MERCATUS CENTER
George Mason University
Bridging the gap between academic ideas and real-world problems

TESTIMONY

ON THE HUMAN COSTS OF THE US REGULATORY SYSTEM: SHOULD CONGRESS PRESSURE AGENCIES TO MAKE RULES FASTER?

BY PATRICK A. MCLAUGHLIN

Senate Judiciary Committee
Subcommittee on Oversight, Federal Rights, and Agency Action

August 1, 2013

INTRODUCTION

Chairman Blumenthal, Ranking Member Hatch, and members of the committee, thank you for inviting me to testify today. I am an economist and senior research fellow at the Mercatus Center at George Mason University, a 501(c)(3) research, educational, and outreach organization in Arlington, Virginia. My primary research focuses on the regulatory process and how it could be improved, so I am delighted to testify on today's topic.

The political system in the United States typically reacts to major events—perceived crises, new technologies, accountings scandals, and the like—by creating new regulatory agencies and new regulations. The Patient Protection and Affordable Care Act (PPACA), enacted in 2010 as a congressional response to shortcomings of the medical care and insurance system in the United States, is a recent example of such a response. In the sense that PPACA has and will continue to cause the creation of new regulations, it is no different than any other act of Congress prescribing goals and duties to regulatory agencies. Conversely, there is no mechanism built into the regulatory system for the removal of obsolete, inefficient, redundant, or otherwise undesirable regulations. The result is a constant accumulation of federal regulations. As the quantity and scope of regulations grow, so does the degree to which they affect the economy. In 2012, the *Code of Federal Regulations*—the series of books that contains all regulations in effect at the time of printing—contained over 170 thousand pages of dense legal text with over one million restrictions, the result of the accumulation of regulations over decades and decades of reactive governance.[1]

PPACA directs a multitude of executive branch agencies to add to this enormous body of regulations. The final version of PPACA, as published in the *United States Statutes at Large*, was 906 pages long, a length that attests

1. For pages, see Office of the Federal Register, *Federal Register Document Pages 1976–2012*, https://www.federalregister.gov/uploads/2013/05/OFR-STATISTICS-CHARTS-ALL1-1-1.pdf. For restrictions, see Omar Al-Ubaydli and Patrick McLaughlin, "RegData: A Numerical Database on Industry-Specific Regulations for All US Industries and Federal Regulations, 1997–2010" (Working Paper No. 12-20, Mercatus Center at George Mason University, Arlington, VA, October 2012), http://mercatus.org/publication/industry-specific-regulatory-constraint-database-ircd. RegData is also available online at http://regdata.mercatus.org.

For more information or to meet with the scholars, contact
Robin Bowen, (703) 993-8582, rbowen@mercatus.gmu.edu
Mercatus Center at George Mason University, 3351 Fairfax Drive, 4th Floor, Arlington, VA 22201

to the fact that PPACA will lead to the creation of a potentially monumental quantity of new regulation. As such, it is appropriate to consider both the overall consequences of making that many new rules and whether those consequences might affect lower-, middle-, and high-income households differently. One focus of this hearing, according to the invitation letter I received from Chairman Blumenthal, is the human costs of rulemaking delay. I applaud the committee's concern over how the often obscure regulatory process can lead to real human costs—costs measured not just in dollars, but also in human lives.

The regulatory process in the United States creates human costs in more ways than can be covered in this testimony, but I will cover three:

1. The accumulation of regulations stifles innovation and entrepreneurship and reduces efficiency. This slows economic growth, and over time, the decreased economic growth attributable to regulatory accumulation has significantly reduced real household income.

2. The unintended consequences of regulations are particularly detrimental to low-income households—resulting in costs to precisely the same group that has the fewest resources to deal with them.

3. The quality of regulations matters. The incentive structure of regulatory agencies, coupled with occasional pressure from external forces such as Congress, can cause regulations to favor particular stakeholder groups or to create regulations for which the costs exceed the benefits. In some cases, because of statutory deadlines and other pressures, agencies may rush regulations through the crafting process. That can lead to poor execution: rushed regulations are, on average, more poorly considered, which can lead to greater costs and unintended consequences.[2] Even worse, the regulation's intended benefits may not be achieved despite incurring very real human costs.

