-level characteristics, neighborhood socioeconomic status still affects pediatric-injury risk ratios. I reproduce the pediatric-injury risk ratios for the different census tracts in Manhattan by quartiles of low-income household concentration from Durkin et al. (1994) in table 5. As can be seen quickly, there is a significant difference in the risk of pediatric injury for census tracts in the lowest quartile of low-income household concentration as compared to census tracts in the highest quartile of low-income household concentration. Overall, children living in census tracts with a greater concentration of low-income households were more than twice as likely to be subjects of a pediatric injury as children living in a census tract with a low concentration of low-income households. Durkin et al. (1994, table 2) report an overall injury incidence of 72 per 10,000 of population and a mortality rate as a result of pediatric injury of 1.8 in 10,000 for the northern Manhattan census tracts in their study.

In table 5, I also report the average of census-tract median contract rent for the four quartiles of census tracts by concentration of low-income households, which I obtained from the 2000 census.²³ The difference in monthly rent between the quartile of census tracts with the highest concentration of low-income households and the quartile of census tracts with the lowest concentration of low-income households is roughly \$475. Assuming the differences in risk of

²³ I use 2000 Census data to match more closely the 1983–91 data reported in Durkin et al. (1994).

pediatric injury are attributable to neighborhood-level socioeconomic characteristics and the data used in this study effectively controls for household level characteristics, this estimate suggests that low-income households in northern Manhattan could cut their risk of pediatric injury in half by moving to a census tract with a lower concentration of low-income households. Doing so would involve an increase in their monthly rental rate of \$475 on average (increasing monthly expenditures on rent by 22 percent).

Durkin et al. (1994, table 4) report simple linear regression results for the effect of different neighborhood as well as household-level characteristics on the incidence of pediatric injury. They find that for a reduction of 1 percent in the percentage of low-income households in a census tract, the overall risk of pediatric injury would decrease by 16.7 cases in 100,000 population or almost 2 in 10,000. These results suggest that low-income households could obtain significant reductions in the risk of severe pediatric injury by moving to a neighborhood with a slightly lower concentration of low-income households, for a relatively small increase in their rental rate.

What about adult mortality risks? Cubbin, LeClere, and Smith (2000) use data from the National Health Interview Survey (1987–1994) to estimate injury-mortality hazard ratios for different individual- and census tract-level socioeconomic characteristics. Overall, their findings suggest a roughly 25 in 10,000 chance of death. For individuals in their sample, 17.4 percent of all deaths were homicides, 23 percent suicides, 33.8 percent caused by motor-vehicle accidents, and 26 percent were due to other external events.²⁴ They find that median household income in each census tract has a large effect on injury-mortality ratios even after controlling for individual-level demographics like marital status, income, educational attainment, and

²⁴ This breakdown of the different causes of death is based on the number of total deaths and the number of observations for each cause of death reported in table 2 of Cubbin, LeClere, and Smith (2000, 519).

employment status. Individuals who live in neighborhoods with a median household income between \$0 and \$25,953 are 2.7 times as likely to be homicide victims, 1.7 times as likely to be involved in motor-vehicle accidents, and 1.6 times as likely to suffer a fatal injury caused by other external causes as individuals living in neighborhoods with a median family income of \$42,933–\$150,001 (Cubbin, LeClere, and Smith 2000, table 4).

I combine these results from Cubbin, LeClere, and Smith (2000) with data on median and average rent by income bracket, to estimate the private cost of risk reduction associated with moving to a neighborhood with a lower concentration of low-income households.²⁵ I obtain this data from the census bureau for all 8,962 New York State census tracts with a median household income of less than \$150,000.²⁶ Note that the data obtained on rent are only for New York State while the data on injury mortality in Cubbin, LeClere, and Smith (2000) are based on a national sample. Despite this difference, the information on rent should help gain a better idea of the approximate private cost of risk reduction in New York State. Table 6 shows that the difference between average/median rent in census tracts with a lower median household income between \$0 and \$25,953, as compared to census tracts with a higher median household income between \$42,933 and \$150,001, is roughly \$400 a month. This suggests that households could reduce their risk of being the victim of a homicide by 62 percent (from a hazard ratio of 2.66 to a hazard ratio of 1) for a monthly cost of \$400. Similarly, by moving, they could reduce their risk of being the victim of a motor-vehicle accident by 42 percent and their risk of being the victim of another external event resulting in death by 37.5 percent. These percentage changes translate roughly

²⁵ Cubbin, LeClere, and Smith (2000) provides four income brackets \$0–\$25,953; \$25,953–\$33,271; \$33,271–\$42,933; and \$42,933–\$150,001. I use 2000 Census data (obtained from the American Fact Finder Online Database) on median household income in 1999 and median gross rent by census tract to calculate the average and median rent for all census tracts with a median household income that falls within these four brackets.

²⁶ The data in Cubbin, LeClere, and Smith (2000) are for the 1987–94 National Health Interview Survey. I use 2000 Census data on median household income and median gross rent by census tract to match the period in Cubbin, LeClere, and Smith (2000) as closely as possible.

into a reduction of homicide mortality incidence to 1.7 in 10,000 (for a 2.7 in 10,000 decrease), a reduction in risk of dying in a motor vehicle accident to 4.8 in 10,000 (for a 3.5 in 10,000 decrease), and a reduction of their risk of death from another external cause to 4.2 in 10,000 (for a 2.5 in 10,000 decrease). The only mortality risk that would slightly increase is suicide related risk, which would be 6.2 in 10,000 compared to previously 5.8 in 10,000 (0.4 in 10,000 increase).²⁷

Overall, the evidence from Durkin et al. (1994) and Cubbin, LeClere, and Smith (2000), together with the data on average/median household rent, suggests that by spending roughly \$500 more on rent a month (for a total annual expenditure increase of \$6000), households can reduce their risk of death from different types of events by at least half. Similarly, they can reduce the risk of severe pediatric injury for their children by about 50 percent.

This information is meaningful only when compared to the absolute incidence of such injuries or mortality cases, however. Since data on mortality as well as pediatric injury by income level is not available, a back of the envelope calculation has to suffice. Durkin et al. (1994) report a mean annual injury incidence rate of 72.5 per 10,000, which suggests that the incidence rate for low-income neighborhoods should be slightly above 72.5 per 10,000, and the incidence rate for higher-income neighborhoods should be slightly below it. Using 72.5 per 10,000 population as the injury incidence for low-income neighborhoods and using the risk ratios reported in Durkin et al. (1994) will therefore give us a conservative estimate of the absolute reduction in risk for low-income households that move to higher-income neighborhoods. The authors report that children living in neighborhoods with greater concentrations of low-income

²⁷ While these private risk reductions are significant (roughly 1/10,000 per year), the cost is also significant (\$500 per month). Given that moving could affect multiple children in a single household as well as adults, this type of private expenditure is likely to be a much better deal than many federal risk-reducing measures for these families.

households are 2.2 times more likely to be subject to any type of severe pediatric injury compared to children who live in neighborhoods with lower concentrations of low-income households. This suggests that moving from a largely low-income tract to a moderately low-income tract could potentially reduce these children's risk of pediatric injury by roughly 54 percent—that is, from an incidence of 72.5 per 10,000 with a 1.8 in 10,000 mortality rate to 32.95 cases per 10,000 population with a mortality rate of 0.82 per 10,000 (for a reduction in mortality from severe pediatric injury of 1 in 10,000). This potential private measure for risk reduction is significantly larger than any of the risks health and safety regulation address.²⁸ Remember from section 1 and table 2 of this paper, for example, that the initial risk addressed by floor emergency lighting in airplanes was as low as 0.00022 per 10,000 population.

We can do a similar back of the envelope calculation for adult injury mortality risk as reported in Cubbin, LeClere, and Smith (2000). The cost of moving from a low-income neighborhood to a high-income neighborhood would lie somewhere between \$400 and \$500 per month. The mortality risk in the Cubbin, LeClere, and Smith (2000) study is roughly 25 in 10,000 for all deaths, 4.4 in 10,000 for death through homicide, 5.8 in 10,000 for suicide, 8.3 in 10,000 for death through motor vehicle accident, and 6.7 in 10,000 for other external causes of death. As demonstrated, individuals can significantly reduce a number of risks by moving from low-income neighborhoods to higher-income neighborhoods.

The net risk reductions families may obtain simply by moving are significantly larger than any of the initial risks addressed by most federal health and safety regulation. What is the cost per household of different types of regulation and how does it compare to the cost of private

²⁸ Note that the top five risks addressed by regulation reported in table 2 are larger. However, these numbers reflect the initial annual risk only for the exposed population. If they were adjusted to reflect the initial annual risk for the entire population of the United States, they would in practical terms be zero.

risk reductions described in this section? To allow for at least a tentative comparison of private and public risk-mitigation strategies, the next section estimates the cost and benefit of 36 public risk-mitigation strategies enacted through regulation.

5. The Cost of Regulation

This section provides several examples of the estimated costs of regulation. The premise of this study is that social regulation and health and safety regulation often reflect the preferences of the wealthy and seek to mitigate risks that are small compared to the risks low-income families face on a daily basis. Estimates of the value of better health and greater longevity resulting from the regulation of such negligible risks usually are based on the income of average Americans and therefore ignore specific effects on low-income families (see, for example, Murphy and Topel 2006). However, John Morrall (2003) provides estimates for the cost per life saved for different types of regulation. I use his estimates to construct a measure of the cost of regulation for low- versus high-income households. Morrall finds, for example, that regulation of occupational exposure to asbestos through OSHA (passed in 1986) saves roughly 74 lives each year at a cost of \$89 million per life saved. Such stringent occupational asbestos exposure standards drive up the cost of construction, particularly the cost of renovating older buildings. Since low-income households disproportionately occupy older building structures, this regulation affects them directly.

Childcare regulation provides another case in point. Many states require childcare providers to install child-size lavatories and outdoor playground equipment. In addition, strict child-staff ratios limit the size of childcare groups. While such requirements may lead to slight improvements in childcare quality, they do not seem to have a significant effect on long-term

childcare outcomes. They do significantly drive up the price of childcare services, however, which has particularly negative consequences for low-income households. For example, for a family with less than \$1500 monthly income, the cost of childcare makes up 30 percent of the family budget. The same cost of childcare represents only 7 percent of the budget of a family with a monthly income of \$4,500 or more.²⁹

To get a better idea of the annual cost of regulation per household, I use Morrall's (2003) estimates of the cost per life saved as well as the number of lives saved per year to calculate the total cost of regulation for each of his 36 examples of implemented regulations. I combine this information with estimates from Keeney (1997) that translate the cost of \$1 billion of regulation to the household level.³⁰ Keeney provides estimates for the cost of regulation by household assuming both that the cost is borne equally by all households and, alternatively, that the cost is borne proportional to income. See table 7 for these results.³¹ The 36 regulations together reduce

²⁹ See Thomas (2011) for more detail on regulation of childcare; see page 30 of the study for the specific source of this information.

³⁰ For example, Morrall (2003) estimates the cost per life saved for steering column protection at \$100,000 (in 1984 dollars). This translates to \$166,000 per life saved in 2000 dollars. Morrall also reports that steering-column protection saves roughly 1,300 lives each year. The total cost of saving those 1,300 lives is therefore roughly \$215,800,000. Keeney (1997) reports in table 5 of his study that, assuming all households share equally in bearing the cost of regulation, the cost of \$1 billion worth of regulation (\$1.264 billion in 2000 dollars) translates into a cost of \$10.45 per household (or \$13.21 in 2000 dollars). I therefore calculate the total cost of steering-column regulation per household as \$215,800,000 divided by \$1.264 billion multiplied by \$13.21 for an annual cost per household of \$2.25 for steering-column protection.

³¹ The cost of regulation proportional to income for the two types of households is calculated using information from table 5 in Keeney (1997). Keeney reports the cost of \$1 billion of regulation per household proportional to income for a number of different income brackets. For the low-income bracket (\$25,000–\$29,999) I use Keeney's \$15,000–\$24,999 (in 1991 dollars) income bracket and translate it into 2000 dollars, which corresponds to roughly \$18,964–\$31,606 (using an inflation factor of roughly 1.26 between 1991 and 2000, obtained from the Bureau of Labor Statistics website [http://www.bls.gov/data/inflation_calculator.htm]) and would therefore contain our sample low-income household. Using this bracket, the year 2000 equivalent of the annual cost of \$1 billion of regulation for the low-income household is \$6.97. For the high-income household, I use the cost for the highest income bracket recorded in Keeney, which is \$75,000 plus (in 1991 dollars). This corresponds to roughly \$95,000 in 2000 dollars and is therefore too low to be a good representation of the cost of regulation for the high-income household (income greater than \$200,000 per year). Therefore, estimates of the cost of regulation for the high-income household will likely be too low. However, the cost of \$1 billion worth of regulation to the high-income household reported in Keeney is \$28.76, which translates to \$36.36 in 2000 dollars. The cost of \$1 billion of regulation to a household when all households share an equal burden is \$10.45 in 1991 dollars, which corresponds to \$13.21 in 2000 dollars. I

annual mortality risk by roughly 0.18 per 10,000 members of the population. The total cost per household of these 36 regulatory efforts, if all households bear an equal share of the cost of these rules, is roughly \$604 dollars per year (in 2000 dollars). If the costs were borne proportional to income, households like our low-income sample household would pay roughly \$319 per annum, while high-income households would pay roughly \$1,664 (both in 2000 dollars).³²

Table 8 summarizes the risk reduction and cost for a 1 in 10,000 reduction in mortality from the private risk-reduction strategy of moving to a higher-income neighborhood versus the risk reduction from the 36 regulations in Morrall (2003).³³ As can be seen, the cost of regulation far exceeds the cost of private risk reduction for low-income households. Assuming a proportional distribution of the cost of regulation, the cost of regulation for our low-income households represents roughly between 1 and 1.3 percent of annual income, while the cost of regulation as a percentage of income for high-income households represents roughly 0.83 percent. Assuming equal distribution of the cost of regulation, our low-income household would spend 2–2.4 percent of income on regulation, while the high-income household would spend 0.3 percent of income on regulation.

This somewhat rough approach to estimating the cost of regulation for different levels of income indicates that regulation appears to have a strong redistributive effect. More research on

also adjust the \$1 billion figure to 2000 dollars, which translates to roughly \$1,264,317,181 using the BLS inflation calculator.

³² I use the cost of \$1 billion of regulation per household from Keeney (1997) together with the total cost of regulation reported in Morrall (2003), both adjusted to 2000 dollars, to calculate the annual cost per household of each of the 36 regulatory efforts reported in table 7. The total cost per household of the reduction in mortality risk of 0.18 per 10,000 members of population reported here is the sum of the cost of each of the 36 individual types of regulation.

³³ Notice that neither of the two measures is a very accurate estimate of the actual costs and benefits of private risk reduction or public risk-reduction strategies. The benefits of the private risk-reduction strategy do not incorporate all potential benefits from relocating to a higher-income neighborhood. Further, it is not clear that the quantified risks would actually be reduced by the amount this study suggests, because mortality risks, while certainly influenced by neighborhood effects, are importantly influenced by individual behaviors such as diet and exercise. Similarly, the 36 different regulations taken from Morrall do not come close to approximating the total cost or benefits of public risk-mitigation strategies. However, both measures give a rough idea of the two alternative strategies for risk reduction.

the topic is needed; however, regulators should recognize the strong likelihood that regulation has a redistributive effect from poor households to the richer households whose preferences are represented by regulation.

6. Conclusion

Well-intentioned regulation often represents the preferences of the wealthy by regulating otherwise negligible risks. By driving up prices for all consumers, such regulation is likely to have disproportionately negative or regressive effects on the poor. This study shows that compared to potential private risk-reduction strategies, regulation tends to target low risks that are extremely expensive to mitigate. Such regulations, therefore, represent the preferences of the wealthy and come at the expense of low-income households.

The 36 different regulations included in this rough estimation of the cost and benefits of public risk-mitigation strategies resulted in a total reduction in the risk of a fatality of 0.18 in 10,000 of population and cost approximately \$604 per household, which translates to \$3,359 for a 1 in 10,000 reduction in mortality. In contrast, the private risk-reduction strategy of moving to a high-income neighborhood would reduce mortality risk by roughly 8.3 in 10,000 people for adult mortality risks and by 1 in 10,000 for pediatric injury risk. Such private risk-reduction costs a total of \$6,000 per household, which translates into a cost of \$645.16 for a mortality risk reduction of 1 in 10,000 people. In consequence, having to pay for small risk reductions through regulation may prevent low-income households from taking more beneficial private risk reduction strategies that would result in a greater reduction in mortality.

