It’s an Outrage

Regulations Are Entirely to Blame for Unemployment and a Leading Cause of Death in the United States, According to Industry and Its Allies
Acknowledgments
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I. Introduction

If forecasts of industry and its allies are to be believed, regulations are responsible for causing job losses far in excess of the number of people who are currently unemployed and are a leading cause of death in the United States.

Studies and predictions that have been put forth over the past four decades suggest that regulations on discrete matters such as fuel economy standards, toxic emissions, and workplace safety cost or threatened more than 55 million jobs. [See Figure 1] That is nearly five times the total number of Americans currently unemployed, which is about 11.3 million.¹

Studies on the purported effects of regulations *writ large* have arrived at similarly dramatic conclusions. For instance, a study published in 2011 by the Washington, D.C., Phoenix Center concluded that reducing federal regulatory spending by 16 percent would add more than 18 million jobs over five years. That’s one-and-a-half new jobs for every person currently unemployed and twice the number of jobs lost during the Great Recession. Federal regulations are cumulatively responsible for exacting a toll of about 23.2 million lost jobs a year, according to the Phoenix Center’s formula. By this reasoning, regulations have eliminated more jobs in the past seven years than the total number of jobs currently in existence in the United States.

Some claims put forth by critics of regulations go even further. One strain of thought postulates that regulations are a major cause of premature deaths. Purveyors of this logic argue that regulations depress incomes; people with lower incomes live less long than those with higher incomes; thus, regulations must hasten death. Assumptions that a Heritage Foundation scholar used in a paper on this topic published in the 1990s coupled with an updated estimate on the national cost of regulations yield the conclusion that regulations are now the third-leading killer of Americans.

Of course, even the strongest critics would acknowledge that regulations could not possibly be exacting a toll on the epic scale that the historical predictions and other analyses outlined in this paper suggest. In large part, that is because none of predictions covered in this paper proved remotely accurate. But these flawed claims remain relevant because they are so similar in nature to the projections that industry and its allies are putting forth today about the alleged “job killing” effects of regulations. The question is whether industry’s track record or its rhetoric will carry the day?

Figure 1: Past Predictions of Lost Jobs Due to Regulations

<table>
<thead>
<tr>
<th>Regulation</th>
<th>Jobs Loss Claim</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce air polluting emissions from automobiles by 90 to 97 percent over five years (commenced in 1970).</td>
<td>800,000 jobs would be lost</td>
</tr>
<tr>
<td>Virtually eliminate workers’ exposure to cancer-causing vinyl chloride in PVC manufacturing facilities (1974).</td>
<td>Up to 2.2 million jobs would be lost</td>
</tr>
<tr>
<td>Raising fleet-wide fuel economy standard to 27.5 miles per gallon by 1985 (commenced in 1975).</td>
<td>1.5 million jobs would be lost</td>
</tr>
<tr>
<td>Various proposed increases to the minimum wage since the late 1970s.</td>
<td>6.1 million lost jobs, cumulatively</td>
</tr>
<tr>
<td>Significantly reduce emissions of SO2 and NOX, as called for in the Clean Air Act amendments of 1990.</td>
<td>Up to 2 million jobs would be lost</td>
</tr>
<tr>
<td>Measures undertaken in Oregon to protect the northern spotted owl, which was listed as an endangered species (1991).</td>
<td>100,000 jobs would be lost</td>
</tr>
<tr>
<td>Requirement that companies with more than 50 employees grant their workers up to 12 weeks of unpaid leave a year to care for sick family members, newborns and newly adopted babies (1993).</td>
<td>60,000 lost jobs in first year</td>
</tr>
<tr>
<td>Phase out of lead as a gasoline additive (commenced in 1974; completed in 1995).</td>
<td>43 million jobs threatened</td>
</tr>
<tr>
<td>Total</td>
<td>Up to 55.8 million jobs lost or threatened</td>
</tr>
</tbody>
</table>
II. Industry Predictions of Job Losses Due to Eight Historical Regulatory Measures

“If GM is forced to introduce catalytic converters across-the-board on 1975 models, the prospect of an unreasonable risk of business catastrophe and massive difficulties with these vehicles in the hands of the public must be faced.”

—General Motors Vice President Ernest Starkman (1973)

1. REGULATION: Standards requiring 90 to 97 percent reductions in auto emissions of certain pollutants (commenced in 1970)

RHETORIC: Would eliminate 800,000 jobs

REALITY . . .