Every regulation ostensibly has a goal, and there are always different ways to achieve it. There are also always costs and often unintended consequences. Careful consideration of regulatory options can help minimize the costs and unintended consequences that regulations necessarily incur. If additional time can improve regulations in this regard, then additional time should be taken.

REGULATORY ACCUMULATION

By design, regulations restrict choices. In its most basic definition, a regulation is a law that "seeks to change *behavior* in order to produce desired *outcomes*," and it does this by requiring or forbidding certain actions.[3] Federal regulations can place restrictions on the choices of individuals, large manufacturers, high-tech startups, small business owners, state and local governments, and even on the federal government itself.

Federal regulation in the United States has consistently grown for decades. One way to measure the growth of federal regulation is to count the number of pages published each year in the *Code of Federal Regulations*. The *Code of Federal Regulations* contains the legal text of all federal regulations in effect each year. That means one can simply look at the number of pages published in the *Code of Federal Regulations* in a given year to get a rough approximation of the extent and complexity of all federal regulations in effect in that year. Figure 1 shows the number of pages published in the *Code of Federal Regulations* each year from 1975 to 2012.

---

2. Jerry Ellig, Patrick A. McLaughlin, and John F. Morrall III, "Continuity, Change, and Priorities: The Quality and Use of Regulatory Analysis across U.S. Administrations," *Regulation & Governance* 7 (2013): 153–73; Jerry Ellig and Rosemarie Fike, "Regulatory Process, Regulatory Reform, and the Quality of Regulatory Impact Analysis" (Working Paper No. 13-13, Mercatus Center at George Mason University, Arlington, VA, July 2013), http://mercatus.org/publication/regulatory-process-regulatory-reform-and-quality-regulatory-impact-analysis.
3. Cary Coglianese, "Measuring Regulatory Performance: Evaluating the Impact of Regulation and Regulatory Policy" (Expert Paper No. 1, Organisation for Economic Co-operation and Development, August 2012), http://www1.oecd.org/regreform/regulatory-policy/1_coglianese%20web.pdf.