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**Table 1: Annual Death Rate per 10,000 Population,
Top 10 Causes and Specific Accidents (2009)**

Cause of Death	Rate*
All Causes	79.4
Heart Disease	19.5
Cancer	18.5
Lung Disease (Emphysema, Chronic bronchitis)	4.5
Stroke	4.2
Accidents	3.8
Alzheimer's	2.6
Diabetes	2.2
Influenza and pneumonia	1.8
Nephritis, nephrotic syndrome and nephrosis	1.6
Suicide	1.2
All Accidents	3.8
Motor vehicle accidents	1.2
Poisoning	1.0
Fall	0.8
Drowning	0.1
Fire	0.1
Accidental Discharge of Firearm	0.02

Source: Kochanek et al. (2011), Deaths: Final Data for 2009, National Vital Statistical Reports, vol. 60, no. 3, Table 11, pp. 93-97.

Note: *Rate is number of people per 10,000 members of the population.

**Table 2: Annual Death Rate per 10,000 of Exposed
Population for Regulated Risks**

Cause of Death	Rate*
TOP 5	
Arsenic (OSHA)	18
Crane Suspended Personnel Platform (OSHA)	18
Underground Construction (OSHA)	16
Oil and Gas Well Service (OSHA)	11
Acrylonitrile	9.4
BOTTOM 5	
DES Cattlefeed	0.0031
Seat Cushion Flammability	0.0016
Cabin Fire Protection	0.00065

Land Disposal Restrictions	0.00023
Floor Emergency Lighting	0.00022

Source: Morrall (2003), Table 1.

Note: *Rate is number of people per 10,000 members of the population.

Table 3: Selected Characteristics of Households, by Total Money Income in 2010

	Low Income (\$25,000–\$29,999)	High Income (>\$200,000)
Total number of households of this size in the United States	6730	4627
Percentage of all U.S. households	5.67%	3.9%
Percentage in Metro Statistical Area	80.52%	94.19%
Percentage Outside Metro Statistical Area	19.48%	5.81%
Percentage in Northeast	16.92%	24.98%
Percentage in Midwest	22.66%	16.34%
Percentage in South	39.87%	32.05%
Percentage in West	20.55%	26.63%
Family Households	58.74%	88.70%
Married-couple families	36.09%	82.73%
Female householder	17.53%	3.09%
Five-person household	4.53%	11.32%
Mean size of household	2.31	3.3
Two earners	15.1%	53.10%
Mean number of earners	0.88	2.06
High school graduate (includes equivalency)	34.46%	7.82%
Bachelor's degree or higher	15.93%	76.72%
Percentage owner occupied	55.85%	90.62%
Percent renter occupied	42.54%	9.03%

Source: The information contained in this table is based on, U.S. Census Bureau and Bureau of Labor Statistics, *Current Population Survey, 2010*, <http://www.census.gov/cps>.

**Table 4: Annual Death Rate by County
for Low- and High-Income Counties**

per 1000 of population (2008)

Cause	Low-Income Counties	High-Income Counties
Heart Disease	2.987	2.387
Accidents	0.35	0.267
Diabetes	0.271	0.155
Cancer	2.18	1.793
Stroke	0.254	0.156
Suicide	0.1191	0.0863
Homicide	0.0942	0.0418
All Causes	9.68	7.31

Note: The rates reported are average death rates for the 16 New York counties with the highest concentration of households with an annual income of less than \$35,000/more than \$200,000.

Source: Data for household income obtained from U.S. Census Bureau, American Fact Finder Database 2010 Census,

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>. Data for death rates by county (Underlying Causes of Death - Detailed Mortality) for 2008 obtained from CDC, Wonder Online Database, <http://wonder.cdc.gov>.

Table 5: Pediatric Injury by Percentage of Low-Income Households in Neighborhood and Average Neighborhood Rent

Concentration of low-income households in census tract	Average % of low-income households	Average of census tract median contract rent (in 2000 dollars)	Pediatric Injury Risk Ratio (RRs) for Different Census Tracts										
			All injuries	Unintentional injuries	Assault injuries	Self-inflicted injuries	Injuries of undetermined cause	Motor-vehicle injuries	Pedestrian injuries	Fall injuries	Gunshot injuries	Burn injuries	
lower 25 percentile	17.86	\$878.75	1	1	1	1	1	1	1	1	1	1	1
50 percentile	31.73	\$538.00	1.7	1.6	2.6	2.3	1.6	1.9	2	1.5	2.4	1.4	1.4
75 percentile	37.67	\$490.00	1.7	1.6	2.6	2.3	1.6	1.9	2	1.5	2.4	1.4	1.4
top 25 percentile	47.03	\$403.48	2.2	2	4.5	1.9	1.8	2.5	3.1	1.9	3.4	1.6	1.6

Source: Durkin et al. (1994) and U.S. Census Bureau, 2000 Census.

Table 6: Rate Ratios for Adult Injury Mortality by Cause of Death for Respondents to National Health Interview Survey and Average Rent by Income Bracket for 8,962 New York Census Tracts

Income brackets from Cubbin, LeClere, and Smith (2000), median income for all households in Census Block Group	Average and Median Rent ¹		Hazard Ratios for Injury Mortality by Cause of Death ²					
	Average Rent	Median Rent	Homicide	Suicide	Motor Vehicle	Other External		
\$0-\$25,953	\$532.69	\$571.00	2.66	0.95	1.73	1.60		
\$25,953-\$33,271	\$680.62	\$692.00	1.64	1.46	1.89	1.24		
\$33,271-\$92,933	\$751.89	\$749.50	2.67	1.01	1.38	1.28		
\$42,933-\$150,001	\$960.01	\$923.00	1.00	1.00	1.00	1.00		

¹ By income group calculated using 2000 Census data for all New York County, New York Block Groups

² For persons aged 18-64 who responded to the National Health Interview Survey 1987-94 with follow up until 1995 and linked to the 1990 U.S. Census (n=472,364) from Cubbin, LeClere, and Smith (2000), full model results reported, which adjust for demographic characteristics, marital status, income to needs, educational attainment, and employment/occupational status.

Table 7: Cost of Specific Types of Regulation for a Low- and a High-Income Household

Regulation ¹	Year ¹	Agency ¹	Annual Lives Saved ¹	Lives saved per 100,000 residents ²	Total Cost (2000\$) ³	Cost to a low-income household per year (2000\$) ⁴	Cost to a high-income household per year (2000\$) ⁴	Cost per household for equal cost distribution (2000\$) ⁴
Acrylonitrile	1978	OSHA-H	6.9	0.00230	\$430,670,400.00	2.37	12.39	\$4.50
Alcohol & Drug Control	1985	FRA	4.2	0.00140	\$3,486,000.00	0.02	0.10	\$0.04
Arsenic	1978	OSHA-H	11.7	0.00390	\$1,796,535,000.00	9.90	51.67	\$18.77
Arsenic/Copper Smelter	1986	EPA	0.06	0.00002	\$2,639,400.00	0.01	0.08	\$0.03
Arsenic/Glass Paint	1986	EPA	0.11	0.00004	\$3,505,920.00	0.02	0.10	\$0.04
Asbestos	1972	OSHA-H	396	0.13200	\$4,864,464,000.00	26.82	139.90	\$50.83
Asbestos	1986	OSHA-H	74.7	0.02490	\$11,073,378,600.00	61.05	318.45	\$115.70
Asbestos	1986	EPA	10	0.00333	\$1,729,720,000.00	9.54	49.74	\$18.07
Benzene	1985	OSHA-H	3.8	0.00127	\$107,866,800.00	0.59	3.10	\$1.13
Benzene/Fugitive Emissions	1984	EPA	0.31	0.00010	\$1,440,880.00	0.01	0.04	\$0.02
Cabin Fire Protection	1985	FAA	15	0.00500	\$4,980,000.00	0.03	0.14	\$0.05
Children's Sleepware Flammability	1973	CPSC	106	0.03533	\$228,748,000.00	1.26	6.58	\$2.39
Coke Ovens	1976	OSHA-H	31	0.01033	\$3,180,228,000.00	17.53	91.46	\$33.23
Concrete & Masonry Construction	1985	OSHA-S	6.5	0.00217	\$15,106,000.00	0.08	0.43	\$0.16
Crane Suspended Personnel Platform	1984	OSHA-S	5	0.00167	\$7,470,000.00	0.04	0.21	\$0.08
DES (Cattlefeed)	1979	FDA	68	0.02267	\$14,900,160,000.00	82.14	428.51	\$155.68
EDB	1983	OSHA-H	0.002	0.00000	\$51,792,000.00	0.29	1.49	\$0.54
Ethylene Oxide	1984	OSHA-H	2.8	0.00093	\$118,988,800.00	0.66	3.42	\$1.24
Floor Emergency Lighting	1984	FAA	5	0.00167	\$5,810,000.00	0.03	0.17	\$0.06
Formaldehyde	1985	OSHA-H	0.01	0.00000	\$1,195,200,000.00	6.59	34.37	\$12.49
Fuel System Integrity	1975	NHTSA	400	0.13333	\$199,200,000.00	1.10	5.73	\$2.08
Grain Dust	1984	OSHA-S	4	0.00133	\$18,592,000.00	0.10	0.53	\$0.19
Hazard Communication	1983	OSHA-S	200	0.06667	\$597,600,000.00	3.29	17.19	\$6.24
Land Disposal	1986	EPA	2.52	0.00084	\$14,641,200,000.00	80.71	421.06	\$152.98
Oil & Gas Well Service	1983	OSHA-S	50	0.01667	\$8,300,000.00	0.05	0.24	\$0.09
Passive Restraints	1984	NHTSA	1,850.00	0.61667	\$921,300,000.00	5.08	26.50	\$9.63
Radionuclides/Uranium Mines	1984	EPA	1.1	0.00037	\$12,599,400.00	0.07	0.36	\$0.13
Seat Cushion Flammability	1984	FAA	37	0.01233	\$36,852,000.00	0.20	1.06	\$0.39
Servicing Wheel Rims	1984	OSHA-S	2.3	0.00077	\$1,909,000.00	0.01	0.05	\$0.02
Side Doors	1970	NHTSA	480	0.16000	\$1,035,840,000.00	5.71	29.79	\$10.82
Steering Column Protectin	1967	NHTSA	1,300.00	0.43333	\$215,800,000.00	1.19	6.21	\$2.25
Trihalomethanes	1979	EPA	322	0.10733	\$160,356,000.00	0.88	4.61	\$1.68
Underground Construction	1983	OSHA-S	8.1	0.00270	\$4,033,800.00	0.02	0.12	\$0.04
Unvented Space Heaters	1980	CPSC	63	0.02100	\$10,458,000.00	0.06	0.30	\$0.11

Uranium Mill Trailings/Active	1983	EPA	2.1	0.00070	\$184,758,000.00	1.02	5.31	\$1.93
Uranium Mill Trailings/Inactive	1983	EPA	2.1	0.00070	\$96,213,600.00	0.53	2.77	\$1.01
All Regulation Combined			5,471.31	1.82377		319.01	1,664.18	\$604.62

¹The information for regulation, year, agency, and annual lives saved are taken from Morrall (2003, table 1).

²Lives saved per 100,000 residents are calculated using Morrall's (2003) total lives saved and dividing by 3000 to get a number for lives saved per 100,000 residents assuming a U.S. population of 300,000,000 residents.

³The information for total cost is taken from Morrall (2003), and adjusted to 2000 dollars. Morrall reports his estimates in 1984 dollars. The inflation factor from 1984–2000 of 1.66 was obtained from the Bureau of Labor Statistics (BLS) website (http://www.bls.gov/data/inflation_calculator.htm).

⁴The cost of regulation proportional to income for the two types of households is calculated using information from Keeney (1997, table 5). Keeney reports the cost of \$1 billion of regulation per household proportional to income for a number of different income brackets. For the low-income bracket (\$25,000–\$29,999) I use Keeney's \$15,000–\$24,999 (in 1991 dollars) income bracket, which corresponds to roughly \$18,964–\$31,606 in 2000 dollars (using an inflation factor of roughly 1.26 between 1991 and 2000 obtained from the BLS website (http://www.bls.gov/data/inflation_calculator.htm)) and would therefore contain our sample low-income household. Using this bracket, the year 2000 equivalent of the annual cost of \$1 billion of regulation for the low-income household is therefore \$6.97. For the high-income household, I use the cost for the highest income bracket recorded in Keeney, which is \$75,000 plus (in 1991 dollars). This corresponds to roughly \$95,000 in 2000 dollars and is therefore too low to be a good representation of the cost of regulation for the high-income household (income greater than \$200,000 per year). The estimates of the cost of regulation for the high-income household will likely be too low. However, the cost of \$1 billion worth of regulation to the high-income household reported in Keeney is \$28.76, which translates to \$36.36 in 2000 dollars. The cost of \$1 billion of regulation to a household when all households share an equal burden is \$10.45 in 1991 dollars, which corresponds to \$13.21 in 2000 dollars. I also adjust the \$1 billion figure to 2000 dollars, which translates to roughly \$1,264,317,181 using the BLS inflation calculator.

Table 8: Cost and Benefits of Regulation vs. Private Risk Reduction

	Risk Reduction (per 10,000 population)	Cost per household per year	Cost for a 1 in 10,000 reduction in mortality risk
Private Risk Reduction	Moving from a largely low-income neighborhood to a neighborhood with fewer low-income households	\$6,000.00	\$645.16
	1 from severe pediatric injury; 8.3 for adult mortality		

Regulation (36 measures reported in Morrall [2003])	Low-income household if cost borne is proportional to income	0.18 for exposed population	\$319.01	\$1,772.28
	High-income household if cost borne is proportional to income	0.18 for exposed population	\$1,664.18	\$9,245.44
	If cost is distributed equally among all households	0.18 for exposed population	\$604.62	\$3,359.00

Note: The cost for a 1 in 10,000 reduction in mortality risk is calculated as cost per household per year divided by the risk reduction per 10,000 people. For example, for the private risk-reduction strategy, I divide \$6,000 by 9.3 (reduction in pediatric injury plus reduction in adult mortality).

Source: Author's calculations and Morrall (2003), Keeney (1997), Durkin et al. (1994), and Cubbin, LeClere, and Smith (2000)

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WORKING PAPER

THE CONSEQUENCES OF REGULATORY ACCUMULATION
AND A PROPOSED SOLUTION

by Patrick A. McLaughlin and Richard Williams



The opinions expressed in this Working Paper are the authors' and do not represent official positions of the Mercatus Center or George Mason University.

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Abstract

The American regulatory system has no working, systematic process for reviewing regulations for obsolescence or poor performance. Over time, this has facilitated the accumulation a vast stock of regulations. Regulatory accumulation can negatively affect GDP growth, labor productivity, innovation, and safety—perhaps explaining why every president since Jimmy Carter has recognized it as a problem. We examine previous, presidentially led efforts to initiate a review of existing regulations in the United States, and show that these efforts have not materially altered the stock of regulations. In contrast, we examine other, successful government reform efforts in order to identify their characteristics. After outlining the obstacles to regulatory cleanup that previous efforts in the United States failed to address, we suggest a process that could be adopted in order to eliminate or modify obsolete or otherwise undesirable regulations. Finally, we evaluate our proposal alongside other recent proposals with regard to how well they overcome the previously identified obstacles to regulatory review and cleanup.

JEL codes: H1, H23, K23, L51, J810

Keywords: regulation, regulatory accumulation, regulatory cleanup, retrospective review, retrospective analysis, consequences of regulation, unintended consequences, economic growth, regulatory improvement commission, regulatory review commission, BRAC for regulations, regulation and safety, nonfunctional rules, risk reduction, risk management, workplace safety

The Consequences of Regulatory Accumulation and a Proposed Solution

Patrick A. McLaughlin and Richard Williams

1. Introduction

While every American president for the past 30 years has embraced the notion of performing economic analysis on new regulations before their implementation, no president has successfully reexamined the enormous stock of previously existing regulations that he inherited nor materially altered the growth of the stock of regulations. Yet this stock of federal regulations in the United States is enormous and growing. In 2012, the Code of Federal Regulations—the series of books that contain all the currently applicable federal regulations—comprised over 170,000 pages of dense legal text. Importantly, as the quantity and scope of regulations grow, so does the degree to which they can negatively affect people and the economy.

The buildup of regulations is a consequence of a reactive regulatory system. As economists Michael Mandel and Diana Carew recently wrote, “The political system, understandably, reacts to major events—new technologies, corporate accounting scandals, environmental discoveries, or reports of tainted food or faulty products.” When regulations are created in reaction to major events, “new rules are [placed] on top of existing reporting, accounting, and underwriting requirements. . . . For each new regulation added to the existing pile, there is a greater possibility for interaction, for inefficient company resource allocation, and for reduced ability to invest in innovation. The negative effect on U.S. industry of regulatory accumulation actually compounds on itself for every additional regulation added to the pile.”¹

¹ Michael Mandel and Diana G. Carew, “Regulatory Improvement Commission: A Politically-Viable Approach to U.S. Regulatory Reform” (Policy Memo, Progressive Policy Institute, Washington, DC, May 2013), 3–4, <http://www.progressivepolicy.org/2013/05/regulatory-improvement-commission-a-politically-viable-approach-to-u-s-regulatory-reform/>.