In about 1950, A.J. Haagen-Smit discovered that a chemical reaction involving hydrocarbons and nitrogen oxide—which were emitted in abundance from the tailpipes of automobiles—was responsible for causing the clouds of smog that were overhanging many major cities, especially Los Angeles.²

Although the auto industry denied that its cars were culpable, Congress passed laws in 1965 and 1970 to address pollution from automobiles.³ The Clean Air Act amendments of 1970 required that auto emissions of key pollutants be reduced by 90 to 97 percent by 1975.⁴

The automakers responded with a series of doomsday predictions about what would happen if the requirements were not delayed. The Clean Air Act provisions “could have a tremendous impact on all of American industry and could do irreparable damage to the American economy,” Ford Motor Co. Vice President Lee Iacocca said in 1970, while Congress was debating the requirements it would soon enact.⁵

³ Id.
⁴ Id.
A “catalytic converter,” which transformed pollutants into naturally occurring compounds, offered a promising solution. But General Motors, a leader in developing the device, denied that it could implement the new technology in time to meet the law’s requirements.

Installing catalytic converters was predicted to cost about $860 per vehicle, or about $5 billion annually for the industry as a whole. “Without obvious performance benefits, companies were reluctant to equip the entire fleet with the devices. Not surprisingly, by 1973 [General Motors] was expressing public opposition to implementation of the 1975 standards,” researchers David Gerard and Lester B. Lave wrote in a 2003 retrospective on the outcomes of the 1970 Clean Air Act.

“If GM is forced to introduce catalytic converters across-the-board on 1975 models, the prospect of an unreasonable risk of business catastrophe and massive difficulties with these vehicles in the hands of the public must be faced,” General Motors Vice President Ernest Starkman testified to the Environmental Protection Agency (EPA) in 1973. “It is conceivable that complete stoppage of the entire production could occur, with the obvious tremendous loss to the company, shareholders, employees, suppliers and communities.”

Iacocca, who had risen to president of Ford in December 1970, continued warning of an impending disaster in 1973. “If the U.S. Environmental Protection Agency does not suspend the catalytic converter rule,” Iacocca said in a speech, “it will cause Ford to shut down and would result in: 1) reduction of gross national product by $17 billion; 2) increased unemployment of 800,000; and 3) decreased tax receipts of $5 billion at all levels of government so that some local governments would become insolvent.”

But the automakers’ case was unraveling. Japanese manufacturer Honda testified during the 1973 EPA hearings that it would have no problem satisfying the 1975 requirements.

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7 Id.
10 Roland Hwang (Natural Resources Defense Council) and Matt Peak (CALSTART), _Lessons Learned and Implications for California’s CO2 Standards_ (published on Web site of the National Resources Defense Council) (April 2006), http://bit.ly/1fdulnM.
Specialists at the EPA and National Academy of Scientists validated claims that Honda attached to its technology.11

“General Motors believes it has an answer to the automotive pollution problem ... and the catalytic converter has enabled GM engineers to improve performance and to increase miles per gallon”
—General Motors newspaper ad (1974)

The demands of the Clean Air Act were slightly relaxed and delayed several times during the implementation period due to protests by the automobile industry.12 For instance, in June 1974, the automakers were given a partial one-to-two year delay on some of the emissions standards.13 But by then, the technical obstacles surrounding the catalytic converter were mostly resolved.

In September 1974, General Motors took out full-page newspaper ads announcing that “General Motors believes it has an answer to the automotive pollution problem” and that the company would install catalytic converters on all of its 1975 models. What’s more, the automaker said in the ads, “the catalytic converter has enabled GM engineers to improve performance and to increase miles per gallon.”14

Tailpipe emission of hydrocarbons fell by more than 57 percent just between the 1974 and 1975 automobile models.15 Meanwhile, costs to outfit new cars with catalytic converters were much less than expected.16 There is no evidence that the requirement resulted in lost jobs. Auto sales, which had plummeted amid a recession from 1972 to 1974, rebounded in

13 Hill Votes to Allow Slower Air Clean Up, WASHINGTON POST (June 13, 1974).
16 Roland Hwang (Natural Resources Defense Council) and Matt Peak (CALSTART), Lessons Learned and Implications for California’s CO2 Standards (published on Web site of the National Resources Defense Council) (April 2006), http://bit.ly/1fdulnM.
1975, the year the requirement took effect. Meanwhile, the cost of an automobile relative to the consumer price index fell to an all-time low in 1975.\textsuperscript{17}