Figure 1: Total Number of Pages in the Code of Federal Regulations 1975 -- 2011

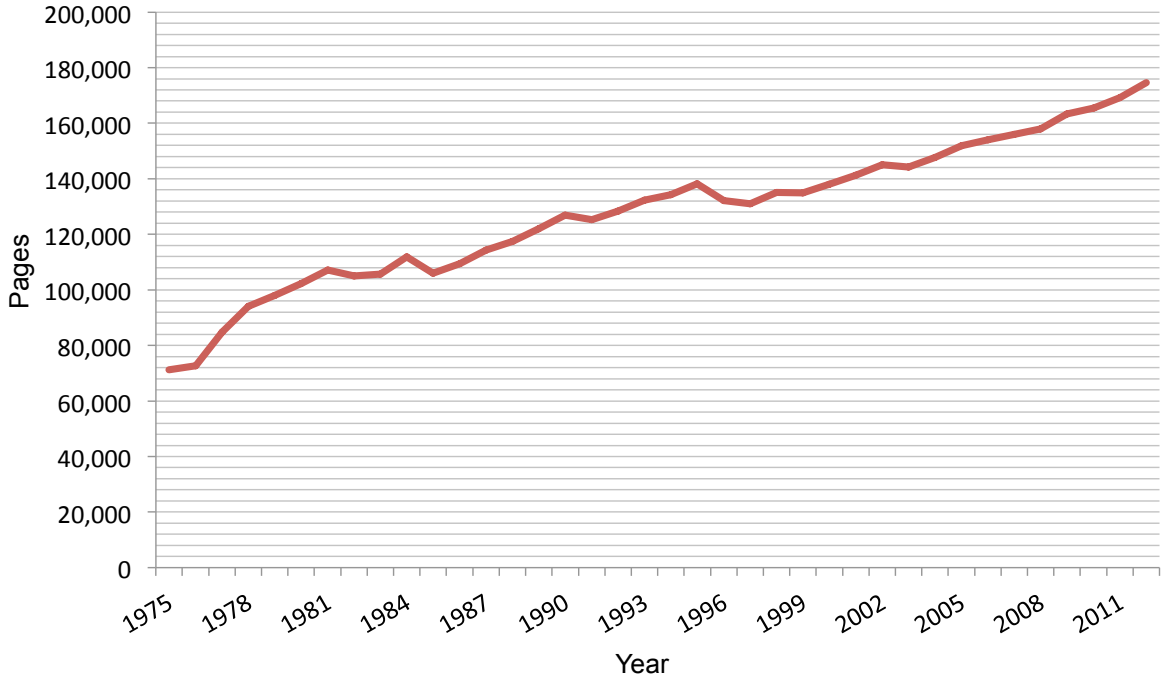
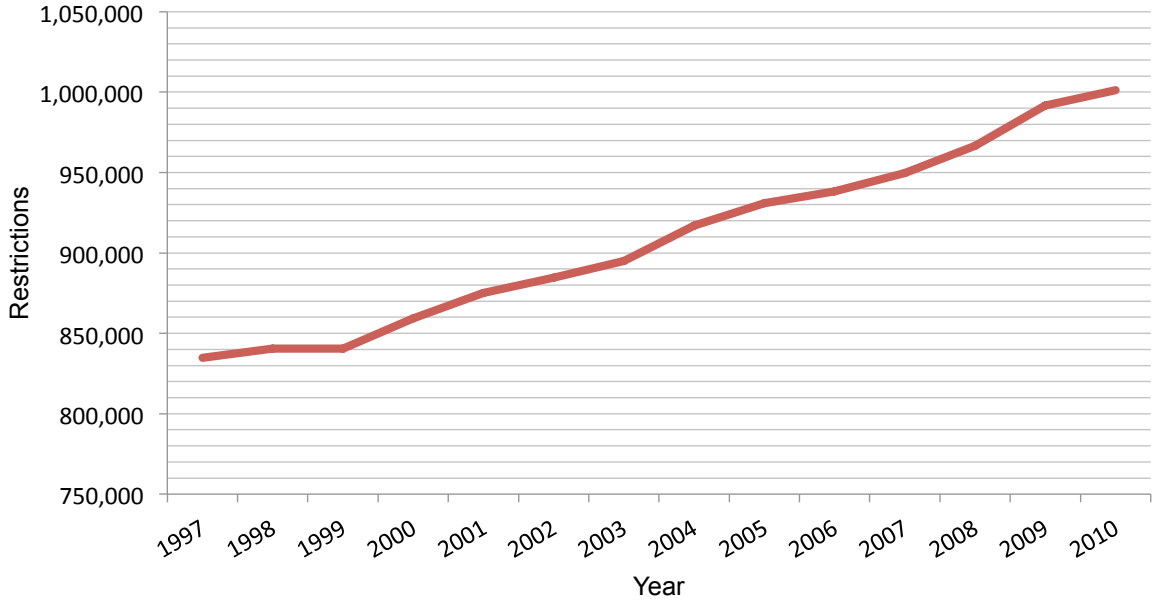


Figure 2: Total Number of Restrictions 1997 – 2010



As Figure 1 shows, the number of pages published in the *Code of Federal Regulations* has consistently grown over the tenures of all recent presidents. In 1975, there were 71,224 pages of regulation. In 2012, 174,545 pages of regulation were published.[4]

4. Office of the Federal Register, *Federal Register Document Pages*.

Of course, not all pages are the same. Another way to assess the extent and complexity of federal regulation is to look at the actual number of restrictions—words that create binding, legal obligations either to do something or not to do something, such as "shall," "must," and "may not." This permits a more narrow focus on the components of regulatory text that are truly restrictive, as opposed to, for example, text that merely provides information or opinion. In a project called RegData, made publicly available on the website of the Mercatus Center at George Mason University, economics professor Omar Al-Ubaydli and I have done exactly that.[5] Figure 2 shows the total number of regulatory restrictions published in regulatory text in the *Code of Federal Regulations* from 1997 to 2010.