The existing regulatory system requires that executive branch agencies “adopt a regulation only upon a reasoned determination that the benefits of the intended regulation justify its costs.”² Unfortunately, this requirement only involves prospective analysis, and not retrospective analysis. As a former chief economist of the Council of Economic Advisers put it, “The single greatest problem with the current system is that most regulations are subject to cost-benefit analysis only in advance of their implementation.”³ While prospective analysis can certainly help avoid some regulatory pitfalls, only in hindsight can an analysis determine whether the benefits that a rule was intended to achieve are actually being realized and whether those benefits do indeed justify the costs of the rule.

The need to eliminate or modify some regulations from the accumulated stock has been widely recognized by members of Congress and every president since Carter.⁴ In his 2011 State of the Union address, for example, President Obama noted, “There are twelve different agencies that deal with exports. There are at least five different agencies that deal with housing policy. Then there is my favorite example: The Interior Department is in charge of salmon while they are in fresh water, but the Commerce Department handles them when they’re in saltwater. I hear it gets even more complicated when they are smoked.”⁵ Nonetheless, executive branch attempts to examine and revise or eliminate existing regulations have primarily relied on executive orders for review of the need for regulations, rather than creating a streamlined and evidence-based, analytical process that could accomplish large-scale reform. Economist Randall Lutter terms retrospective *review* an “administrative process” that uses the Administrative Procedure Act to

² Executive Order 12866, 58 Fed. Reg. 51734 (1993).

³ Michael Greenstone, “Toward a Culture of Persistent Regulatory Experimentation and Evaluation,” in *New Perspectives on Regulation*, ed. David Moss and John Cisternino (Cambridge, MA: Tobin Project, 2009), 113.

⁴ Mandel and Carew, “Regulatory Improvement Commission.”

⁵ Barack Obama, “Remarks by the President in State of Union Address,” January 25, 2011, Washington, DC (White House, Office of the Press Secretary), <http://www.whitehouse.gov/the-press-office/2011/01/25/remarks-president-state-union-address>.

ultimately revise or eliminate rules.⁶ He differentiates that from retrospective *analysis*, which uses economics and science to “assess the benefits and costs of existing regulations relative to a hypothetical scenario without such regulations.” To date, there has been neither large-scale retrospective analysis nor the creation of a process that would eliminate failing regulations.⁷ Congress recognized the problem in 2000, passing the Regulatory Right-to-Know law that asks OMB to recommend areas for reform, including information on the effects of federal rules and paperwork “in the aggregate, by agency and agency program, and by major rule.”⁸ Despite this effort, regulations continue to accumulate, and the ability of presidential administrations to clean up obsolete or otherwise undesirable regulations appears rather limited.

Most efforts at regulatory cleanup have relied on the agencies that originally created the rules and have no incentive or inclination to remove them. In fact, even if agencies were to attempt to eliminate or modify rules in bulk, they must do so through the informal rulemaking process established by the Administrative Procedure Act. Doing so would, of course, attract comments from special interest groups that may have vested interests in preserving existing rules, making their modification or elimination that much more difficult. Furthermore, retrospective review without congressional authority is limited: even if they were so inclined, agencies can only remove those rules that were allowed, but not required, by statute.

This paper outlines why a congressional regulatory reform effort to eliminate obsolete, inefficient, or ineffective regulations, which we later describe as “nonfunctional” rules, is necessary and develops some recommendations on how to do that. Several attempts at

⁶ Randall Lutter, “The Role of Retrospective Analysis and Review in Regulatory Policy” (Mercatus Working Paper No. 12-14, Mercatus Center at George Mason University, Arlington, VA, April 2012), 6, http://mercatus.org/sites/default/files/Lutter_Retrospective_v1-2.pdf.

⁷ *Ibid.*, 7.

⁸ Regulatory Right-to-Know Act, 31 U.S.C. § 1105 (2000).

eliminating or modifying government programs are evaluated, including relatively unsuccessful attempts at regulatory cleanup as well as largely successful attempts at eliminating waste and obsolescence, such as the Base Realignment and Closure Commissions. Based on these reviews, the key obstacles that a successful attempt at regulatory cleanup must overcome are explained. Recommendations designed to overcome these obstacles are given in the last section, which details our proposal to create a Regulatory Review Commission. This independent commission would be tasked with assessing the effectiveness of existing regulations and recommending changes to or repeals of regulations to Congress, with the objective of achieving a reduction of regulations equal to or greater than some predetermined, quantitative threshold.

To streamline this process and eliminate the possibility of pork-barrel politics, our recommendation stipulates that Congress can only halt the recommendations of the commission from going into effect with a joint resolution of disapproval of the entire package. In sum, a commission identifies rules or programs for elimination or modification, and Congress is given only the possibility of doing nothing—implying acceptance—or producing a joint resolution of disapproval, without amendments. This waters down the influence of special interest groups by eliminating Congress’s ability to “cherry pick.”⁹

The remainder of this paper proceeds as follows. In section 2, we review evidence of the problems caused by regulatory accumulation. Section 3 reviews previous efforts to address regulatory accumulation in the United States and other, more successful efforts at serious government reform in the United States and elsewhere. Section 4 discusses lessons learned from those efforts and develops a framework for evaluating proposals for regulatory cleanup based on

⁹ By “cherry pick” we mean the ability of members to choose certain regulations or programs to keep that are in their best interests, such as programs that benefit their constituents, and accept the recommendations to eliminate other regulations.

those lessons. Section 5 focuses on our recommendations on how to create a streamlined process for eliminating obsolete or otherwise undesirable regulations. Section 6 evaluates our proposal within the context of the framework developed in section 3, alongside five other bills that were proposed in the 112th or 113th Congresses that also address the topic of regulatory cleanup. Section 7 concludes.

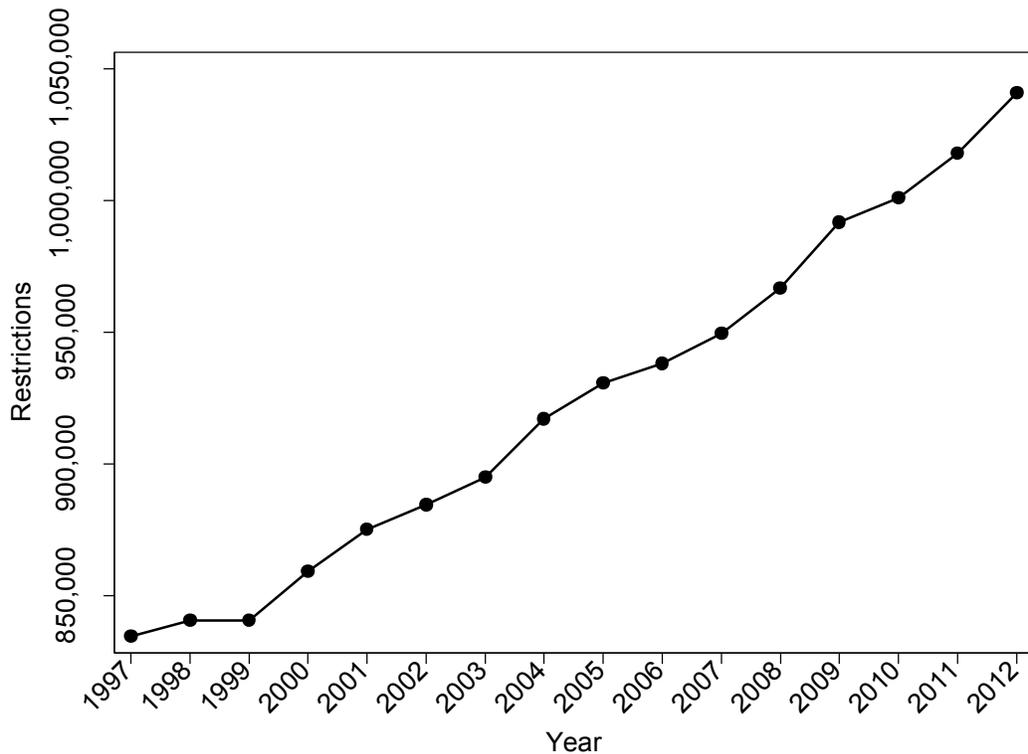
2. The Problems of Regulatory Accumulation

By all measures, regulation has been increasing for several decades. Figure 1 shows the growth of federal regulations from 1997 to 2012, as measured by counting the number of restricting words, such as “shall,” “must,” or “required” (hereafter called “restrictions”), that are printed in the *Code of Federal Regulations* each year.¹⁰ The total number of restrictions in federal regulations has grown from about 835,000 in 1997 to over 1 million by 2010. That averages out to nearly 12,000 new restrictions created each year.

Large-scale retrospective analysis, coupled with a streamlined mechanism for eliminating obsolete or otherwise undesirable regulations, can dramatically improve economic performance. Additionally, and in a way that is most likely related, regulatory cleanup may positively affect international competitiveness, entrepreneurship, and safety. The existing stock of regulations is so large that any regulatory reform effort that focuses only on new regulations while ignoring the accumulated stock, as several executive orders, guidance memos, acts of Congress, and bills currently under consideration do, is bound to miss significant opportunities to improve the US economy via regulatory cleanup.

¹⁰ Omar Al-Ubaydli and Patrick A. McLaughlin, “RegData: The Industry-Specific Regulatory Constraint Database (IRCD)” (Mercatus Working Paper No. 12-20, Mercatus Center at George Mason University, Arlington, VA, July 2012), <http://mercatus.org/publication/industry-specific-regulatory-constraint-database-ircd>.

Figure 1. Federal Regulation Restrictions, 1997–2012



2.1. Regulation and Economic Performance

A recent study by economists John W. Dawson and John J. Seater found that between 1949 and 2005 the accumulation of federal regulations slowed economic growth by an average of 2 percent per year.¹¹ Dawson and Seater’s study is groundbreaking in that they use the page count of the *Code of Federal Regulations* as a measure for regulatory growth, allowing them to consider all federal regulations over a long period of time, instead of a specific group or type of regulations over a short timeframe. However, it is not an outlier. Several earlier studies using broad indexes, such as those produced by the World Bank and OECD, have permitted cross-country comparisons of the effects of certain types of regulations, such as barriers to entry. These

¹¹ John W. Dawson and John J. Seater, “Federal Regulation and Aggregate Economic Growth,” *Journal of Economic Growth* 18 (2013): 137–77.

earlier studies also reveal the negative impacts regulation can have on economic growth. One widely cited example is “Regulation and Growth” by Simeon Djankov and his colleagues, which finds that a country’s improvement from the first to the fourth quartile of business regulations, as measured by the World Bank’s Doing Business index, implies a 2.3 percentage point increase in annual GDP growth.¹²

Another study published by the World Bank finds that, holding a country’s level of governance (a measure of how effectively a country is governed) equal to the world median, a one standard deviation increase in regulatory burdens as measured by the study’s synthetic regulatory index (comprising separate indexes, including those developed by the World Bank, KPMG, the PRS Group, the Fraser Institute, and the Heritage Foundation) leads to a 0.3 percentage point decrease in GDP per capita.¹³ Economists Gorgens et al. (2003) find that a heavily regulated economy will likely have economic growth lower on average by 2 to 3 percentage points versus less regulated economies.¹⁴ They use the Fraser Institute’s Economic Freedom Index as their measure of regulatory burden.

The negative economic effects of widespread regulation are also revealed by the positive effect that large-scale deregulatory efforts across developed countries historically have had on investment and economic growth. For example, Alberto Alesina and his colleagues find that deregulation in the United Kingdom’s transportation and communications sectors during the mid-1980s led to an increase in the investment rate of about 3 percentage points.¹⁵ They find that

¹² Simeon Djankov, Caralee McLiesh, and Rita Maria Ramalho, “Regulation and Growth,” *Economics Letters* 92, no. 3 (2006): 400.

¹³ Norman V. Loayza et al., “The Impact of Regulation on Growth and Informality: Cross-Country Evidence” (World Bank Policy Research Working Paper No. 3623, 2005), 8.

¹⁴ Tue Gorgens, Martin Paldam, and Allan Würtz, “How Does Public Regulation Affect Growth?” (Working Paper No. 2003-14, University of Aarhus, 2003), 15.

¹⁵ Alberto Alesina et al., “Regulation and Investment,” *Journal of the European Economic Association* 3, no. 4 (2005): 810.

when the United States and the United Kingdom liberalized product markets in the late 1970s and early 1980s, both nations realized significant surges in investment as a share of capital stock—from 3.7 percent in 1975 to 8.15 percent in 1998. On the other hand, during that same time, investment rates in continental European countries where large-scale deregulatory reforms were not implemented—such as Italy, France, and Germany—decreased 5 percentage points.

A large number of rules also make it difficult to start new businesses, likely contributing to the drag on economic growth discussed above. According to *Forbes*, entrepreneurs start about 540,000 new US companies every month.¹⁶ An extensive body of literature has documented a negative effect of regulation on entrepreneurship, and one likely reason may be the sheer difficulty of sorting through over 1 million federal requirements, in addition to all of the state and local (and possibly international) regulations to begin a business.¹⁷

Finally, the growing stock of regulations in the United States is one issue that has contributed to this country being increasingly disadvantaged in international competitiveness. The United States has slipped to tenth place from fourth (1995) in Heritage’s 2013 Index of Economic Freedom.¹⁸ The Fraser Institute’s Economic Freedom of the World index shows an even more precipitous decline for the United States, falling from third best in its ranking for the regulation category in 2001 to seventeenth in 2011.¹⁹ This decline is partially driven by the

¹⁶ Cheryl Conner, “Who’s Starting America’s New Businesses? And Why?” *Forbes.com*, July 22, 2012, <http://www.forbes.com/sites/cherylsnappconner/2012/07/22/whos-starting-americas-new-businesses-and-why/>.

¹⁷ See, for example, Bruce Benson, “Opportunities Forgone: The Unmeasurable Costs of Regulation,” *Journal of Private Enterprise* 19, no. 2 (2004): 1–25; Leora Klapper, Luc Laeven, and Raghuram Rajan, “Entry regulation as a barrier to entrepreneurship,” *Journal of Financial Economics* 82, no. 3 (2006): 591–629; Stefano Scarpetta et al., “The Role of Policy and Institutions for Productivity and Firm Dynamics: Evidence from Micro and Industry Data” (Working Paper No. 329, OECD Economics Department, 2002); and Kristina Nyström, “The Institutions of Economic Freedom and Entrepreneurship: Evidence from Panel Data,” *Public Choice* 136, no. 3–4 (2008): 269–82.

¹⁸ “2014 Index of Economic Freedom,” Heritage Foundation, accessed Jan. 27, 2014, <http://www.heritage.org/index/>.

¹⁹ James Gwartney, Robert Lawson, and Joshua Hall, “2012 Economic Freedom Dataset,” published in *Economic Freedom of the World: 2012 Annual Report*, Economic Freedom Network, 2012, <http://www.freetheworld.com/countrydata.php?country=C135>.

failure to improve the regulatory system and clean up obsolete and inefficient regulations, and it has contributed to the United States' overall ranking in economic freedom decreasing from third best in 1980 to nineteenth in 2010.

2.2. Regulation, Health, and Safety

In traditional models, many government interventions consist of addressing risks to reduce overall risk profiles. That is, risks are discovered, and, in response, governments pass laws and regulations to address those risks. But is it true that overall risk is diminished as a result of these interventions? In theory, a primary goal of many government interventions—especially environmental, health, and safety regulation—is to reduce overall risk profiles. However, a regulatory system that facilitates the accumulation of risk regulations contains a self-defeating characteristic: the proliferation of static regulatory requirements that may inhibit risk managers from dynamically responding to more pressing and relevant risk issues. To effectively address both large and small risks, as well as new and existing risks, requires constant readjustment of priorities by those who must actually manage risk reduction (as opposed to social decision-makers). Currently, a lack of risk information associated with regulations and legal constraints prevents prioritization of risks. Nevertheless, like all resources, risk management resources are constrained. With a resource constraint, as more regulations are added to the mix, fewer resources can be devoted to managing each risk.

We start with the premise that regulations can be roughly divided into two categories, what we will call “functional” and “nonfunctional.” Those that are functional address current, significant risks, mitigate some amount of those risks through compliance with the regulations, and do not have significant unintended effects or excessive compliance costs relative to their

benefits. Those that are nonfunctional are missing one or more of these features. There are a number of ways in which rules can be nonfunctional.

Nonfunctional rules. To be categorized as functional, a rule must address current and significant risks (or, more generally, problems). Rules may not do that if they are outdated, but it may also be the case that they never actually did. It is also possible that the regulations addressing particular risk issues have worked and the risks have been reduced to safe (*de minimis*) levels.²⁰ In other cases, the rules may be addressing significant risks but not actually mitigating those risks. Again, it may be the case that they did mitigate the risk at some point but do not now. Table 1 below shows our proposed first test for whether a rule is functional or nonfunctional.

Table 1. The First Test for Functionality of a Rule

	Significant risk	Nonsignificant risk
Current risk	Functional	Nonfunctional
Noncurrent risk	Nonfunctional	Nonfunctional

However, even if a rule qualifies as functional in the first test, a second wave of tests may still find it nonfunctional. These tests include the weighing of unintended consequences, including risk-risk tradeoffs; the duplication of and possible interference with other rules; and a current benefit-cost analysis.