Starkman, who had forecast “catastrophe” over the standards, passed away in January 1976. Later that month, The New York Times published on op-ed by Starkman posthumously. “The public is very well served by the vehicular emission constraints in effect for 1976 models,” Starkman wrote. “They are tough; they are assuring continued real progress in eliminating automotive-related air pollution and the technology we’re using to meet them—relying on the catalytic converter—has proven effective and efficient.”\textsuperscript{18}

\[\ldots\]

\begin{quote}
\textbf{The new vinyl chloride standard would “throw 2 million jobs down the drain.”}
\end{quote}

\begin{flushright}
—Firestone Corp. (1974)
\end{flushright}

2. **REGULATION:** Virtually ban emissions of carcinogenic vinyl chloride (1974)\textsuperscript{19}

**RHETORIC:** Up to 2.2. million jobs lost

**REALITY . . .**

In January 1974, a public health emergency arose over the discovery that exposure to vinyl chloride, a substance used to produce polyvinyl chloride (PVC), was complicit in causing a form of liver cancer called angiosarcoma that was usually fatal to those who contracted it.\textsuperscript{20} Within months of the discovery, the Occupational Safety and Health Administration (OSHA) proposed a rule to require PVC manufacturers to reduce workers’ exposure to vinyl chloride to “no detectable level.”\textsuperscript{21}

\begin{footnotesize}


\textsuperscript{19} This section was drawn in part from a previously published report that was included in a book. See Negah Mouzoon and Taylor Lincoln, THE UNSUNG HERO IN AMERICAN INNOVATION, Chapter IX within TAYLOR LINCOLN, REALITY CHECK: THE FORGOTTEN LESSONS OF Deregulation and UNSUNG SUCCESSES OF SENSIBLE SAFEGUARDS (Public Citizen: 2013), http://bit.ly/1bSKxpz.

\textsuperscript{20} Paul H. Weaver, On the Horns of the Vinyl Chloride Dilemma, FORTUNE (October 1974).

\textsuperscript{21} Id.
\end{footnotesize}
“PVC Rolls Out of Jeopardy, Into Jubilation”

Chemical Week headline (1976)

Makers of PVC claimed that the new standard would be “technologically infeasible to achieve” and thus exact an enormous toll on the economy if enacted.22 (Products made from PVC at the time included pipes, floor tile, house siding, cables, packaging materials, furniture, bottles, rain coats, shower curtains, medical tubing, auto upholstery, credit cards, Saran Wrap, and phonograph records.)

Fortune magazine devoted a lengthy article to the dilemma of choosing between saving some workers’ lives and sparing an industry.23 A report commissioned by the plastics industry warned that the proposed rule would cause “severe economic dislocation,” eliminating 1.7 million to 2.2 million jobs. The entire automobile industry, the report said, “would, in fact, have to shut down.”24

Despite the pressure, OSHA barely budged. It relaxed its proposed rule in the slightest way, permitting exposure levels of 1 part per million instead of zero. Despite the concession, the relaxed standard would still permit only 1/500th of the ambient levels that were allowed before the health hazard was discovered.25

When the rule was released, Firestone Corp. put out a statement saying the new rules put the PVC industry “on a collision course with economic disaster” and would “throw 2 million jobs down the drain.”26

The doomsday forecasts soon proved unfounded. In August 1975, PVC manufacturer B.F. Goodrich Co. announced that it had developed a manufacturing process that would meet the OSHA standards.27 The new process “will be simple to operate [and] will increase raw material efficiency,” B.F. Goodrich said in a Wall Street Journal display ad.28

Significant employment gains ensued. “PVC Rolls Out of Jeopardy, Into Jubilation,” headlined a Chemical Week article that was published just 22 months after the OSHA rule

23 Paul H. Weaver, On the Horns of the Vinyl Chloride Dilemma, Fortune (October 1974).
26 Id.
was announced.\textsuperscript{29} The PVC industry embarked on an enormous expansion, which continued throughout the 1970s.\textsuperscript{30}

In 1997, the Centers for Disease Control reported that the 1 part per million standard for exposure to vinyl chloride in the workplace was “readily achieved” and that “new cases of hepatic angiosarcoma in vinyl chloride polymerization workers have been virtually eliminated.”\textsuperscript{31}