Figure 2 corroborates the impression given by Figure 1: regulation has been consistently growing. Aside from helping people like me to make nifty graphs and figures, these measures of regulation allow economists to perform studies on the consequences of the accumulation of regulation.

THE CONSEQUENCES OF REGULATORY ACCUMULATION

The buildup of regulations has economic consequences. 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.[6]

In all cases, regulatory intervention in the market is costly. According to the Office of Management and Budget, the cost of compliance with federal regulations alone—that is, the cost that regulations directly impose on regulated entities—likely totals in the tens of billions of dollars annually.[7] A simple example of direct compliance costs is the fee regulated professionals, such as stockbrokers, must pay to obtain licenses when those licenses are required by regulations.[8] But some compliance costs are surprising. For example, restaurants sometimes must pay to have food inspectors perform inspections in the evening, when the restaurant is open, instead of during the day when food inspectors typically work.[9]

In addition to money outlays to pay compliance costs, regulation necessarily creates what economists call "opportunity costs"—productive activity forgone because scarce resources get devoted to regulatory compliance. If a restaurant owner has to spend an evening showing the food inspector around, the owner cannot spend that same time greeting customers and ensuring that they have a quality dining experience.

More subtle, perhaps, is the fact that the accumulation of restrictions over time leaves individuals in the economy less liberty to entrepreneurially seize an opportunity, less control over the use of their own resources, and less ability to innovate. This means would-be entrepreneurs are sometimes prohibited from creating a new product

---

5. Al-Ubaydli and McLaughlin, "RegData: A Numerical Database," and RegData, Mercatus Center at George Mason University, accessed July 29, 2013, http://regdata.mercatus.org.
6. Michael Mandel and Diana Carew, "Regulatory Improvement Commission: A Politically-Viable Approach to U.S. Regulatory Reform" (Progressive Policy Institute, Washington, DC, 2013), 3–4.
7. Office of Management and Budget, Executive Office of the President, "Draft 2012 Report to Congress on the Benefits and Costs of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities" (2012), http://www.whitehouse.gov/sites/default/files/omb/oira/draft_2012_cost_benefit_report.pdf.
8. FINRA requires "General Securities Representatives" to pass a Series 7 exam. See FINRA, "FINRA Registration and Examination Requirements," last modified February 18, 2013, http://www.finra.org/Industry/Compliance/Registration/QualificationsExams/Qualifications/P011051.
9. See Lea Richards, "Regulation Nightmares," *CNN Money,* September 22, 2011, http://money.cnn.com/galleries/2011/smallbusiness/1109/gallery.regulation_nightmares/4.html.

that could potentially improve consumers' quality of life or even save lives. For example, the National Highway Traffic Safety Administration (NHTSA) has regulations restricting how headlights on cars can be designed. While those NHTSA regulations allow headlights to automatically switch between high and low beam and swivel to shine light around a curve in the road, they do not allow designers to implement any sort of adaptive setting that could dim the high beam only at the appropriate spots in the road. One major reason why cars have low beams is so that drivers can switch to low beams when another car is approaching. Without switching from high beams, the oncoming driver can be temporarily blinded. Of course, there are still other potential hazards, obstacles, and people on other parts of the road. While switching to low beams has the benefit of not blinding the oncoming driver, it has the cost of reducing visibility, particularly on the sides of the road. Toyota, Mercedes, and Audi have all created systems that dim only a select portion of the high beam when another car is approaching. This selective dimming allows the driver to still see the sides of the road, where pedestrians may be walking, while simultaneously keeping her high beams from blinding oncoming drivers. While these systems have been built and sold in Europe and Asia, they cannot be sold in the United States because of NHTSA regulations.[10] The implied human cost is obvious: human lives could be lost—pedestrians who may have been seen with high beams but not low beams—because of the intransigence of the regulatory system.