First in that wave of secondary tests is the weighing of unintended consequences. Some existing rules have unintended harmful consequences that may more than offset the direct benefits of the rules. These consequences may not have manifested themselves immediately after

²⁰ It may be that even though risks are reduced to *de minimis* levels, further enforcement is needed if it is found that market mechanisms have not supplied sufficient incentives to stay at those risk levels.

the rule's promulgation, but may have grown apparent over time. In some cases, these unintended consequences should have been foreseeable but were not analyzed.²¹ If these unintended consequences, such as risk-risk tradeoffs, are severe enough to offset the benefits of the primary risk being reduced, then the rule is nonfunctional. A risk-risk issue arises as an attempt to reduce one risk increases other risks.²²

All activities that humans engage in, and all substances humans are exposed to, create some risk, however small. This is the lesson from the founding principle of toxicology: "All things are poison, and nothing is without poison; only the dose permits something not to be poisonous."²³ This statement has been generalized to mean "the dose makes the poison." This is true of both (1) exposure to substances (chemicals, microbial agents, radiation and physical hazards) and (2) activities (work, play). Given that every substance and activity creates risk, every attempt to exchange one activity for another or substitute one substance for another has the possibility of increasing countervailing risks. Because there is often tremendous uncertainty regarding both risk decreases caused, for example, by regulation and increases in countervailing risks, there will often be uncertainty about whether overall risk has increased.

Second, rules may directly reduce safety if they interfere with other rules. This is the result of adding more safety rules that eventually begin to interfere with the ability to consider other safety issues, possibly leading to less overall safety. The assumption that more rules equals more safety was referred to as a *linear assumption* by sociologist Elizabeth Nichols

²¹ Sherzod Abdukadirov, "The Unintended Consequences of Safety Regulation" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, June 4, 2013), http://mercatus.org/sites/default/files/Abdukadirov_UnintendedConsequences_v1.pdf.

²² For a discussion of countervailing risks, see John D. Graham and Jonathan Baert Wiener, *Risk vs. Risk: Tradeoffs in Protecting Health and the Environment* (Cambridge, MA: Harvard University Press, 1997).

²³ B. Madea, F. Mußhoff, and G. Berghaus, *Verkehrsmedizin: Fahreignung, Fahrsicherheit, Unfallrekonstruktion* (Cologne: Deutscher Ärzte-Verlag, 2007), 435.

and political scientist Aaron Wildavsky.²⁴ They noted, “Adding new safety devices and procedures is no guarantee of increased safety. Operational safety is not merely additive or linear but highly conditional and contingent. Unforeseen interactions may foil the purpose of the new addition. That is, new dangers can arise from the added safety effort itself.”²⁵ For example, the worst nuclear accident to date at the time they wrote the article, the Chernobyl nuclear power accident, was at least in part the result of adding more safety checks while the plant was online. It was a safety test that caused the actual accident. They noted that similar problems were found at the Three Mile Island nuclear facility. These types of countervailing risks are most likely to occur with design rules, where regulators try to anticipate every possible contingency in complex systems by requiring compliance with detailed instructions. As the number of rules increases, the likelihood of rules interfering with each other increases. Even if they do not directly cause interference, it may also be useful to classify rules that are duplicative as nonfunctional, in order to at least reduce the cost of learning about two regulations instead of one.

Finally, more generally, the benefits of complying with existing rules may no longer be worth the cost. In all of the above cases, this general condition would be necessary to make the rule nonfunctional. OMB has stated, “The only way we know to distinguish between the regulations that do good and those that cause harm is through careful assessment and evaluation of their benefits and costs.”²⁶

²⁴ Elizabeth Nichols and Aaron Wildavsky, “Does Adding Safety Devices Increase Safety in Nuclear Power Plants?,” in *Searching for Safety*, by Aaron Wildavsky (Social Philosophy and Policy Center, Transactions Publishing, 1988), 128.

²⁵ *Ibid.*, 139.

²⁶ Office of Management and Budget, Report to Congress on the Costs and Benefits of Federal Regulations, 1997.

Reasons for nonfunctional rules. Rules may be nonfunctional because they are obsolete. The United States began creating regulations 140 years ago and, as most observers have noted, we rarely remove them from the books. In many cases, the problems they address no longer exist. For example, the Food and Drug Administration has been creating rules since its inception in 1906. Food production, packaging, and distribution have changed a great deal in the last 100 years, but most of the original rules are still on the books. For example, there is still a regulation on FDA's books that governs the width of strings in canned string beans.²⁷

In addition, some rules were created using faulty or misleading information that caused regulatory decision-makers to make choices that they would not have made with better information. For example, EPA states in its policy guidance that "EPA's policy is that risk assessments should not knowingly underestimate or grossly overestimate risks. . . ." ²⁸ If EPA were to objectively estimate risks, it would not knowingly under- *or* overestimate risks. To emphasize underestimating risks leads to conservative estimates of risk (overestimates). One problem with conservatively estimating risks is that there is no way for decision-makers to know how conservative the risk estimate is. But no matter how conservative the estimate is, when risks are conservatively estimated, risk managers will believe that their regulations address larger risks than they actually do. The same thing would be true if the existing risk estimate were objectively estimated as a "most likely" risk, where the baseline risk is a central estimate but the amount of risk the regulation is expected to reduce is overestimated. Over time, as agencies continue to regulate to ever lower levels of risk, conservative regulations piled on top of other conservative regulations lead to vastly overregulated compounds, which are likely to be nonfunctional to a degree that is not known.

²⁷ 21 C.F.R. 155.120 (2013).

²⁸ US Environmental Protection Agency, Office of the Science Advisor, "An Examination of EPA Risk Assessment Principles and Practices," Staff Paper (EPA/100/B-04/001), 2004, at 13, available at <http://www.epa.gov/ratf-final.pdf>.

Risk managers can also create nonfunctional rules if they choose to be excessively precautionary in their selection of a regulatory option. Over time, if the regulations are not revisited, the rules may prove to be excessively conservative (costs are too high relative to the benefits), which creates the same problem with conservative analysis, leading to the same result. Of course, many older rules were created with no analysis, which could also cause this problem.

Finally, an extensive literature indicates that rules can be created for political reasons to reward special constituencies. In these cases, rules are promulgated to satisfy special interests and benefit politicians and bureaucrats, without any particular concern about whether they will solve problems.²⁹ Those seeking these rules could range from firms that will financially benefit from raising rivals' costs³⁰ or receiving subsidies to special-interest activists who want rules to limit choices even when the rules themselves are nonfunctional. Whether the problem begins with the enacting legislation or special influence on the agency creating regulations, many of these rules will not be functional.

Nonfunctional rules can decrease safety. Given that there are both resource constraints and nonfunctional rules, regulatory accumulation will reduce overall safety if risk managers cannot or are not allowed to prioritize rules. Risk managers—either individuals or actual managers in a firm—are faced with a mix of hazards that are older and static as well as risks that new and rapidly changing. To see this, imagine that all risks currently being managed require

²⁹ The special-interest capture theory of regulation was first formally intimated by Stigler, but has been repeatedly corroborated in the 35 years since Stigler's seminal paper was published. See, for example, Simeon Djankov et al., "The Regulation of Entry," *Quarterly Journal of Economics* 117, no. 1 (2002): 1–37, which examines the regulation of entry of start-up firms across 85 countries and finds "the evidence is inconsistent with the public interest theories of regulation, but supports the public choice view that entry regulation benefits politicians and bureaucrats" because they receive the support of those industries that are protected with regulation.

³⁰ Steven C. Salop and D. T. Scheefman, "Raising Rivals' Costs," *American Economic Review* 73, no. 2 (1983): 267–71.

100 percent of resources allocated to risk management, such as time, attention, and capital, to manage. Furthermore, imagine that these risks are addressed by regulation via 10 rules.

Compliance with these rules produces a benefit of \$10, with 10 units of resources used, and each unit of resources costs \$1. Thus, each rule has \$1 devoted to managing it. Add a nonfunctional rule to be managed and, if all rules are utilizing equal resources (because risk overseers cannot prioritize rules), then each rule will only have about 0.91 units of resources devoted to it.³¹

Resources devoted to the nonfunctional rule are just wasted, but there are now fewer resources devoted to actual risks, diminishing overall safety.

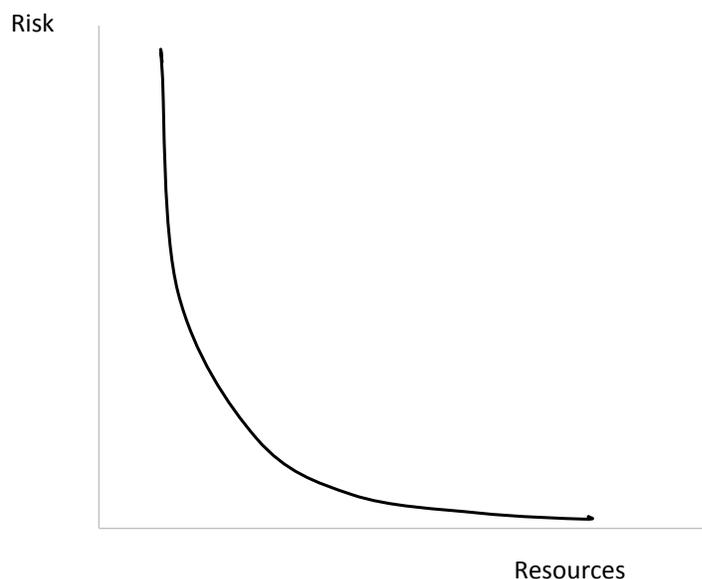
As with most activities, individuals and firms (i.e., risk managers) likely receive diminishing marginal returns to increases in resources devoted to reducing a given risk, as shown in figure 2 below. Figure 2 ranks risk reduction activities along the horizontal axis according to their marginal benefits per unit of resources devoted to compliance, with the activities with the greatest marginal benefit on the left.

As more resources are devoted (horizontal axis) to risk reduction, for example, by complying with a rule or a requirement within a rule, risk (vertical axis) is reduced, albeit with diminishing marginal effectiveness. As an example of this, take a common food safety requirement that firms monitor critical control points within the production process. The rules requiring this typically require a hazard analysis, establishment of critical points where hazards may enter or be controlled, monitoring critical limits at the critical control points, and remedial action when a critical limit has been established. A small amount of resources may just be a manager telling an employee to quickly go through the plant and establish a few critical control points, critical limits,

³¹ This simple example assumes no opportunity to reduce profits, cut wages, or increase prices to as to add more resources. Certainly in the long run these options may exist, but there may be frictional forces in the short run that force these kinds of trade-offs.

and plans to remedy deviations. More resources might be employed to do a thorough scientific hazard analysis to ensure all the right critical control points are discovered. More analysis might look at what the critical limits must be and more resources could go into intensive monitoring. The plan could be even further enhanced and management resources brought to bear on when a production line should be stopped due to a critical limit violation. Further, there could be a plan to continually revise the entire plan based on feedback. Up to a point, more resources will decrease risk, but at some point the reduction in risk achieved per dollar of additional resources devoted to it will decrease. Eventually, the costs will outweigh the benefits.

Figure 2. Diminishing Returns to Resources Devoted to a Given Risk



In sum, as regulatory requirements increase, and some requirements are nonfunctional, fewer resources can be expended on those that are functional, leading to an overall safety decrease, at least in the short run. Firms may not know which regulatory requirements are functional and which are not. In fact, without a comprehensive and systematic analysis, it is

doubtful that anyone knows, which may contribute to the lack of progress that has been observed with past retrospective review efforts (as discussed elsewhere in this paper). In addition, even if they did know, as OMB has pointed out, equal effort must be applied to all regulations, whether functional or nonfunctional: “Some regulations are critically important (such as safety criteria for airlines or nuclear power plants); some are relatively trivial (such as setting the times that a draw bridge may be raised or lowered). But each has the force and effect of law and each must be taken seriously.”³² Separately or together, this means that firm managers cannot prioritize risks so as to control “worst things first.”³³ Thus, when nonfunctional regulations are enforced, they will crowd out compliance with functional regulations.

The second activity crowded out by compliance with nonfunctional rules is private efforts to reduce risks. Firm managers have numerous incentives to address risks. For some risks facing workers, the possibility of tort liability provides some incentives for managers to exercise due diligence with respect to workplace safety. For consumer products, where legitimate negative externalities at some time in the past caused harm to third parties, the growth of interest in these externalities coupled with Internet monitoring and transmission of problems means that managers must also exercise due diligence to protect their brand names, as well as to prevent costly recalls and possible court cases.³⁴

For consumers, paying higher prices for products as firms pass on costs may crowd out more efficient, private risk expenditures. For example, consumers who desire to move to safer neighborhoods, drive safer cars (even if all are regulated), or install smoke detectors (even when not

³² Office of Management and Budget, *Report to Congress on the Costs and Benefits of Federal Regulations*, 1997, 2, <http://www.whitehouse.gov/omb/inforeg/chap1.aspx>.

³³ Adam Finkel and Dominic Golding, eds., *Worst Things First: The Debate over Risk-Based National Environmental Priorities* (Washington: Resources for the Future, 1994).

³⁴ Richard Williams, “A New Role for the FDA in Food Safety” (Mercatus Working Paper No. 10-69, Mercatus Center at George Mason University, Arlington, VA, November 2010).

required) in their houses can make these expenditures on a discretionary basis only after spending resources complying with regulations (usually in form of higher-priced products).³⁵ All these risks are generally greater than, for example, those risks addressed by EPA rules concerned with reducing the lifetime exposure to certain chemicals. Left with their own resources, consumers would be able to choose to reduce more risk per dollar spent on risk-reduction than many government regulations can.³⁶ As we get more rules that are less and less efficient on a dollar-per-unit risk-reduced price, these crowding-out effects are more likely to be exacerbated and lead to decreased safety.

Perhaps more importantly though, regulations tend to be static³⁷ and managers must deal with dynamic risks. As the technology changes, new risks emerge. Regulations take years to develop and are often dated by the time they are created.³⁸ Dealing with nonfunctional and static regulations crowds out scarce resources that could be devoted to newer, emerging risks. These risks could come from new technologies, new production methods, new products, or new sources of labor.

For firms, increasingly complex and detailed rules build a rigid structure that is not flexible enough to innovate in the face of new threats. These rules present opportunity risks by removing the choices to continually improve or develop resiliency. As Wildavsky notes, safety lies in trial

³⁵ Diana Thomas, “The Regressive Effects of Regulation: Who Bears the Cost?” (Research Summary, Mercatus Center at George Mason University, Arlington, VA, February 2013). See also Ralph L. Keeney, “Personal Decisions Are the Leading Cause of Death,” *Operations Research* 56, no. 6 (November–December 2008): 1335–47.

³⁶ See, for example, Aaron Wildavsky, *Searching for Safety* (Piscataway, NJ: Transaction Publishers, 1988); Randall Lutter and John F. Morrall III, “Health-Health Analysis: A New Way to Evaluate Health and Safety Regulation,” *Journal of Risk and Uncertainty* 8, no. 1 (1994); Ralph L. Keeney, “Mortality Risks Induced by Economic Expenditures,” *Risk Analysis* 1990; Ralph L. Keeney, “Mortality Risks Induced by the Costs of Regulations,” *Journal of Risk and Uncertainty* 8, no. 1 (1994); Jackie Teague, Don Anderson, and Fred Kuchler, “Health Transfers: An Application of Health-Health Analysis to Assess Food Safety Regulations,” *Risk* 10 (1999); and Diana Thomas, “Regressive Effects of Regulation” (Mercatus Working Paper No. 12-35, Mercatus Center at George Mason University, Arlington, VA, November 2012).

³⁷ The term “static” here means addressing risks that are relatively unchanging over time, but it is also true that the regulations addressing those risks are static in the sense that they are rarely modified.

³⁸ “The Costs of Regulatory Delay,” Center for Progressive Reform, accessed January 27, 2014, <http://www.progressivereform.org/regdelay.cfm>.

and error, a search process over time, not rigidity.³⁹ For managers and workers in firms to be entrepreneurial when facing and solving new threats, they must “own the problems.” Industrial psychologists Andrew Hale and David Borys have extensively investigated this phenomenon of rule ownership and note that “problems must have an owner if they are to be solved, and a too-large set of rules undermines companies’ sense of ownership of the risks inherent in their processes.”⁴⁰ For firms that are closest to the problems and should be able to see problems as they emerge, rather than taking ownership of the solutions, they end up simply following (government) rules. Alternatively, when the quantity of rules to follow reaches the point of information overload, some managers and workers may just ignore the rules until cited by inspectors. In other words, private innovative solutions are crowded out.⁴¹ A study of mine safety rules in New South Wales reached a similar conclusion about the effect of too many rules and concluded,

(a) Management and regulators should not continue to produce more and more rules and regulations to cover every aspect of mining. Miners will not read nor comprehend to this level of detail.