\textbf{3. REGULATION:} Require automakers to double fuel economy performance within 10 years (commenced in 1975)

\textbf{RHETORIC:} Meeting the requirement would cost 1.5 million jobs

\textbf{REALITY . . .}

In 1975, as the nation’s economy convulsed under the pressure of the Middle East oil embargo, Congress passed a law calling on automakers to double their average automobile fuel economy—to 27.5 miles per gallon—in 10 years.\textsuperscript{32} By 1979, the industry was claiming that the goal was unattainable. A study by Chase Manhattan Bank forecast that 1.5 million jobs would be lost by 1984 if the standards were not relaxed.\textsuperscript{33}

Eventually, the National Highway Traffic Safety Administration (NHTSA) relented in part to the industry’s demands by reducing the standard to 26 miles per gallon.\textsuperscript{34} But that reduction was not implemented until 1985, after predictions of calamitous job losses were already proven false.

Despite the decreased standard, the average fuel economy for passenger cars reached 27.6 miles per gallon by 1985.\textsuperscript{35} Meanwhile, there is no evidence that the improvements cost

\textsuperscript{29} PVC Rolls Out of Jeopardy, Into Jubilation, CHEMICAL WEEK (Sept. 15, 1976).
\textsuperscript{30} This section was drawn in part from a previously published report that was included in a book. See Negah Mouzoon and Taylor Lincoln, THE UNSUNG HERO IN AMERICAN INNOVATION, Chapter IX within TAYLOR LINCOLN, REALITY CHECK: THE FORGOTTEN LESSONS OF Deregulation AND Unsung Sucesses OF Sensible Safeguards (Public Citizen: 2013), \url{http://bit.ly/1bSKxpx}.
\textsuperscript{31} EPIDEMIOLOGIC NOTES AND REPORTS Angiosarcoma of the Liver Among Polyvinyl Chloride Workers—Kentucky, CENTERS FOR DISEASE CONTROL (Feb. 7, 1997).
\textsuperscript{32} History of Fuel Economy, Pw ENVIRONMENTAL GROUP (April 2011), \url{http://bit.ly/1JKlQ7}.
\textsuperscript{33} John M. Berry, Auto Mileage Hearings Open in the House, WASHINGTON POST (March 13, 1979).
\textsuperscript{34} Warren Brown, Fuel Economy Standards Lowered, WASHINGTON POST (Oct. 2, 1985).
\textsuperscript{35} Summary of Fuel Economy Performance, U.S. DEPARTMENT OF TRANSPORTATION, NATIONAL HIGHWAY TRANSPORTATION SAFETY ADMINISTRATION (April 2013), \url{http://1.usa.gov/GFAdYj}. 
jobs. Automakers sold 2.2 million more cars in 1984 than in 1979, when a study warned that the standard would cost 1.5 million jobs. Sales rose another 460,00 units in 1985 and 865,000 on top of that in 1986.\textsuperscript{36}

The automakers probably could have fully met the more ambitious rule if they had tried harder. Chrysler Corp., which opposed the rollback to 26 miles per gallon and was by then led by Lee Iacocca, said that it had achieved the higher standard as a result of its investments.\textsuperscript{37}

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\textbf{4. REGULATION:} Periodic increases to minimum wage since the late 1970s\textsuperscript{38}

\textbf{RHETORIC:} Would eliminate 6.1 million jobs, cumulatively

\textbf{REALITY} \ldots

Few regulatory matters have generated more hyperbole over the years than the minimum wage. For instance, presidential candidate Ronald Reagan said in January 1980, “The minimum wage has caused more misery and unemployment than anything since the Great Depression.”\textsuperscript{39}

Since mid-1970s, critics have predicted or attributed a total of 6.1 million job losses due to increases in the minimum wage.\textsuperscript{40} [See Figure 2] The chairman of the U.S. Chamber of Commerce’s labor relations committee, for example, said in 1975, “If the minimum wage were increased to anywhere between the low of $2.50 and the high of $3.00, between 2 and