Regulations like these have been accumulating at a fairly constant rate for more than half a century. As regulations accumulate and block off entrepreneurial choices and potential innovations, the economy suffers. Sustained economic growth depends on innovation and entrepreneurship. A recent study published in the *Journal of Economic Growth* added to the already substantial evidence supporting the point that regulatory accumulation slows economic growth by stifling innovation and entrepreneurship.[11] Using pages from the *Code of Federal Regulations* as its measure of the extent and complexity of federal regulations, this study found that between 1949 and 2005 the accumulation of federal regulations has slowed economic growth by an average of 2 percent per year. Considering that economic growth is an exponential process, an average reduction of 2 percent over 57 years makes a big difference. A relevant excerpt tells just how big of a difference:

> We can convert the reduction in output caused by regulation to more tangible terms by computing the dollar value of the loss involved. [...] In 2011, nominal GDP was $15.1 trillion. Had regulation remained at its 1949 level, current GDP would have been about $53.9 trillion, an increase of $38.8 trillion. With about 140 million households and 300 million people, an annual loss of $38.8 trillion converts to about $277,100 per household and $129,300 per person.[12]

That's $277,100 per household in real goods, including health care, that were not produced and consumed because of federal regulation. That number seems almost too high to be believed, but, in fact, it is not out of line with a number of other studies that have been produced by such organizations as the World Bank and the OECD, as well as other scholars.[13]

To make more sense of it, consider retirement savings. People save for retirement by investing money in the present, in the hope that those investments will grow fast enough to allow a more comfortable retirement. So consider a case where your invested retirement savings grew two percent more slowly each year. How much less would you have when you retire? Invested retirement savings, like the economy, follow an exponential growth path. This means that rate of growth in one year affects all future years. If you tuck away $10,000 today, and your investments