(b) Detailed prescriptive regulations, detailed safe work procedures, and voluminous safety management plans will not ‘connect’ to the miner. The aim should be to operate with a framework of fewer rules but of the highest quality.⁴²

Finally, compliance with nonfunctional regulations may crowd out efforts to ensure resilience—that, if risks are realized, there will be ways to minimize and quickly address the consequences. For example, food safety problems with pathogens are never likely to be eliminated given the prevalence of pathogens in the environment. But systems that can quickly respond and target and stop outbreaks may reduce illnesses much faster (and also provide

³⁹ Wildavsky, *Searching for Safety*, 207.

⁴⁰ Andrew Hale, David Borys, and Mark Adams, “Regulatory Overload: A Behavioral Analysis of Regulatory Compliance” (Mercatus Working Paper No. 11-47, Mercatus Center at George Mason University, Arlington, VA, November 2011), 31.

⁴¹ Israel Kirzner, “Competition, Regulation, and the Market Process; An ‘Austrian’ Perspective,” Cato Institute, 1982, <http://www.cato.org/sites/cato.org/files/pubs/pdf/pa018.pdf>.

⁴² David Laurence, “Safety Rules and Regulations on Mine Sites—The Problem and a Solution,” *Journal of Safety Research* 36 (2005): 49.

incentives to not have the problem in the first place), compared to increasing preventive controls. Resilience may come from modifying existing rules or putting systems in place to respond rapidly to problems. Either requires resources and can be a valid response to different kinds of risks. Most of our regulatory system is based on *ex ante* anticipation, which would be preferred for those risks that are fairly stable and predictable. But if there is uncertainty about where problems may emerge, so-called black swans,⁴³ resiliency may be the better strategy.

As rules accumulate, some proportion of them is likely to be, or to become, nonfunctional. As individuals and firms must continue to comply with rules that are nonfunctional, more effective risk-reducing activity may be crowded out, decreasing overall safety.

3. Previous Efforts at Regulatory Cleanup and Similar Large-Scale Reforms

Since 1975, the *Code of Federal Regulations* (CFR) has expanded in 30 of 37 years. In those 30 expansionary years, 117,294 pages were added to the CFR. In contrast, in the seven contractive years, 17,871 pages were subtracted from the CFR—for net growth of nearly 100,000 pages.

Previous efforts to eliminate obsolete regulations—discussed further below—have removed only very small percentages of existing regulations from the books.

3.1. Previous Efforts to Reexamine Existing Regulations in the United States

Policymakers have long recognized the need to formalize the process of regulation creation, and over the decades that have passed since the Administrative Procedure Act, reforms to the process have been undertaken. Despite these reforms, numerous problems remain. For example, it may be that many of the more than 1 million restrictions in the *Code of Federal Regulations* are

⁴³ See, for example, Nassim Nicholas Taleb, *The Black Swan: The Impact of the Highly Improbable* (New York: Random House, 2008).

outdated, duplicative, inefficient, or ineffective (i.e., continuing compliance is expected to have costs exceeding benefits) based on one or more of the reasons given above. Note that even new regulations may fall into these categories. It is perhaps for these reasons that each of the past five administrations from Reagan forward (as well as Congress) has made some explicit attempt to weed out nonfunctioning regulations.

The need to reduce the existing regulatory burden is not new. This section details efforts to modify or eliminate nonfunctioning regulations that were undertaken by each of the past five presidents. Notably, none of these efforts resulted in either substantial reductions relative to the total size of the *Code of Federal Regulations* or sustained changes in the rate of adding new regulations to the *Code of Federal Regulations*. Nonetheless, there does appear to be a presidential consensus on the benefits of regulatory reform, as the next section explains.

“Reduce the burdens of existing and future regulations” —*President Reagan*. One of President Reagan’s first actions after his election was to issue Executive Order 12291 in 1981, which, in addition to creating OIRA and requiring centralized review of major rules and their economic analyses, required agencies to review their existing major rules. Generally speaking, this requirement of review of existing rules was interpreted to mean that agencies should determine which regulations could be withdrawn or scaled back.⁴⁴

President Reagan created the Presidential Task Force on Regulatory Relief, which was led by then-Vice President George H. W. Bush, to oversee the regulatory review process. This review may have been partly responsible for the diminutions in pages in the CFR in 1982 and 1985 shown in figures 3 and 4.

⁴⁴ OMB, *Report to Congress on the Costs and Benefits of Federal Regulations*, 1997, <http://georgewbush-whitehouse.archives.gov/omb/inforeg/chap1.html#trbrp>.

Figure 3. Total Pages in the *Code of Federal Regulations*, Number of Pages Added or Subtracted Each Year, and Percentage Changes from Previous Year, 1975–2012

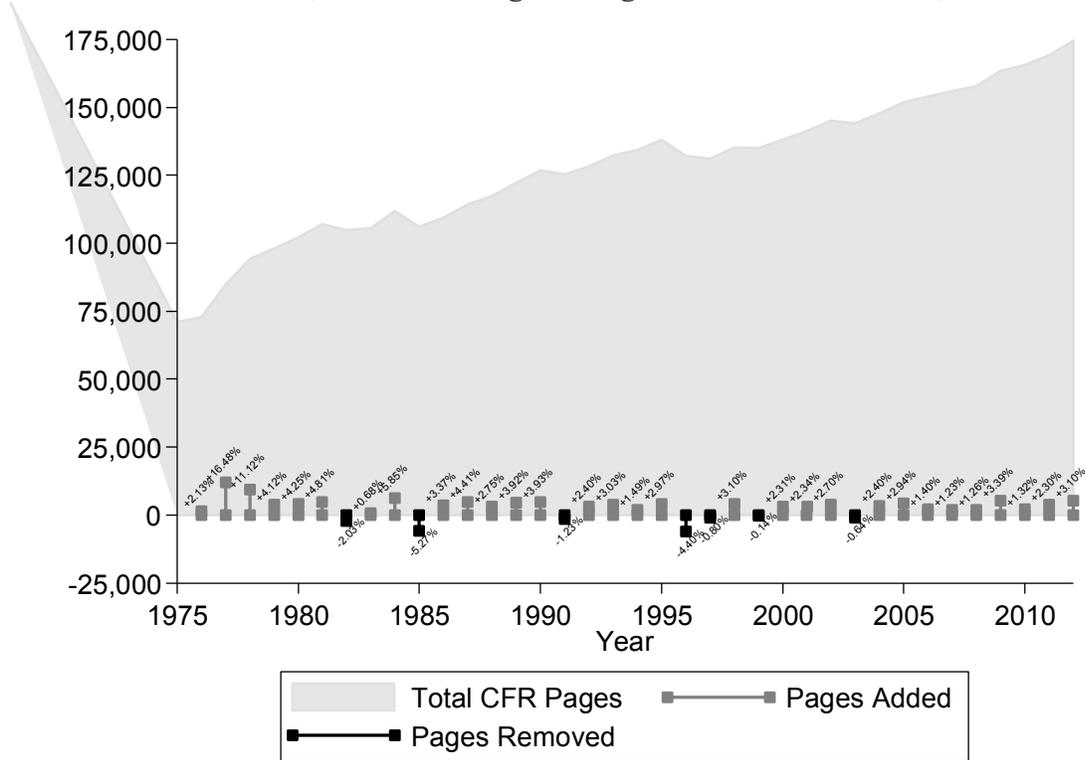
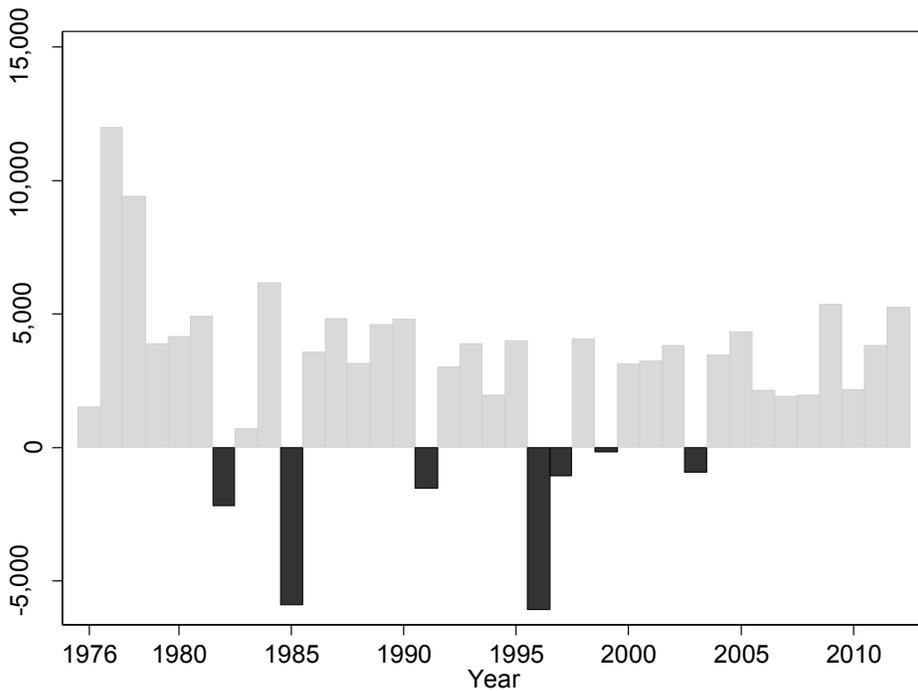


Figure 4. Pages Added to or Subtracted from the *Code of Federal Regulations*, 1976–2012



However, simultaneous deregulatory efforts that originated in the Carter administration and came through Congress in the form of the Airline Deregulation Act of 1978, the Staggers Rail Act of 1980, and the Motor Carrier Act of 1980 also led to substantial reductions in the number of pages in the CFR. For example, because of the Airline Deregulation Act, the Civil Aeronautics Board was completely abolished, but that was not completed until 1985 when the last vestiges of the Civil Aeronautics Board were either eliminated from the CFR altogether or transferred to the Office of the Secretary of the Department of Transportation. The elimination of the Civil Aeronautics Board's pages from the CFR is at least partially responsible for the decrease in pages seen in 1985 in figure 3.

During President Reagan's term the Regulatory Flexibility Act of 1980 was enacted.

Section 610 of that act requires periodic agency reviews of rules:

which will have a significant economic impact on a substantial number of small entities anytime with 10 years of promulgation . . . to determine . . . whether such regulations should be continued as written or should be amended or rescinded consistent with the stated objectives of applicable statutes, to minimize their impact on small entities.⁴⁵

However, this law only requires review of rules affecting small entities in a significant way and has had very little impact on the totality of rulemaking, as will be seen below.

Figure 4 shows that in two of the eight Reagan years, the total number of pages in the CFR diminished. In 1982, pages decreased by 2 percent relative to the year before, and in 1985, by 5.3 percent. Even if these diminutions are fully attributed to the Presidential Task Force rather than any of the transportation deregulatory acts of Congress, they do not seem to have done much to stem the overall growth of regulations under his administration. During the Reagan years, 23,047 pages were added to the CFR, while 8,066 were subtracted, for a net gain of 14,981 pages.

⁴⁵ The Regulatory Flexibility Act, Pub. L. 96-354, 94 Stat. 1164 (1980).

“Provide regulatory relief” —President George H. W. Bush. Subsequently, President George H. W. Bush appointed Vice President Dan Quayle to head another task force, called the Competitiveness Council. Created in 1990, the Competitiveness Council’s mission was “to provide regulatory relief.”⁴⁶ The efforts of this council may have led to the slight subtraction of pages from the CFR seen in figures 3 and 4 in 1991. However, in percentage terms as shown in figure 3, the only decrease in total CFR pages that occurred during the George H. W. Bush years amounted to a decrease of just 1.2 percent in 1991.⁴⁷ Overall, the George H. W. Bush years saw 11,700 pages added to the CFR and 1,562 taken away, for a net gain of 10,138 pages.

“Cut obsolete regulations” —President Clinton. In 1993, President Bill Clinton and Vice President Al Gore created a task force consisting of about 250 career civil servants called the National Performance Review (later renamed the National Partnership for Reinventing Government). This task force had a broad mission of creating a government that “works better, costs less, and gets results Americans care about.”⁴⁸ Beginning in February 1995, the task force was instructed to help 65 regulatory agencies to “cut obsolete regulations, [and] reward results, not red tape,” among other directives.⁴⁹ Notably, the efforts of this task force and the cooperating agencies led to the elimination of 16,000 pages of regulation from the *Code of Federal Regulations*.⁵⁰ Indeed, this effort appears to have caused one of the few substantive reductions in

⁴⁶ Office of Management and Budget, “Draft Report to Congress on the Costs and Benefits of Federal Regulations,” 62 Fed. Reg. 140 (July 22, 1997), 39356, <http://www.gpo.gov/fdsys/pkg/FR-1997-07-22/pdf/97-19082.pdf>.

⁴⁷ 1,562 pages removed from a stock of 126,892 pages in 1990: $-1,562/126,892 = -1.231\%$.

⁴⁸ Bob Stone, “Creating ‘Reinvention University,’” *Public Manager* 27, no. 1 (1998): 47.

⁴⁹ National Partnership for Reinventing Government, “History of the National Partnership for Reinventing Government—Implementing Recommendations—1994,” accessed January 29, 2014, <http://govinfo.library.unt.edu/npr/whoware/historypart3.html#governing>.

⁵⁰ Ibid.

the total number of pages published in the *Code of Federal Regulations*, as figure 4 shows. However, despite the relative success of the National Partnership, the Clinton years saw a net increase of 9,053 pages added to the CFR. Additionally, President Clinton issued Executive Order 12866 in the same spirit as Reagan's Executive Order 12291. Executive Order 12866 also formalized the regulatory analysis process that agencies must perform when creating new, significant regulations, including requirements to consider several alternatives and to assess their costs and benefits. Section 5 of Executive Order 12866 required agencies to submit to OIRA a program to periodically review existing significant regulations to determine whether they should be "modified or eliminated."⁵¹

Regulatory reform and burden reduction under President George W. Bush. President George W. Bush also attempted to eliminate obsolete regulations, or at least announced efforts to do so. In 2001 and 2002 OIRA, under the leadership of John Graham, launched a public nomination process for eliminating or modifying existing rules.⁵² One of the major sets of regulations eliminated were those protecting consumers from deceptive airline ticketing information.⁵³ Another episode of interest during the George W. Bush years was the administration's attempt to slow or stop midnight regulations, a surge in rulemaking during the lame-duck period of an outgoing administration.⁵⁴ Despite the administration's efforts, rulemaking during the final year of the administration still surged, and rules produced during

⁵¹ Executive Order 12866, 58 Fed. Reg. 190 (Oct. 4, 1993), <http://www.archives.gov/federal-register/executive-orders/pdf/12866.pdf>.

⁵² John D. Graham, Paul R. Noe, and Elizabeth L. Branch, "Managing the Regulatory State: The Experience of the Bush Administration," *Fordham Urban Law Journal* 33, no. 4 (2005): 121.

⁵³ *Ibid.*, 122.

⁵⁴ Susan E. Dudley, "Regulatory Activity in the Bush Administration at the Stroke of Midnight," *Engage* 12, no. 2 (2009).

the midnight period were accompanied by lower-quality regulatory analysis.⁵⁵ This demonstrates the degree to which a president appears to have limited ability to control the regulatory output of agencies. All told, the George W. Bush years witnessed a net increase of 25,284 CFR pages.

“Retrospective analysis” under President Obama. Executive Order 13563, issued by President Barack Obama in January 2011, ordered executive branch agencies to “consider how best to promote retrospective analysis of rules that may be outmoded, ineffective, insufficient, or excessively burdensome, and to modify, streamline, expand, or repeal them in accordance with what has been learned.”⁵⁶ Furthermore, the agencies were ordered to place these retrospective analyses online “whenever possible,” and to submit plans to the Office of Information and Regulatory Affairs that would detail the agencies’ plans for periodic review of existing significant regulation. The goal was similar to that expressed in previous administrations: to “determine whether any such regulations should be modified, streamlined, expanded, or repealed so as to make . . . regulatory program[s] more effective or less burdensome in achieving the regulatory objectives.”⁵⁷

Regardless of whether this attempt at retrospective review achieves any degree of success (see discussion below), it is unlikely to affect independent agencies. Executive Order 13579, issued in July 2011, was directed at independent agencies and repeated the retrospective analysis

⁵⁵ Patrick A. McLaughlin, “The Consequences of Midnight Regulations and Other Surges in Regulatory Activity,” *Public Choice* 147 (2011); 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 SE (2011).

⁵⁶ Executive Order 13563, 76 Fed. Reg. 14, Sec. 6. (Jan. 21, 2011), 3822, <http://www.gpo.gov/fdsys/pkg/FR-2011-01-21/pdf/2011-1385.pdf>.

⁵⁷ *Ibid.*

and review language of Executive Order 13563, except that the word “shall” was replaced with the word “should.”⁵⁸

Neither effort appears to have done much to slow the accrual of pages in the CFR despite a concerted effort to do so.⁵⁹ Over the first three years of President Obama’s first term, 11,212 pages were added to the CFR.