\begin{footnotesize}
\begin{itemize}
\item \textsuperscript{36} Id.
\item \textsuperscript{37} Id.
\item \textsuperscript{38} This section draws in part on previously published research by Adam Crowther, a researcher for Public Citizen’s Congress Watch division. \textit{See ADAM CROWTHER, PUBLIC CITIZEN, REGULATION ISSUE: INDUSTRY’S COMPLAINTS ABOUT NEW RULES ARE PREDICTABLE—AND WRONG} (Feb. 14, 2003), \url{http://bit.ly/YtCZlg}.
\item \textsuperscript{40} Totals compiled from \textbf{CONSIDER THE SOURCE: 100 YEARS OF BROKEN-RECORD OPPOSITION TO THE MINIMUM WAGE, NATIONAL EMPLOYMENT LAW PROJECT AND CRY WOLF PROJECT} (March 2013), \url{http://bit.ly/Yze3uW}.
\end{itemize}
\end{footnotesize}
3.1 million jobs would be lost.\footnote{Id., at 14, \url{http://bit.ly/Yze3uW}.} Similarly, the U.S. Chamber predicted in 1987 that a proposed increase to the minimum wage would cost 1.9 million jobs.

**Figure 2: Claims Regarding Increases to the Minimum Wage**

<table>
<thead>
<tr>
<th>Year of Claim</th>
<th>Claim</th>
<th>Relevant Policy Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>Raising minimum wage to $3 an hour would cost 3.1 million jobs ---U.S. Chamber of Commerce</td>
<td>Between 1975 and 1981, the minimum wage was raised from $2 to $3.35</td>
</tr>
<tr>
<td>1987</td>
<td>Proposed increase in minimum wage would cost a total of 1.9 million jobs over ensuring eight years ---U.S. Chamber of Commerce</td>
<td>In 1990 and 1991, the minimum wage was raised from $3.35 to $4.25</td>
</tr>
<tr>
<td>1996</td>
<td>Raising minimum wage would cost 500,000 jobs ---Rep. Jack Kingston (R-Ga.)</td>
<td>In 1996, the minimum wage was raised from $4.25 to $4.75</td>
</tr>
<tr>
<td>2013</td>
<td>Recent minimum wage increases may have led to the elimination of 550,000 jobs ---Ball State Univ. study</td>
<td>In 2007, 2008 and 2009, the minimum wage was raised from $5.85 to $7.25.</td>
</tr>
</tbody>
</table>


Attempting to quantify the actual effects, or lack thereof, of the minimum wage on employment is a vexing task that economists have long wrestled over. But from a common sense perspective, trends over the past three decades do not provide much support for the argument that the minimum wage has significantly dampened employment.

The minimum wage has steadily become less of a factor over time. The number of employees paid the minimum wage fell from 4.7 million in 1980 to 1.6 million in 2012, while the number of hourly workers increased from 51.3 million to 75.3 million, according to the U.S. Department of Labor.\footnote{Characteristics of Minimum Wage Workers: 2012 (Table 10), BUREAU OF LABOR STATISTICS, U.S. DEPARTMENT OF LABOR (viewed on Oct. 8, 2013), \url{http://1.usa.gov/2wG7BC}.} For the minimum wage to be depressing employment in the manner that the critics claim, employers would need to be choosing not to hire people at the mandated minimum wage because doing so would cost too much, while they are increasingly hiring people whom they voluntarily pay more than the minimum wage. That hypothetical fact pattern does not make much sense.

A study published in 2008 compared employment levels by restaurants (which are by far the largest employer of minimum wage workers) in contiguous jurisdictions that are
The authors found that minimum wages do not have a discernible effect on employment.

“For the range of minimum wage increases over the past several decades, methodologies using local comparisons provide more reliable estimates by controlling for heterogeneity in employment growth,” the authors concluded. “These estimates suggest no detectable employment losses from the kind of minimum wage increases we have seen in the United States.”


5. REGULATION: Standards to reduce pollution included within the Clean Air Act Amendments of 1990

RHETORIC: Would eliminate up to 2 million jobs

REALITY . . .

Industry representatives predicted that dire consequences would flow from anti-pollution measures that were eventually codified in the Clean Air Act Amendments of 1990. “A minimum of 200,000 (plus) jobs will be quickly lost, with plants closing in dozens of states,” the Business Roundtable wrote. “This number could easily exceed 1 million jobs, and even 2 million jobs at the more extreme assumptions about residual risk.”

The law used a “cap and trade” system that required those that emitted levels of pollution exceeding the standard to purchase credits from those that polluted less. The system was advocated within the White House by C. Boyden Gray, counsel to President George H.W.