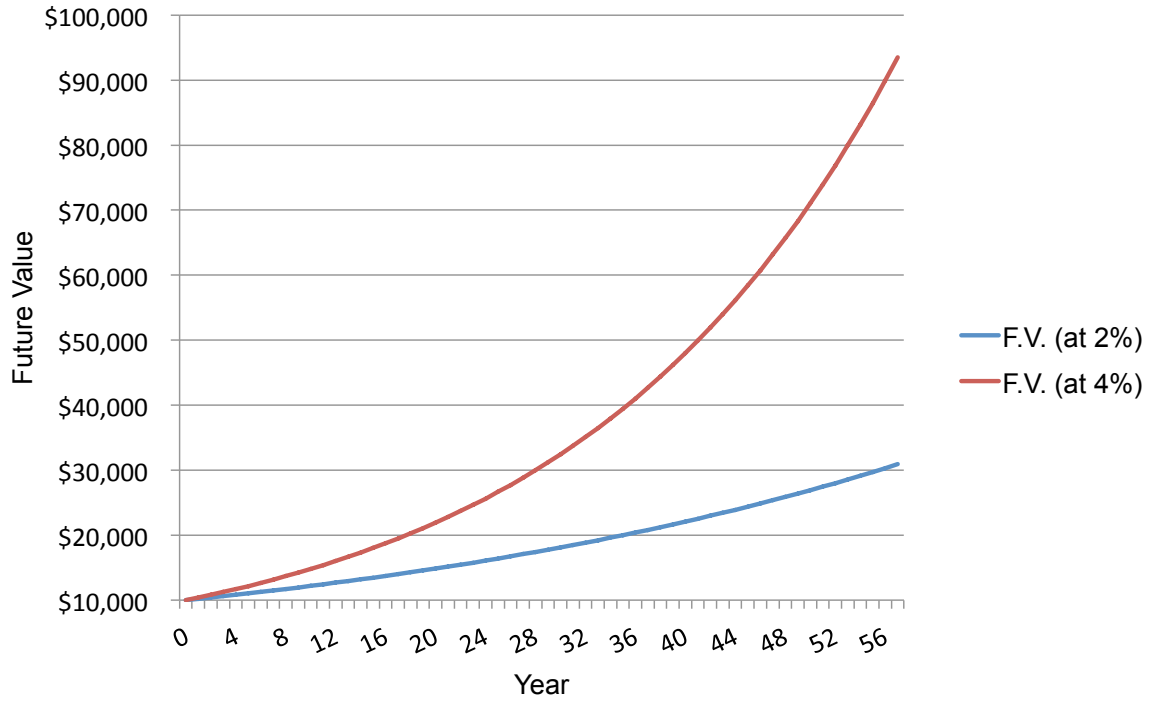
---

10. Gabe Nelson, "Toyota Puts High Beams on Headlight Regulation," *Automotive News*, May 13, 2013, http://www.autonews.com/article/20130513/OEM11/305139967#axzz2a4R2r6ou.
11. John W. Dawson and John J. Seater, "Federal Regulation and Aggregate Economic Growth," *Journal of Economic Growth* (2010): 1–41.
12. Ibid., p. 22.
13. For examples, see Norman Loayza, Ana Maria Oviedo, and Luis Serven, "The Impact of Regulation on Growth and Informality: Cross-Country Evidence" (Related Publications 05-11, AEI-Brookings Joint Center for Regulatory Studies, 2005); Simeon Djankov, Caralee McLiesh, and Rita Maria Ramalho, "Regulation and Growth," *Economics Letters* 92.3 (2006): 395–401; Guiseppe Nicoletti et al., "Product and Labor Markets Interactions in OECD Countries" (Economics Department Working Paper No. 312, OECD, Paris, 2001); Giuseppe Nicoletti and Stefano Scarpetta, "Regulation, Productivity and Growth: OECD Evidence," *Economic Policy* 18, no. 36 (2003): 9–72; Alberto Alesina et al., "Regulation and Investment," *Journal of the European Economic Association* 3, no. 4 (2005): 791–825.

return 5 percent over the course of the next year, that means that you would have $10,500 next year. If that $10,500 returns 5 percent again in the following year, you would have $11,025. On the other hand, if that $10,000 returned only 3 percent in the first year, you would have $10,300 at the end of that year. And if you received 3 percent again in the second year, at the end of the second year, you would have $10,609.

Over the course of 57 years, a difference of 2 percent in the rate of growth leads to a substantial difference in outcomes. Figure 3 shows two growth paths for a sum of $10,000 over a 57-year period—one path growing at 2 percent per year, and the other at 4 percent per year. After 57 years, that initial $10,000 becomes more than $93,500 when growing at a 4 percent annual rate. When slowed to an annual 2 percent growth rate, that $10,000 grows to only about $31,000 over the same period.

Figure 3: Growth Rate of Initial Investment over 57 Years



The economy grows in a similar way, following an exponential growth path. Goods, such as computers and machinery, that are produced in one year in the economy contribute to economic growth in the following year. Once that fact is realized, it is easier to understand how a 2 percent difference in economic growth can lead to households being $277,100 poorer because of federal regulation.

Nonetheless, my points do not require you to believe that the total costs of federal regulation are that high. It is more important to understand the mechanisms that cause the accumulation of federal regulation to be costly. What exactly is it about regulatory accumulation that causes economic growth to slow?

Two lynchpins of economic growth—innovation and competition—can be negatively affected by regulations. Although even the best-crafted regulation can inhibit innovation, there is substantial evidence that inflexible regulations, like design standards requiring only high and low beam headlights and nothing in between, stifle innovation. For example, regulations that impose specific technologies—such as catalytic converters in vehicle exhaust systems or scrubbers in the smokestacks of power plants—offer no incentive or ability for companies to find alternative solutions that could achieve the same objective as the required technology.[14] Conversely, incentive-based

14. Robert Hahn and Robert Stavins, "Incentive-Based Environmental Regulation: A New Era from an Old Idea," *Ecology Law Quarterly* 18 (1991): 1–42.

regulations, such as regulatory systems that create permits that are tradable in a market, or that set a performance standard without specifying a design or technology that must be used to achieve that performance standard, allow regulators to achieve an objective at lower cost. Of course, the fact that a regulatory program contains market-based incentives does not guarantee success in achieving desired outcomes. As one study on the topic of incentive-based regulation put it, "whether any specific instrument is desirable depends on how it is designed and implemented."[15] Incentive-based regulations as a general rule do less harm to innovation than inflexible, command-and-control regulations, but even the best design cannot entirely mitigate a regulation's consequences on innovation.