3.2. Successful Reforms of Problems Similar to Regulatory Accumulation

Some reform programs have successfully eliminated significant governmental waste and obsolescence. One successful government reform program that overcame obstacles similar to those faced in regulatory reform was the removal and realignment of military bases under the Base Realignment and Closure Act.

In 1988, Congress created the Base Realignment and Closure (BRAC) Commission to address an impasse: nearly everyone agreed that toward the end of the Cold War, many military bases were no longer necessary, but no one could agree on which specific base(s) to close. This was because each base had a literal constituency and “designated champion” in Congress—the member from the base’s congressional district.⁶⁰ Congress created the BRAC Commission and its process to overcome pork-barrel politics (which effectively would have prevented any bases from being closed) by requiring members to agree to abide by the recommendations of an independent commission—the BRAC Commission. The commission—composed of independent experts—was given a mission of assessing military bases primarily

⁵⁸ Executive Order 13579. This language is significant because an executive order has the force and effect of law on regulatory agencies so that use of the word “shall” becomes a suggestion rather than an order.

⁵⁹ White House, “Campaign to Cut Waste,” accessed February 6, 2014, [http://www.whitehouse.gov/the-press-office/2011/02/02/campaign-to-cut-waste](#).

⁶⁰ Jerry Brito, “Running for Cover: the BRAC Commission as a Model for Federal Spending Reform,” *Georgetown Journal of Law & Public Policy* 9, no. 1 (2011).

according to their military value, and, in conjunction with the Department of Defense, submitting a list of bases to Congress that would be recommended for closure or realignment based on their military value. As legal scholar Jerry Brito put it, “A clear mission (identify bases to be cut) along with guiding criteria (military need) positioned the commission to make empirically defensible choices.”⁶¹

Once the BRAC Commission’s recommendations were made, Congress’s ability to stop those bases’ closure or realignment was limited to a joint resolution of disapproval. Barring that, the recommendations of the commission would be implemented. Additionally, BRAC changed the burden of proof. Before the creation of the BRAC Commission, those who wished to close bases had to prove that those bases were unnecessary. The BRAC Act instead placed the burden on those who sought to keep a base open.⁶² As a result, the first BRAC Commission recommended 11 major bases for closure. In comparison, no bases were successfully closed between 1977 and 1988.

Another successful program may be even more relevant to the topic of eliminating or modifying nonfunctional regulations: the Administrative Burden Reduction Programme in the Netherlands. In 2003, the Dutch set for themselves a specific goal of reducing regulatory costs by 25 percent, called the Administrative Burden Reduction Programme (the Dutch Programme).⁶³ The Dutch Programme required all regulatory ministries—analogue although not identical to agencies in the United States—to measure the cost of their regulations using the Standard Cost Model. Economist Joshua Hall explains,

⁶¹ Ibid., 12.

⁶² Ibid., citing Charlotte Twight, “Department of Defense Attempts to Close Military Bases: The Political Economy of Congressional Resistance,” in *Arms, Politics, and the Economy: Historical and Contemporary Perspectives*, ed. Robert Higgs (New York: Holmes & Meier, 1990), 264.

⁶³ “International Standard Cost Model Manual,” International SCM Network to reduce administrative burdens, October 2005, <http://www.oecd.org/regreform/regulatory-policy/34227698.pdf>.

The Standard Cost Model (SCM) was developed in the Netherlands as a consistent methodology for measuring administrative costs and burdens resulting from business regulations in both ex ante and ex post situations. The model is designed to break down administrative burdens and costs to businesses, ensuring that even obligations not imposed by regulation (for example, voluntary information obligations) are measured, allowing for a complete overview of all information obligations (IOs) and simplifying the identification of unnecessary regulation. The SCM strictly measures costs to businesses; it does not consider whether the regulations from which the costs stem are “reasonable.”⁶⁴

This simple model does not identify or quantify the entire burden of a regulation, but because it is simple and replicable, all agencies were able to evaluate their regulations in a manner that allowed consistent comparison. Furthermore, this simplicity helped avoid subversion. It is hard to claim someone incorrectly calculated administrative costs when the methodology is clear and when a newly created, independent monitoring agency is overseeing the evaluations. Thus, although the Standard Cost Model does not pretend to assess the total cost, including opportunity cost, of a given regulation, it does represent a simple and transparent way to consistently measure some costs of regulations. Once all the ministries had assessed the costs of their regulations according to the Standard Cost Model, the next task was to eliminate 25 percent of those costs by 2007.

Importantly, the Dutch Programme established an independent monitoring agency to monitor each ministry’s measurement and reduction processes.⁶⁵ This independent agency helped ensure the integrity of each ministry’s assessments as well as prod the ministries to complete the reduction of 25 percent of administrative burden by 2007. Another office was created within the Ministry of Finance “to manage the political side of organizing the process between the various ministries and to overcome political obstacles.”⁶⁶

⁶⁴ Joshua Hall and Michael Williams, “A Process for Cleaning Up Federal Regulations: Insights from BRAC and the Dutch Administrative Burden Reduction Programme” (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, December 20, 2012), 7–8, http://mercatus.org/sites/default/files/Hall_BRAC_final.pdf.

⁶⁵ Ibid., 7.

⁶⁶ Ibid.

Both the BRAC Commission and the Dutch Programme shared some characteristics that offer insights into attempted retrospective review schemes. First, each created an independent body to help accomplish the task. Second, each assigned a clear mission to the independent bodies. For the BRAC Commission, the mission was to identify bases for realignment or closure according to military value. For the Dutch Programme, the mission was to have ministries assess the costs of their regulations using the Standard Cost Model, and then facilitate the elimination of 25 percent of the costs of those regulations in each ministry.

In contrast to the relative success of the BRAC process and the Dutch Programme, none of the attempts to eliminate obsolete regulations by executive order produced results similar in magnitude to those of the BRAC Commission or the Dutch Programme. Some of these efforts were composed of individuals who were arguably independent of the agencies themselves, but notably none of them gave these individuals the power to actually bypass agency input into the decision on whether to eliminate the targeted regulations. The analogy to the BRAC process is strong: in the BRAC process, individual legislators had incentive to fight to save individual bases when it served their interest. In previous attempts to eliminate obsolete regulations, individual agencies had similar incentive to protect individual regulations from elimination. The first BRAC commission circumvented congressional members' ability to protect individual bases by only giving Congress input at the final stage in the form of a joint disapproval. Executive Order 13563, as an example in counterpoint, relied on the agencies themselves not only to produce the information used to identify target regulations but also to decide whether to eliminate or otherwise modify the targeted regulations.

4. Lessons from Previous Successes and Failures

Why did the BRAC Commission and the Dutch Programme succeed while attempts to eliminate obsolete regulations in the United States have largely failed? Perhaps inadvertently or perhaps by design, the BRAC Commission and the Dutch Programme built in devices such as independent commissions and an expedited legislative process that overcame some of the main obstacles to government reform. We explain some of the primary obstacles below, and point out how the BRAC Commission and Dutch Programme overcame them.

Obstacle 1

Decision-makers need adequate information to determine which regulations are obsolete, but agencies lack incentives to produce this information.

One of the reasons for the failure of previous attempts to eliminate obsolete regulations is information. Simply put, agencies often lack the information necessary to decide which regulations are obsolete, and they also lack the incentives to produce the necessary information. It's hard to imagine how any attempt to eliminate nonfunctional regulations—not just the latest attempt—could be successful without enough information to decide whether a regulation is nonfunctional in the first place.

A recent study demonstrates this. In the study mentioned earlier, Lutter thoroughly examines the results of the efforts of four agencies—EPA, FDA, the National Highway Traffic Safety Administration, and the Securities and Exchange Commission—in response to President Obama's retrospective review directives contained in Executive Orders 13563 and 13579.⁶⁷ Although Executive Order 13563 specifically stipulates that the regulatory system “must

⁶⁷ Lutter, “Role of Retrospective Analysis.”

measure, and seek to improve, the actual results of regulatory requirements,” Lutter finds little evidence of progress toward improving measurement (analysis) of actual results. Indeed, Lutter finds that very few retrospective analyses of existing regulations performed by these agencies even provide sufficient information to evaluate whether the benefits of continuing those regulations exceed their ongoing costs. This is the information problem for regulatory reform and the first obstacle. Agencies are not currently required by statute to analyze their existing regulations to determine ongoing costs and benefits or, more simply, even whether the regulations are effective.

Ideally, whether a rule or a regulatory program should be continued, modified, or eliminated would rely on research indicating whether a systemic problem still exists; whether the rule continues to produce benefits exceeding costs; whether there are unintended consequences, such as countervailing risks, that have not been accounted for; whether additional regulations in the area (e.g., food safety) are likely to produce benefits exceeding costs; whether states and localities (or markets or courts) might be better able to address the problems; and whether the program continues to be a high federal priority. However, agencies tend to expend their resources not on researching these questions but on producing new rules that expand their budgets and control over their portion of the economy.⁶⁸ Researching existing rules is not likely to ever be high on their agendas.

The BRAC Commission’s and the Dutch Programme’s Solutions to Obstacle 1

Both the BRAC Commission and the Dutch Programme utilized information from the agency closest to the programs being evaluated. In the case of BRAC, the Department of Defense (DOD)

⁶⁸ William A. Niskanen, “Bureaucracy,” in *The Elgar Companion to Public Choice*, ed. William F. Shughart and Laura Razzolini (Northampton, ME: Edward Elgar, 2001).

had incentive to provide the most accurate information because elimination of inefficiency would permit DOD to execute its mission better. For the Dutch Programme, agencies did not necessarily have incentive to provide the most accurate information (as they wished to protect, not eliminate rules), but they were given little choice. The Standard Cost Model is simple and transparent enough that any misinformation would presumably be easily sighted.

Obstacle 2

Agencies are stakeholders with respect to their own regulations.

Even if agencies had the necessary information available to them, they have little incentive to modify or eliminate existing rules. Agencies often spend many years developing rules, and asking agencies to eliminate their own rules can be comparable to asking them to admit failure. Further, even if the public desired that some regulations be eliminated, agencies' preferences may deviate from those preferences. This is analogous to what industrial organization and financial economists refer to as the principal-agent problem.⁶⁹ In this case, government agencies are the agents, and private individuals are the principals.⁷⁰ When the incentives of agents do not align with those of the principals, suboptimal outcomes tend to ensue. In the case of government agencies, agencies have incentive to grow, regardless of whether that growth would be optimal for individuals. There are many theories about why bureaucracies grow, such as the desire to maximize their discretionary budgets.⁷¹ Over time, these theories have been supplemented with literature describing bureaucratic desires such as “influence on

⁶⁹ See Michael Jensen and William Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure,” *Journal of Financial Economics* 3 no. 4 (1976): 305–60.

⁷⁰ It is also true that agencies are agents for Congress, the principals.

⁷¹ Niskanen, “Bureaucracy,” 269.

public policy, power or simply utility.”⁷² Agencies’ budgets expand if their regulatory programs expand, so those agents’ incentives may lead them to pursue a different course than the one preferred by their principals.

The BRAC Commission’s and the Dutch Programme’s Solutions to Obstacle 2

The BRAC Commission was not directly faced with a principal-agent problem. The DOD actually desired to close military bases that had little military value so that it could reallocate scarce resources and personnel to locations of greater military value.

The Dutch Programme, on the other hand, tackled this problem head-on by requiring that all agencies meet a quantified target—a reduction of costs by 25 percent.

Obstacle 3

Individuals in agencies have little incentive to provide information that would lead to a rule’s elimination or the choice not to produce a rule.

This obstacle is a corollary of the previous principal-agent problem and is a reflection of how agencies tend to reward their employees.⁷³ In general, employees—including economists—are professionally rewarded for being part of teams that create new regulations or expand

⁷² Ronald Wintrobe, “Modern Bureaucratic Theory,” in *Perspectives on Public Choice*, ed. Dennis C. Mueller (Cambridge: Cambridge University Press, 1997), 431.

⁷³ Trying to produce evidence to get rid of regulations would be viewed in agencies as different from providing evidence to support a regulation. It would be viewed as if it came from someone outside the agency. As one coauthor of this paper has described his experience as an agency economist, “If your views are not mainstream, you are saying something different that is not going to be welcomed. . . . It is an oppressive atmosphere.” Richard Williams, “The Influence of Regulatory Economists in Federal Health and Safety Agencies” (Working Paper No. 08-15, Mercatus Center at George Mason University, Arlington, VA, July 2008), http://mercatus.org/sites/default/files/publication/WP0815_Regulatory%20Economists.pdf.

existing regulatory programs.⁷⁴ Conversely, employees are rarely rewarded for deciding that a regulation should not be created. This is unfortunate, because specialists in agencies are likely to have some relevant information about which rules are nonfunctional. However, no one has yet discovered how to change the incentives of individuals in agencies so that they have a reason to provide accurate information and have no fear of retaliation should that information indicate that growth in the number or scope of the agency's regulations is not optimal.

The BRAC Commission's and the Dutch Programme's Solutions to Obstacle 3

The BRAC Commission embraced independence as the solution to obstacle 3. The independent commission exists for only a finite period, and its mission is clear. This independence limits the degree to which others can create incentive for commissioners to deviate from their mission.

The Dutch Programme had two components that address obstacle 3. First, the Dutch Programme adopted a clear and transparent model that agencies had to use to provide information about rules' costs. This limited economists to either providing cost information or to providing nothing at all. Second, in order to ensure that all agencies provided cost information (rather than nothing at all), the Dutch Programme created an independent agency to oversee the application of the Standard Cost Model in all the agencies.

Obstacle 4

Decision criteria for classifying regulations as nonfunctional can be subverted if they are not clear and objective.

⁷⁴ Williams quotes one economist as saying, "Success is putting out 10 regulations a year and bigger regulations are bigger successes." Ibid.

Before the creation of the BRAC Commission, attempts at the base closures were hampered by congressional members' ability to subvert one of the several criteria considered by Congress before the BRAC Act created the BRAC Commission.⁷⁵ As Representative Richard Armev put it in 1988,

An environmental impact statement can take as long as two years and cost over \$1 million to complete. Once completed, any congressman or well-organized citizens' group can take the military to court and insist that it be redone to consider some previously unnoticed aspect. After that, the second statement can be found wanting, and a third can be ordered. By this time, several years after the base closing was first announced (a move that by itself has already hurt the local economy), the local citizenry and members of Congress are thoroughly aroused, and the political pressures to cancel the closing order are all but insurmountable.

The base closure process and its consideration of complex and subjective criteria, at least before the 1988 BRAC Act, made it easy for any legislator to stop a military base from closing. As a result, each member of Congress possessed a *de facto* veto on any single base's closure.

Similarly, any analysis—even quantitative analyses—can be subverted. For example, an agency might produce a regulatory impact analysis that purports to show that a regulation's anticipated benefits outweigh its costs, whereas an independent analysis would show the opposite. Of course, the agency has incentive to show that, and it is difficult for a nonexpert to tell whether the regulatory impact analysis is objective and thorough. It is possible for the agency to subvert regulatory impact analyses to serve the agency's purposes, such as to expand its budget.

The BRAC Commission's and the Dutch Programme's Solutions to Obstacle 4

One characteristic shared by the BRAC Act and the Dutch Programme is that they both set out simple criteria by which to judge whether to keep military bases and regulations, respectively.

⁷⁵ Jerry Brito, "A Spending Commission Modeled on BRAC" (Mercatus Research Summary, Mercatus Center at George Mason University, Arlington, VA, Jan. 19, 2010), <http://mercatus.org/sites/default/files/Brito-BRAC-Research-Summary.pdf>.

Importantly, the simplicity, clarity, and objectivity of these criteria minimized subversion of the reform efforts by individuals, agencies, or special interest groups. The vaguer the criteria, the easier it would be for an individual, agency, or special interest group to manipulate them into serving its purposes, rather than objectively analyzing relevant data.

Obstacle 5

Individual regulations can cause concentrated benefits and dispersed costs.

All regulatory programs originate in Congress, whether by the organic statute that created an agency and an agency mission, or a statute that attempts to specifically elicit regulatory intervention from agencies. All the same dynamics that lead to congressional pork in legislation can apply to regulation. As a result, if members of Congress are given the option to consider which regulations to eliminate on a one-by-one basis, individual members who have constituencies or backers that benefit substantially from the regulation will fight to keep that regulation intact. In other words, Congress must overcome the public choice problem of concentrated benefits and dispersed costs in order to agree to eliminate regulations.

The BRAC Commission's and the Dutch Programme's Solutions to Obstacle 5

The BRAC process overcame obstacle 5 by grouping all bases considered to be candidates for closure into a single list. Congress was provided this list from the BRAC Commission, and Congress by default was assumed to approve the list. The only way Congress could stop the closure of all bases on the list was to pass a majority vote of disapproval. For regulations, this means that groups of regulations that are sent to Congress must not be able to be stopped by oversight committees that govern those regulations.