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45 This section draws in part on previously published research by Adam Crowther, a researcher for Public Citizen’s Congress Watch division. See ADAM CROWTHER, PUBLIC CITIZEN, REGULATION ISSUE: INDUSTRY’S COMPLAINTS ABOUT NEW RULES ARE PREDICTABLE—AND WRONG (Feb. 14, 2003), http://bit.ly/YtCZlg.
Bush. “I remember [then-White House Chief of Staff] John Sununu blew up, and he said, ‘My God, you’re going to strangle America,’ ” Gray recalled two decades later.47

In 1992, the National Federation of Independent Businesses characterized the Clean Air Amendments as “probably one of the most complex pieces of regulation ... ever passed” and said compliance was “going to be a nightmare for small-business people.”48

Instead of an economy-strangling nightmare, costs relating to the law came in at about one-eighth of forecasts, and the air got cleaner much faster than expected.49 In 2003, the Office of Management and Budget (OMB) concluded that the 1990 Clean Air Act program had the largest quantified human health benefits of any federal regulatory program in the previous 10 years, at more than $70 billion annually. OMB pegged the ratio of benefits to costs at more than 40-to-1.50

By 2010, the results from the Clean Air Act were preventing 218,000 premature deaths per year, and saving 13 million days of work that would otherwise have been lost due to illness, the U.S. Environmental Protection Agency reported in 2011.51

In April 2013, Investor’s Business Daily published data that (mostly likely inadvertently) provided a ringing endorsement of the 1990 law. “Pollution has been falling across the board for decades, even while the nation’s population and economy have expanded,” the IBD wrote in an article criticizing proposed clean air measures. “Overall air pollution levels dropped 62 percent from 1990 to 2012, while GDP grew 69 percent and population climbed 26 percent.”52 The newspaper even produced a graphic, titled “Clean Air Victory,” documenting the progress. [See Figure 3]

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47 Good for Acid Rain, But Can It Slow Climate Change? NATIONAL PUBLIC RADIO (Sept. 13, 2009), http://npr/Oh25soH.
50 Cap and Trade: Acid Rain Program Results, ENVIRONMENTAL PROTECTION AGENCY (undated, viewed on Oct. 8, 2013), http://1.usa.gov/UnoEF2.
The IBD’s takeaway was that the past success in cleaning up the air obviated the need for rules to make greater improvements. But the American Lung Association reported in 2013 that 40 percent of Americans—131.8 million people—still live in counties where the air is dangerous to breathe.

A reasonable interpretation of the facts that the IBD cited is that regulations have been remarkably successful in curbing pollution, and much more work needs to be done.

Gray, who advocated for the 1990 Clean Air Act but has often been a critic of proposed regulations, views the forecasts of economic calamities resulting from the law as patently disproven. "Many critics of the 1990 [Clean Air Act amendments] effort predicted dire adverse economic consequences," Gray wrote in 2011. "The legislation was implemented during one of the greatest economic booms of U.S. history, and obviously did not retard growth."

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6. REGULATION: Efforts to save the northern spotted owl (logging limitations instituted in 1991)

RHETORIC: The efforts would eliminate 100,000 jobs

REALITY . . .

In 1991, Federal District Court Judge William L. Dwyer ordered the National Forest Service to limit logging in old growth forests to preserve the northern spotted owl, which had been listed as a threatened species by the U.S. Fish and Wildlife Service a year earlier.55

A coalition of logging industry groups predicted that protection efforts would cost up to 100,000 jobs in Oregon. In his re-election campaign, President George H.W. Bush mocked Democratic vice presidential nominee Al Gore by saying “This guy is so far out in the environmental extreme we’ll be up to our necks in owls and outta work for every American.”56

As it turned out, job losses were significantly less than the industry predicted and were more than offset by other gains in Oregon's economy. By 1994, unemployment in Oregon had fallen to just above 5 percent, the lowest level in a generation. “Economic calamity has never looked so good,” a New York Times reporter wrote.57 In the five years preceding that article’s publication, Oregon had lost about 15,000 jobs in forest products industry, but had gained 20,000 high-technology jobs. Displaced timber workers had been trained to fill some of the new high-technology jobs.58

From a broader perspective, logging employment has been in decline since the middle of the 20th century, but environmental regulations do not appear to be a primary reason. A study published in 1998 found that the reduction in logging jobs was the most pronounced from 1947 until 1964, when the Wilderness Act was passed. The Wilderness Act limited logging on federal forests and has been a frequent target of those who blame environmental laws for reductions in logging employment. The authors postulated that new technology and other factors besides environmental regulations were primarily responsible for the employment decline.