A recent study by economist Matt Mitchell (which I have attached) points out that regulations are sometimes used to grant privileges to favored companies, primarily by shielding them from competition.[16] As examples, Mitchell notes that thirty-six states "require government permission to open or expand a health care facility," and thirty-nine states "require government permission to set up shop as a hair braider." When regulations make it harder for entrepreneurs to establish a particular type of business, incumbents in that line of business can charge higher prices or provide lower-quality products—they have less to fear from competitors because of the shield of regulation. Thus regulations sometimes serve to entrench incumbents and limit competition, to the detriment of economic growth.[17] Protection from competition also serves to limit innovation. One study found that the companies that spent the most resources lobbying Congress and agencies for protective treatment tended to be "larger, older, less diversified, and less profitable" than those companies that did not lobby.[18] Indeed, when there is a possibility of gaining protection from the government through lobbying efforts, some companies will divert scarce resources to doing so—necessarily decreasing the resources those companies can use for research and development, employee training, and other innovations that increase productivity.[19]

REGRESSIVE EFFECTS OF REGULATIONS

Regulations can be regressive, particularly in their effects on prices.[20] 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 millions of Americans use to treat asthma.[21] Since the implementation of that ban, the average price of asthma inhalers has tripled.[22] To individuals with high incomes, the tripling of the price of inhalers may not have even registered. But to people with low incomes, the higher price may lead to the choice to not 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.

---

15. Robert W. Hahn and Robert N. Stavins, "Economic Incentives for Environmental Protection: Integrating Theory and Practice," *American Economic Review* 82, no. 2 (1992): 464–68.
16. Matthew Mitchell, "The Pathology of Privilege: The Economic Consequences of Government Favoritism" (Mercatus Research, Mercatus Center at George Mason University, Arlington, VA, July 9, 2012), http://mercatus.org/publication/pathology-privilege-economic-consequences-government-favoritism.
17. Mitchell, "Pathology of Privilege," 2012, 19–21.
18. Stefanie Randall Morck Lenway and Bernard Yeung, "Rent Seeking, Protectionism and Innovation in the American Steel Industry," *The Economic Journal* 106 (1996): 410–421, 410.
19. Chung-Lei Yang, "Rent Seeking, Technology Commitment, and Economic Development," *Journal of Institutional and Theoretical Economics* 154, no. 4 (1998): 640–658.
20. Diana Thomas, "Regressive Effects of Regulation" (Working Paper No. 12-35, Mercatus Center at George Mason University, November 2012), http://mercatus.org/publication/regressive-effects-regulation.
21. Use of Ozone-Depleting Substances, 70 Fed. Reg. 63 (April 4, 2005), 17168, http://www.fda.gov/OHRMS/DOCKETS/98fr/05-6599.pdf.
22. Laurie Tarkan, "Rough Transition to New Asthma Inhalers," *New York Times*, May 13, 2008, http://www.nytimes.com/2008/05/13/health/13asth.html?_r=0.

When regulations cause the prices of goods and services to increase, lower-income households may elect not to buy those goods anymore or may have to decrease the amounts of other goods they buy in order to afford the more expensive, regulated good. This can have the unintended consequence of forcing lower-income families not to purchase some good or service that was a medical necessity or that would have reduced the risk of accidental death. I have attached a recent study by economist Diana Thomas that gives more details on the regressive effects of regulations.

REGULATORY CHOICES MATTER

The specific choices made in the execution of a regulation can dramatically impact both whether a regulation accomplishes its objective and how much the regulation costs the economy. As a society, we are often willing to sacrifice some economic growth in exchange for regulations if it can address an otherwise unfixable problem. How a regulation attempts to achieve that goal plays a huge role in determining the regulation's costs and consequences. It takes time to discern what option can yield the most "bang for the buck," and picking the wrong approach risks sacrificing a lot—both in economic costs and in human costs—in order to gain nothing.