Despite the success of the first BRAC Commission, some worried that even this independent commission was not devoid of political influence—especially in subsequent rounds. Brian T. Kehl surmised that logrolling and special interests played a role in the removal of certain bases from the closure list after the list was leaked to the *New York Times* a week before its official submittal from DOD to the commission in 1993. In the interim, three bases in California were removed from the list, leading Kehl to conclude, “The special interests of California and its Congressional delegation were undoubtedly successful at bringing pressure to bear on the Pentagon.”⁷⁶ Furthermore, as Jerry Brito points out,

No member of the relevant defense committees has ever had a base closed in their districts. In 1991, DoD recommended 31 major bases for closure. The BRAC commission removed four from this list, three of which were represented on the Senate Armed Services Committees. In 1993, of the nine bases removed from the list, only one was not represented on the Senate Armed Services Committee or the Senate Defense Appropriations Committee. Certainly one obstacle to reforming or removing regulations will be the committees themselves. Although regulations generally don’t favor one state or region over another, Committee program chairs may not wish to decrease the regulations in their particular area of oversight.⁷⁷

The Dutch Programme did not explicitly address obstacle 5. However, a quantified threshold is analogous to creating a list of bases that is adequately long to ensure no particular special interest group can stop the entire scheme, so long as the threshold is high enough. Additionally, it appears that the Dutch Programme accepted that horse-trading and logrolling would likely occur—even if 25 percent had to be cut, a savvy politician might try to make sure those cuts would only affect other constituencies—and created an separate agency “to manage

⁷⁶ Brian T. Kehl, “The Pentagon vs. Congress: The Political Economy of Military Base Closures during BRAC” (PhD dissertation, George Mason University, 2003), 40, <http://handle.dtic.mil/100.2/ADA416525>.

⁷⁷ In contrast, however, a recent study found no evidence of political influence in the 2005 round of the BRAC closures. Scott A Beaulier, Joshua C. Hall, and Allen K. Lynch, “The Impact of Political Factors on Military Base Closures,” *Journal of Economic Policy Reform* 14, no. 4 (2011): 333–42. Nonetheless, the point remains that even so-called independent commissions may be subject to political influence.

the political side of organizing the process between the various ministries and to overcome political obstacles.”⁷⁸

Obstacle 6

Removing regulation requires congressional consent.

Ultimately, it is acts of Congress that direct agencies to create regulations. Even if agencies were to identify nonfunctional regulations that they want to eliminate or modify because of, for example, obsolescence, statutes might not allow the agencies to make the changes. Thus, any reform will require congressional consent before beginning the exercise. Otherwise, the authors of certain statutes may become defensive when agencies point out that regulations stemming from those statutes are no longer necessary or are even counterproductive.

The BRAC Commission’s and the Dutch Programme’s Solutions to Obstacle 6

The problem of base realignment and closure was similar in that prior to the BRAC Commission’s creation, congressional approval was required before a base could be closed. This problem was overcome by the obtainment of congressional approval to close or realign all bases on the list proffered by the BRAC Commission, without amendment.

The Dutch Programme appears to have succeeded in overcoming obstacle 6 largely through a commitment of all major political parties of Parliament to reduce business costs.⁷⁹ Given this commitment, Parliament would facilitate the reductions, rather than hinder them.

⁷⁸ Hall and Williams, “Process for Cleaning Up Federal Regulations,” 2012, 7.

⁷⁹ World Bank Group, *Review of the Dutch Administrative Burden Reduction Programme*, 2007, <http://www.doingbusiness.org/~media/FPDKM/Doing%20Business/Documents/Special-Reports/DB-Dutch-Admin.pdf>.

Obstacle 7

The creation of the list of target regulations can be subject to logrolling and special interests' influence.

Reform efforts to roll back regulations are generally not successful at including those people who are typically most harmed by existing regulations. Regulations cause consumers to pay higher prices for goods, but consumers are rarely represented in an organized fashion in these efforts. Additionally, small firms are at a competitive disadvantage in knowing about, understanding, and complying with high fixed-cost rules.⁸⁰ Finally, potential entrepreneurs face higher barriers to entry as a result of regulatory accumulation. Groups that generally promoted the regulations to begin with tend to be the only active players in a program to eliminate them. Those that benefit from regulations include large firms that often lobby for new regulations in order to put their smaller competitors at a disadvantage, as well as the agencies that created the rules in the first place. In addition, activists who generally favor regulation associated with their particular social agenda do not typically account for the effects of the mass of rules or their unintended consequences.

The Small Business Regulatory Enforcement and Fairness Act, which was designed to give teeth to the Regulatory Flexibility Act, passed the Senate by a vote of 98 to 0. This shows that many in Congress understand that small businesses need protection as most are not engaged in the regulatory processes and are often the target of their larger competitors. Moreover, potential start-up competitors, not yet being in the industry, can be harmed by a surplus of rules that make it harder to start a business. So the three groups most affected by excess rules—

⁸⁰ High fixed-cost rules are those that impose “fixed costs,” such as pieces of equipment, as opposed to costs that vary with the size of what is being produced, like labor.

consumers, small businesses, and potential entrepreneurs—are typically not engaged in demanding fewer, more efficient rules.

The BRAC Commission’s and the Dutch Programme’s Solutions to Obstacle 7

It is actually not clear that either the BRAC Commission or the Dutch Programme successfully dealt with obstacle 7. It is possible that special interests affected which regulations were eliminated or modified in the Dutch Programme. In fact, businesses were overtly included and consulted from the beginning of the Programme’s implementation.⁸¹ Of course, consulting businesses does not necessarily indicate special interests’ influence, and under the right leadership, business input can help identify obsolete or otherwise undesirable regulations.

5. Recommendations

In order to successfully undertake retrospective review, we must chart a different path than that of the last 30 years. The primary lesson of previous attempts at retrospective review is that assessment and decision-making authority should generally be removed from agencies and the Administrative Procedure Act. Because of the technical nature of regulations, however, recommendations must come from people who have expertise in the field and with the nature of regulations. Because of the political problems, the experts must be independent of political influences.

Below, we outline several characteristics of successful reform. Many of these are derived directly from lessons learned by studying the BRAC process, the Dutch Programme, and previous attempts at retrospective review in the United States.

⁸¹ World Bank Group, *Dutch Administrative Burden Reduction Programme*, 2007, 5, stating that businesses were permanently represented on the independent monitoring agency and that staff from enterprises were sent on 1- to 2-year short-term assignments to work for the agency in charge of overcoming political obstacles.

1. **Before any specific regulations, agencies, or subject areas are broached, Congress must agree on the general principle** that we need to eliminate or modify nonfunctional rules. The mention of specific regulations, agencies, or subject areas will put too many members on the defensive.
2. **The process should entail independent assessment of whether regulations are nonfunctional.** This likely requires analysts and others who are experts in the areas being addressed and giving them sufficient time and information/data.⁸²
3. **The process should ensure there is no special treatment of any group or stakeholder.** Stakeholder input can help the assessment of regulations, but it should not be the only source of information. Consumers and small businesses may be underrepresented in comments/stakeholder input. The process should explicitly direct an assessment to consider how underrepresented stakeholders are affected by the regulations.
4. **The unit of analysis must be broad enough to identify potentially duplicative regulations.** If only one rule or one agency is examined, the process might miss duplication caused by another rule or agency. Instead, subjects such as air quality, automobile safety, food safety, or workplace safety should be examined: e.g., the Occupational Health and Safety Administration makes workplace safety rules, but so does the Federal Railroad Administration. They may or may not overlap.
5. **The process should use a standard method of assessment that is difficult to subvert.** The criteria of assessment and the sources of information for determining which regulations are nonfunctional must be established first. Failure to establish these criteria is an invitation for politics and logrolling. Even with explicitly determined criteria, the

⁸² Experts may include economists who are experts in efficiency (benefit-cost analysis), subject matter experts, and legal experts.

analysis can be subverted. Even “independent commissioners” can be influenced—they are political appointees, after all. In light of this, it is important to adopt a simple and transparent procedure for assessment because that will minimize opportunities for subversion.

6. **Whatever the procedure for assessment, assessments of specific regulations or regulatory programs should focus on whether and how they lead to the outcomes desired.** Unless regulations are associated with outcomes (as opposed to outputs), it is difficult to assess whether they are successful.⁸³
7. **Regulatory agencies should be recognized as another important stakeholder, with incentives to keep and increase regulation.** Agency information is useful, just like industry and consumer information. However, agencies are likely to provide information that serves their own interests of maintaining their stock of existing regulations. Agency deference should be eliminated in the process of assessing regulations.
8. **The list of regulations for elimination or modification should be long enough to overcome the public choice problem.** If \$1 billion is saved by eliminating or modifying some small set of regulations, but one member is losing benefits to his district/state of \$100 million, it’s easy for that member to oppose cutting those regulations. But if \$100 billion is saved, and many states/districts are also losing \$100 million, any individual member has less incentive to oppose the entire set of recommended changes. In order to ensure that the set of regulations considered is large and broad enough, we recommend including a quantifiable threshold—e.g., 25 percent—as the minimum that must be eliminated or modified for each subject area.

⁸³ A good discussion of this point can be found in Jerry Ellig, Maurice McTigue, and Henry Wray, *Government Performance and Results: an Evaluation of GPRA’s First Decade* (Boca Raton, FL: CRC Press, 2011).

9. Modifications to regulations should be limited. Only improvement from design standards to performance standards or other cost-reducing/innovation-inducing improvements should be suggested. Agencies already have mandates to protect health, safety, the environment, etc. (i.e., to achieve benefits), and these mandates are executed under the Administrative Procedure Act.

10. Congressional action—such as a joint resolution of disapproval—should be required in order to stop the recommendations, as opposed to a vote to enact or not enact.

BRAC did this, and that allows members to complain, fight, or save face publicly, while privately supporting the recommendation.

11. The review process should repeat indefinitely. The limited successes seen in previous efforts such as the National Partnership were followed by a reversion to the long-term trend of regulatory growth. If agencies' missions will always entail creating more regulations, then a counterbalancing cleanup process should also be in place.

5.1. A Model Regulatory Review Commission

To achieve the goal of eliminating or modifying nonfunctional regulations or regulatory programs that are redundant, inefficient, or obsolete, we propose the creation of a Regulatory Review Commission. First, however, Congress would need to pass a Regulatory Review Act. This act would accomplish three things:

1. formally recognize that both the economy and safety could improve substantially from eliminating nonfunctional regulations;
2. create the Regulatory Review Commission, an independent commission that would be charged with identifying regulations to eliminate, modify, or consolidate; and

3. bind Congress to accepting the recommendations of the Regulatory Review Commission, unless a bicameral resolution of disapproval is passed.

The details of the Regulatory Review Act would primarily lay out how the Regulatory Review Commission is structured and how the commissions fit into the process of regulatory review. We describe our proposed process below, which attempts to incorporate the key lessons outlined above.

5.2. Structure of the Commission

The Regulatory Review Commission would be given a narrow mission of identifying nonfunctional regulations. The commission would identify those regulations using a predetermined evaluation method, such as the Standard Cost Model or another simple, transparent model for evaluating the regulation. In addition to evaluating each regulation according to a predetermined model, the commission would have a mission to identify duplicative regulations.

We suggest that the commission be appointed for a limited time (e.g., five years) and that there be seven members. For example, the commission might include two commissioners selected by the Senate majority leader, two by the House majority leader, one by the Senate minority leader, and one by the House minority leader—the president would select the final commissioner, who would also serve as the chair.

Upon its creation and the appointment of its members, the commission would be responsible for dividing up regulatory programs into manageable areas for review. The areas to be reviewed would address a particular outcome of concern. All regulatory text produced across all agencies that attempts to bring about a common outcome would be considered part of a single area of review. Outcomes of concern would be defined by the commission, but an

example of a regulatory program might be all regulatory text that attempts to reduce the risk of premature cancer in humans caused by the respiration of airborne contaminants. This would include, therefore, some regulations promulgated by EPA under the Clean Air Act, but it may also include regulations from DOT, FDA, and other agencies. Another outcome of concern could be “food safety.” The commission would then oversee a review of all federal food safety regulatory programs, including those from USDA, FDA, EPA, and Commerce. The commission would initially choose, for example, four of these outcomes for review. The outcomes chosen could be based on solving the most pressing problems first, including factors such as likely total ongoing costs of the programs; possibility for replacing design with performance rules; absence of benefits, particularly compared to ongoing costs; or effects on domestic or international competition.

Once the four areas for review are chosen, the commission would oversee the creation of corresponding expert committees—one for each area of review. These committees would consist of experts in the area of review, including primarily scientists, risk assessors, and economists who are experts in the area, but also including experts in the agencies that write regulations likely to be reviewed by the committee. To extend our example, suppose the commission chose the following four areas of review: air quality, food safety, automobile safety, and workplace safety (note: these areas are merely examples of areas for review and not necessarily the areas the commission should choose). The commission would assemble committees of experts in those four areas, and the committees would hold public hearings, seek advice from OIRA and the relevant agencies and stakeholders, commission research, and gather information to make recommendations for regulatory programs and individual regulations. The recommendations for changes would be limited to elimination, consolidation, or modification

from a design standard to a performance standard or other cost-reducing modification. The committees would not be permitted to recommend an increase in the stringency or number of regulations, as that mission is already well served by the missions of agencies and the Administrative Procedure Act.

One thing common to successful committees is that they have clear, quantitative goals. In this case, the goal should be defined in the context of whatever model of assessment is adopted. The Dutch Programme, for example, adopted a quantitative goal of eliminating 25 percent of administrative burden in each agency. Without a clear quantitative goal—a minimum threshold that must be achieved—the commission would likely have minimal impact. In the context of committees and areas of review, the quantitative goal would need to relate to the specific area rather than a specific agency. For example, if the area of review is food safety, the committee responsible for food safety would need to identify food safety regulations that could be eliminated—perhaps because they are duplicative, because they do not contribute to the outcomes desired, or because there are better methods now available to achieve the desired outcome. If the threshold chosen is 25 percent, and the model of assessment is the Standard Cost Model, then the committee would produce a list of regulations to eliminate, modify, or consolidate such that the administrative burden caused by all food safety regulations is reduced by 25 percent.

The committees would make regular reports to the commission, which, in turn, would report to the appropriate committees in the House and Senate and to the president. These reports could explain, for example:

1. The outcomes being considered for categorization of regulatory units.
2. The definitions of regulatory units.

3. The definitions of regulatory programs.
4. The assessments of regulations according to the chosen model.
5. Lists of potentially redundant regulations identified so far (i.e., regulatory units that attempt to achieve the same outcome).

Near the end of the term of the commission, the commission would produce a report of regulations and programs to be modified, consolidated with other regulations, or eliminated. Where necessary, the recommendation would include modification or elimination of enabling legislation.

As with the BRAC structure, the recommendations in the report would be considered acceptable unless Congress passed a joint resolution to reject it. An acceptable report would go to the president for signature.

This process would be repeated for a different set of areas of review after the first commission's cycle had ended. Eventually, areas of review would be repeated.

6. A Comparison of Regulatory Review Bills Produced in the 112th and 113th Congresses and Our Proposed Regulatory Review Commission

Above, we listed primary obstacles behind the ongoing inability of the federal government to implement a process for regulatory cleanup. In this section, we evaluate bills from the 112th and 113th Congresses that address the phenomenon of regulatory accumulation with respect to how successful they might be in overcoming these obstacles, alongside our own proposed regulatory review commission.

6.1. A Brief Review of Seven Bills Addressing Regulatory Accumulation (See Appendix for a Summary Table)

S 1390: “Regulatory Improvement Act of 2013”

The Regulatory Improvement Act of 2013 proposes the creation of a Regulatory Improvement Commission. This independent commission would be charged with reviewing existing regulations and developing recommendations for these regulations’ modification, consolidation, or repeal, for the purpose of reducing compliance costs, encouraging growth and innovation, and improving competitiveness. A press release related to the bill states that the proposal “employs a balanced approach to evaluating existing regulations—one that involves identifying regulations that are not essential to broad priorities like the environment, public health, and safety, but instead are outdated, duplicative, or inefficient.”⁸⁴

Strengths:

- creates an independent commission to decide which rules to change or eliminate, thereby avoiding some incentive-related obstacles
- requires of Congress only an up-or-down vote on the commission’s recommendations, with no amendments allowed
- the commission’s recommendations would cover a single sector area to examine, which would allow examination of duplication across agencies
- the commission’s guidelines—to reduce compliance costs, encourage growth and innovation, and improve competitiveness—for selecting regulations to alter are broad enough to allow serious reform

⁸⁴ Office of Senator Angus King, “Senators King & Blunt Introduce Legislation to Review and Streamline Regulations and Stimulate Economic Growth,” news release, July 30, 2013, <http://www.king.senate.gov/newsroom/press-releases/senators-king-and-blunt-introduce-legislation-to-review-and-streamline-regulations-and-stimulate-economic-growth>.