There are always multiple ways to design a regulation. This is why every administration for the past four decades has required some form of economic analysis of regulations prior to their implementation. Among other things, a good economic analysis of a regulation first determines whether there is actual evidence that some otherwise unfixable problem exists, and then weighs the pros and cons of various approaches to fixing that problem. As you likely know, these analyses are performed by regulatory agencies and are called regulatory impact analyses for economically significant rules.

Several years ago, a colleague and I launched a project at the Mercatus Center at George Mason University called the Regulatory Report Card that systematically rates the quality of those analyses.[23] The Regulatory Report Card now includes information on how well regulatory analyses were performed for over one hundred economically significant proposed regulations, spanning 2008 to 2013. Using the data from that project, scholars have been able to learn some best and worst practices observed in these economic analyses, as well as test whether certain factors, such as statutory deadlines, seem to affect quality.

Some lessons that are relevant to this hearing:

1. Statutory deadlines are associated with lower-quality regulatory analyses.[24]

2. The overall quality of regulatory analyses leaves much to be desired: the average total score for the 108 regulations included from 2008 to 2012 was 31.2 out of 60 possible points—barely 50 percent.

3. The quality of analyses accompanying several "interim final regulations" created in 2010 to quickly implement PPACA was even worse.[25]

If members of Congress are concerned with the human costs of regulations, Congress should be concerned that regulatory analyses are poorly performed. One reason that the regulatory analyses of the interim final regulations related to PPACA scored so poorly, for example, was that the analyses often ignored more effective or less costly alternatives.[26] A better analysis might have led to a better regulation and therefore lowered the human costs of that regulation.

---

23. The project and data are more fully described at mercatus.org/reportcard. The methodology is fully described in Jerry Ellig and Patrick A. McLaughlin, "The Quality and Use of Regulatory Analysis in 2008," *Risk Analysis* 32, no. 5 (2012): 855–880.
24. 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 (2011): 179–202.
25. Christopher J. Conover and Jerry Ellig, "The Poor Quality of Affordable Care Act Regulations" (Mercatus on Policy, Mercatus Center at George Mason University, Arlington, VA, January 2012), http://mercatus.org/publication/poor-quality-affordable-care-act-regulations.
26. Conover and Ellig, "Poor Quality of ACA Regulations," 2012, 1.

It is also worth considering whether any of Congress's actions or inactions are contributing to this failure. Given that statutory deadlines are associated with lower-quality analyses, perhaps such deadlines and similar pressures to quickly produce a final rule should be reconsidered.

Congress could also use the Congressional Review Act to overturn some rules if the analyses accompanying them are found to be insufficient. Perhaps an easier option, though, is simply to increase congressional oversight of regulatory agencies through hearings, meetings, public comments on rules, and other lines of communication.

For those concerned that the regulatory process is not doing a good enough job in producing the best regulations at the least cost, I recommend the attached publication by economist Jerry Ellig titled, "Ten Principles for Better Regulation."[27]

CONCLUSION

Regulations have been consistently accumulating for decades. We cannot have confidence agencies make the best regulatory choices because their analysis is unsatisfactory. In general, regulations are costly. Poorly executed regulations are even costlier. If time can improve regulations, then time should be taken.

27. Also available online at http://mercatus.org/sites/default/files/Ellig_10RegPrinciples_v1.pdf.

ABOUT THE AUTHOR

Patrick A. McLaughlin is a senior research fellow at the Mercatus Center at George Mason University. His research primarily focuses on regulations and the regulatory process, and he is the creator and cofounder of RegData. His work has been featured in numerous scholarly journals, including *American Law and Economics Review*, *Administrative Law Review*, *Regulation & Governance*, *Risk Analysis*, and *Public Choice*. Dr. McLaughlin received a PhD in economics from Clemson University.