Weaknesses:

- limits the regulations that the commission can consider to only regulations that were finalized more than 10 years before the commission is established and that have not been amended after being finalized
- relies on public comments to provide suggestions for the sector to focus on; past experience suggests that the primary groups that comment are those that benefit from regulations
- unclear what model, if any, the commission will use to identify regulations for change or elimination
- no mechanism for further reform after the commission is done with proposing changes to one sector area
- the commission would have to be recreated by Congress in order to address any other sector areas; the bill does not propose a repeated commission or a new agency
- limits which regulatory programs can be considered

HR 214: “Congressional Office of Regulatory Analysis Creation and Sunset and Review Act of 2011”

This bill would create a Congressional Office of Regulatory Analysis (CORA) to analyze new rules and would set up a sunset review provision for existing regulations.

Strengths:

- CORA would be a step toward independent Benefit-Cost Analysis (CBA)⁸⁵ of proposed rules and would require a more independent CBA to be provided to Congress for all proposed major rules
- sunset review groups rules by subject area across agencies to look for duplication
- places all significant rules under sunset review at once, overcoming public choice problem
- creates new position/officer in each agency who is responsible for review, which may help align incentives away from subversion

Weaknesses:

- initial review by CORA applies only to major rules
- CORA has no enforcement mechanism—it's just information for Congress
- CORA could be more useful if it performed CBA on legislation before its creation
- sunset review applies only to major rules and rules suggested for review (by the public or Congress)
- leaves sunset review in the hands of the agencies using same criteria as APA rulemaking procedures
- other rules may be suggested for initial and sunset review by members or the public, which may allow subversion by special interests
- unclear where resources for agency-led review would come from, but could not be accomplished with existing resources

⁸⁵ Benefit-cost analysis is a decision-making aid that uses a systematic way to examine a problem and assess the benefits and costs of multiple possible ways to solve the problem.

- unclear how OIRA could afford resources for this (OIRA would provide input into CORA's activities), especially for grouping rules or programs
- unclear whether non-significant rules can be considered in a group (for duplication, etc.)
- exemptions of independent federal bank regulatory agencies will prevent identification of duplication (especially in Dodd-Frank)
- judicial review is not changed from status quo, which means continued deference to agencies on their statutory interpretations

HR 309: "Regulatory Sunset and Review Act of 2013"

This bill would require sunset review of major rules and rules suggested for review by the public or Congress. Its test appears mostly identical to that of the sunset review section of HR 214 above.

Strengths:

- sunset review groups rules by subject area across agencies to look for duplication
- places all sign rules under sunset review at once, overcoming public choice problem
- creates new position/officer in each agency who is responsible for review, which may help align incentives away from subversion
- requires legislative recommendations if statutes prevent changes to rules

Weaknesses:

- leaves sunset review in the hands of the agencies using same criteria as APA rulemaking procedures, with same standards—but given current incentives, it is unlikely that anything would change
- other rules may be suggested for initial and sunset review by members or the public, which may allow subversion by special interests

- unclear where resources for agency-led review would come from, but could not be accomplished with existing resources
- unclear how OIRA could afford resources for this, especially for grouping
- unclear whether rulemakings to revise, consolidate, or eliminate rules can be conducted jointly or have to be done one at a time (i.e., for each CFR Part individually or for all in a group at once)
- unclear whether nonsignificant rules can be considered in a group (for duplication, etc.)
- exemptions of independent federal bank regulatory agencies will prevent identification of duplication (especially in Dodd-Frank)
- judicial review is not changed from status quo, which means agency deference

HR 3181: “Stop the Regulation Invasion Please Act of 2011”

This bill proposes a moratorium and perhaps a repeal of all regulations created since October 1, 1991.

Strengths:

- blanket repeal of all rules unless the rule can be defended
- flips the burden of proof, requiring agencies to defend the continued existence of rules

Weaknesses:

- no treatment for rules as groups that work together
- requires CBA from OMB within 90 days; likely only to get a repeat of RIAs and attempts to justify rules’ existence
- exemptions and exceptions are so broad and vague that all of Dodd-Frank could continue to be implemented

HR 3392: “Regulatory Review Act of 2011”

This bill proposes periodic review of major rules—every 10 years.

Strengths:

- review of all major rules, without exemption
- requirement to analyze all viable alternatives, including repeal
- determinations of keep, amend, or repeal by agencies are to be based on CBA; required to pick most cost-effective option of accomplishing rule objective
- requires judicial review of determination by agency, which will limit agency ability to subvert analysis

Weaknesses:

- doesn't clearly define rules or allow rules to be analyzed as groups
- CBA still in agency hands, although judicial review helps
- review wouldn't be triggered until 10 years after enactment
- unclear where agency resources or OIRA resources for review would come from for their part in directing this
- unclear who defines “objective” of rule; probably the agency, which will be key to subversion

HR 6333: “Sunset Act of 2012”

This bill would require congressional approval to create any new rule. It also requires annual review of rules currently in effect.

Strengths:

- requires Congress to be responsible for its own actions (indirectly) by requiring approval for rule creation or approval for existing rule continuation
- default is that a rule cannot be created or continued without joint resolution of approval, putting burden of proof on agencies
- specifically prevents reissuance of the same rule if one is disapproved or discontinued
- limits ability of Congress to amend or debate approvals

Weaknesses:

- relies on information (CBAs) provided by agencies
- agency analysis/info is not subject to judicial review
- despite attempts to limit debate and amendments to joint resolutions of approval, there will likely be ample room for individual members to hold up individual rules—allowing special interests and pork-barrel politics in

Conclusion

Despite broad and bipartisan recognition that the accumulation of regulations in the United States likely has significant negative economic and possible risk consequences, the problem continues to grow. Every attempt by presidents to direct agencies to review their own regulations in order to eliminate nonfunctional regulations has yielded poor results. This likely stems from fundamental misalignment of incentives: agencies, despite direction from the president, have incentives to maintain and grow their regulations in order to maximize their budgets. In turn, in order to retain regulations that would be eliminated otherwise, agencies may either hide or fail to produce information that would help identify obsolete regulations in the first place. This paper

examined these and several other obstacles that must be overcome before retrospective review and elimination of nonfunctional regulations can be accomplished in the United States.

In contrast to the repeated failures of the United States to clean up regulations, the Dutch Administrative Burden Reduction Programme successfully eliminated 25 percent of the administrative costs imposed by regulations. We examined the Dutch Programme and another innovative program—the BRAC Commission in the United States—as models for how to overcome some of the obstacles heretofore preventing the cleanup of the stock of regulations in the United States.

The primary characteristics of the BRAC Commission’s effort that overcame the obstacles to government reform were the following:

1. The BRAC Act set up an independent commission.
2. The commission was given a mission with clearly defined criteria.
3. Congress’s ability to disapprove was limited to a joint resolution of disapproval. Barring that, the recommendations of the commission would be implemented.

Similarly, the Dutch Programme has some characteristics that helped overcome some of the obstacles preventing regulatory reform in the United States:

1. The Programme established an independent monitoring agency to monitor each agency’s measurement and reduction processes.⁸⁶
2. Agencies were given a clearly defined mission: eliminate 25 percent of administrative costs that stem from regulations by 2007.
3. The criteria used to evaluate regulations’ administrative costs were also clear, simple, and transparent: the Standard Cost Model.

⁸⁶ Hall and Williams, “Process for Cleaning Up Federal Regulations,” 7.

Based on our examination of the obstacles to successful regulatory cleanup and the models of successful government reform, we recommend the creation of an independent Regulatory Review Commission. The commission would be charged with evaluating regulations that cover predetermined, outcome-related topics, such as clean air or food safety, according to a simple and transparent model, such as the Standard Cost Model. The commission would have to suggest changes that would achieve some quantifiable threshold, such as a reduction of 25 percent of administrative burden. These changes would be presented to Congress, and by default the changes would become law unless Congress passed a joint resolution of disapproval. Finally, this process would be repeated for other outcome-related topics on an ongoing basis. After all, there is a process for creating regulations that continues in perpetuity, so it makes sense to have a corollary process for eliminating regulations that are no longer useful.

Appendix: Evaluating Regulatory Reform Proposals with Respect to the Obstacles to Regulatory Cleanup

Table 2 briefly assesses whether and how each of the bills and proposals discussed above addresses the obstacles to regulatory cleanup. For brevity, we have included a rating system that conveys to the reader our opinion about whether the proposal would help overcome the obstacle, maintain the status quo, or, in some cases, exacerbate the problem described by the obstacle.

Table 2. How Do the Bills Deal with the Obstacles to Regulatory Cleanup?

-1 = exacerbates problem described by the obstacle, 0 = maintains status quo, +1 = may make marginal improvements, +2 = likely to help overcome the obstacle

Obstacles	HR 309: Reg Sunset and Review Act	HR 3392: Reg Review Act	HR 214: CORA Creation and Sunset and Review Act	HR 3181: STRIP Act	HR 6333: Sunset Act	S 1390: Regulatory Improvement Act	Regulatory Review Commission (our proposal)
<i>Decision-makers lack information to determine which regulations to eliminate or change</i>	+1 Little change with this bill—the information would still come from agencies, although the creation of a regulatory review officer in agencies may help improve the quality of agency-provided info.	+2 Agencies would perform CBA on major regulations every 10 years, creating new info on reg performance. Agency info would be subject to judicial review, which should improve info quality.	+1 CORA would provide new information to Congress on costs and benefits of proposed major rules. Presumably Congress could use that info to stop a rule under the CRA. There's little change in sunset review—the information would still come from agencies, although the creation of a regulatory review officer in agencies may help improve agency-provided info.	0 CBA info to come from OMB (maybe OIRA?) within 90 days of act. Info is likely to be a repeat of agency analysis — meaning no new info.	0 Congress might get more info because agencies have to prove that a rule needs to be made. Info still comes from agencies and is not subject to judicial review, so quality is questionable.	+2 The independent commission established by this act would be tasked with gathering and producing information, including quantitative metrics, to determine which regulations to eliminate or change.	+2 Similar to the RIA, the independent commission established in our proposal would be tasked with gathering and producing information, including quantitative metrics, to determine which regulations to eliminate or change.

Obstacles	HR 309: Reg Sunset and Review Act	HR 3392: Reg Review Act	HR 214: CORA Creation and Sunset and Review Act	HR 3181: STRIP Act	HR 6333: Sunset Act	S 1390: Regulatory Improvement Act	Regulatory Review Commission (our proposal)
<i>Agencies are stakeholders with different objectives than citizens (recognizing the principal-agent problem)</i>	0 Unclear. Although the bill centralizes regulatory review under a Regulatory Review Officer, this person may not be inclined to reduce regulations within his or her own agency.	0 No change with this bill—agency objectives aren't changed.	+1 CORA objectives would be to provide info, but then Congress would have to act on it. This may lessen principle-agent problem perhaps, but only for new regs. For sunset review, creation of a regulatory review officer in agencies may change objectives somewhat, although it's not explicit.	0 No change.	0 No change.	+2 The act seems to treat agencies as information providers, similar to other possible information providers, such as citizens, trade associations, and businesses.	+2 Similar to the RIA, our proposal would treat agencies as information providers, similar to other possible information providers, such as citizens, trade associations, and businesses.
<i>Agencies lack incentive to provide information on regulations; agency rewarders for expanding regulations</i>	0 Creation of a regulatory review officer in agencies may change incentives somewhat, although it's not explicit. There's likely minimal change on info from agencies unless incentives change.	+2 Agency info would be subject to judicial review, which should improve info quality. Agencies would still be rewarded for expanding regs, however.	+1 CORA, if successfully independent, would have incentive to provide high-quality CBA info on new regs. For sunset review of old regs, creation of a regulatory review officer in agencies may change incentives somewhat, although it's not explicit. There's likely minimal change on info from agencies.	0 Slight change with this act, perhaps because agencies must prove need for rules to Congress. Agencies would still be rewarded for expanding regs, however.	0 Slight change with this act, perhaps because agencies must prove need for rules to Congress. Agencies would still be rewarded for expanding regs, however.	0 While agencies would be required to provide information upon request to the commission, agency incentives do not change. Agencies would still be rewarded for expanding regs, however.	0 Similar to the RIA, while agencies would be required to provide information upon request to the commission, agency incentives do not change. Agencies would still be rewarded for expanding regs, however.

<p>Obstacles</p> <p><i>Decision criteria can be subverted</i></p>	<p>HR 309: Reg Sunset and Review Act</p> <p>0</p> <p>Agency remains responsible for producing its own CBA, which can be bent to its objectives. No judicial review to limit this or other independent review.</p>	<p>HR 3392: Reg Review Act</p> <p>+2</p> <p>Agency CBA procedure would be to analyze alternatives and pick the best option. Judicial review applies, which limits ability to subvert analysis.</p>	<p>HR 214: CORA Creation and Sunset and Review Act</p> <p>0</p> <p>Agency remains responsible for producing its own CBA, which can be bent to its objectives. No judicial review to limit this or other independent review.</p>	<p>HR 3181: STRIP Act</p> <p>0</p> <p>Unclear. It appears that OMB would be required to perform its own CBA, which could be subverted by executive branch.</p>	<p>HR 6333: Sunset Act</p> <p>0</p> <p>Agency remains responsible for producing its own CBA, which can be bent to its objectives. No judicial review to limit this or other independent review.</p>	<p>S 1390: Regulatory Improvement Act</p> <p>+1</p> <p>Act is similar to BRAC, except the proposal does not specify that simple and predetermined metrics or methodologies would necessarily follow. The independent commission would be given the mission of examining the effectiveness of regulations using quantitative metrics, using a pre-established and simple methodology. The commission would also be required to address enough regulations to achieve some minimum reduction (e.g., 25% reduction in compliance costs).</p>	<p>Regulatory Review Commission (our proposal)</p> <p>+2</p> <p>Commission is similar to BRAC. Independent commission would be given the mission of examining the effectiveness of regulations using quantitative metrics, using a pre-established and simple methodology. The commission would also be required to address enough regulations to achieve some minimum reduction (e.g., 25% reduction in compliance costs).</p>
<p><i>Public choice problem of "concentrated benefits and dispersed costs"</i></p>	<p>+1</p> <p>Act places all significant rules under review at once. Changes and elimination appear to require individual rule-making, which could bring a return to the status quo.</p>	<p>+2</p> <p>Act requires review of all rules after 10 years have passed, without exemptions.</p>	<p>-1</p> <p>CORA exacerbates this problem. However, for sunset review, it places all significant rules under review at once. Changes and elimination appear to require individual rule-making, which could bring a return to the status quo.</p>	<p>+1</p> <p>Act repeals all rules unless the rule can be defended. Act flips the burden of proof, requiring agencies to defend the continued existence of rules. Some members may dedicate themselves to defense of individual rules.</p>	<p>-1</p> <p>Each rule must be approved—making this problem worse.</p>	<p>+2</p> <p>Act would send all proposed changes and repeals to Congress for a simple up-or-down vote. However, it could be more effective if it followed the BRAC example and required a vote of disapproval to stop the proposed changes.</p>	<p>+2</p> <p>Commission would send all proposed changes and repeals to Congress, following the BRAC example and requiring a vote of disapproval to stop the proposed changes.</p>

Obstacles	HR 309: Reg Sunset and Review Act	HR 3392: Reg Review Act	HR 214: CORA Creation and Sunset and Review Act	HR 3181: STRIP Act	HR 6333: Sunset Act	S 1390: Regulatory Improvement Act	Regulatory Review Commission (our proposal)
<i>Statutes may make it difficult for agencies to eliminate regulations</i>	0 Unclear. It appears a decision to eliminate a rule could still be countered by statutory requirements.	0 Unclear.	+2 Act explicitly states that if legislation stops a change or elimination, the agency should recommend changes to the legislation.	0 Unclear.	+1 Act requires congressional approval for new rules or continuation of existing rules, so presumably Congress could simultaneously change statutes, if necessary.	0 It is unclear what agencies would do when required by the commission to eliminate an ineffective regulation that was required by another act of Congress. Would they just recreate the rule?	0 It is unclear what agencies would do when required by the commission to eliminate an ineffective regulation that was required by another act of Congress. Would they just recreate the rule?
<i>Horse-trading/ logrolling and special interests' influence may occur, regardless of decision criteria</i>	+1 Decision rule for review is "major," which limits the possibility of horse-trading. However, provisions for the public or Congress to recommend regs for review could exacerbate the problem.	+1 Regulatory review is required for all major rules, without exemptions. Influence could happen in agency CBA.	0 CORA review of new, major rules may be more independent and less susceptible to influence initially, but closeness to Congress may lead to horse-trading/congressional influence. For sunset review, decision rule for review is "major," which limits the possibility of horse-trading. However, provisions for the public or Congress to recommend regs for review could exacerbate the problem.	0 OMB would produce CBAs; act may be highly susceptible to special interests or executive influence unless specifically walled off.	0 Despite attempts to limit debate and amendments to joint resolutions of approval, there will likely be ample room for individual members to hold up individual rules—allowing special interests and pork-barrel politics in.	+2 The independence of the commission coupled with only an up-or-down vote, without amendments, on the complete package of proposed changes or repeals minimizes this possibility, unless special interests can influence individual commissioners.	+2 The independence of the commission coupled with the default acceptance of the committee's recommendations, without amendments, on the complete package of proposed changes or repeals minimizes this possibility, unless special interests can influence individual commissioners.