“Both nationally and in the Pacific Northwest, the greatest decline in timber employment occurred from 1947 until 1964—a time of great economic growth, a general absence of

56 David Remnick, Ozone Man, THE NEW YORKER (April 24, 2006), http://nyr.kr/LbHSIM.
58 Id.
‘unreasonable environmental regulations,’ and growing timber harvests,” the authors wrote.59

... small business will be crushed by the cumulative weight of federal mandates.”

7. REGULATION: Requirement to provide employees unpaid family leave (enacted into law as the Family and Medical Leave Act in 1993)

RHETORIC: The requirement would cost 60,000 jobs a year

REALITY . . .

In 1990 and 1992, Congress passed bills that would require companies with more than 50 employees to offer their workers up to 12 weeks of unpaid family leave a year to be used for the care of sick family members, newborns and newly adopted babies. President George H.W. Bush vetoed both bills.60

Critics, including the U.S. Chamber of Commerce and National Federation of Independent Business, fought the proposal for the better part of a decade. They said a law requiring employers to grant workers unpaid leave would increase businesses’ labor costs. Those costs would result in the elimination of 60,000 jobs in the law’s first year, economist Dolores Tremewan Martin predicted in a report published two months before the 1992 presidential election pitting Bush and Democratic nominee Bill Clinton.61

Clinton went on to win the election, and the Family and Medical Leave Act became the first bill he signed into law. “This first step is a snowball teetering on the top of Mount Everest,”

said Rep. Jan Meyers (R-Kan.) upon passage of the bill by the U.S. House of Representatives. “Small business will be crushed by the cumulative weight of federal mandates.”

80 percent of small businesses said they supported the Family and Medical Leave Act, with 46 percent saying they strongly favored it.

—Results from survey of 500 small businesses (2013)

But there is little evidence that businesses were harmed by the law, let alone crushed. A survey commissioned by the U.S. Department of Labor two decades later asked businesses to assess what effect complying with the law had on “employee productivity, absenteeism, turnover, career advancement, and morale, as well as the business’s profitability.” Only 1 percent of business respondents said “very negative” and 7 percent said “somewhat negative.” In contrast, 37 percent of respondents reported that the effects were “somewhat positive” or “very positive.”

“Most employers report that complying with the FMLA imposes minimal burden on their operations, although a subset of employers reported difficulty complying,” the Labor Department-commissioned study concluded.

A 2013 survey of about 500 small businesses conducted on behalf of Small Business Majority by Lake Research Partners found that 80 percent of respondents supported the law, with 46 percent saying they strongly favored it.

In the time since implementation of the Family and Medical Leave Act, organizations that once opposed its passage have adopted a much more tempered tone, calling for adjustments to reduce what they deem abuses. To work on that effort, the Society of Human Resources has formed the National Coalition to Protect Family Leave, which consists of about 35 organizations, including the U.S. Chamber of Commerce.


“The Coalition supports both the spirit and intent of the FMLA,” the group said in congressional testimony submitted in 2008. “Since its enactment in 1993, the FMLA has guaranteed invaluable work and family flexibility for millions of Americans.”

Musterling quantitative evidence conclusively proving that the Family and Medical Leave Act has not diminished employment would be difficult. But if there were any evidence that the act is costing jobs, one can safely assume that its critics would be trumpeting that claim rather than aligning with a coalition purportedly intent on protecting the law.

... 

8. REGULATION: Ban the use of tetraethyl lead in gasoline (commenced in 1974; completed in 1995)

RHETORIC: The measure would jeopardize up to 43 million jobs

REALITY . . .

By the 1970s, an overwhelming scientific consensus concluded that leaded gasoline was causing profound damage to human health, especially among children. This consensus overcame decades of industry-funded research, which had sought to deny the problem.

In 1974, the Environmental Protection Agency released regulations that would gradually phase out use of tetraethyl lead in gasoline. Tetraethyl lead manufacturers Ethyl Corp. and E.I. DuPont de Nemours and Co. promptly sued, claiming that the ban amounted to an infringement of their property rights. The companies prevailed at the district court level but lost before the U.S. Court of Appeals for the D.C. Circuit.

But the industry continued in a quest to delay the phase-out by attempting to convince the public that following through with it would inflict painful consequences. On behalf of the Petrochemical Energy Group, a Monsanto Co. official sought a delay of the phase-out by

69 This section draws in part on previously published research by Adam Crowther, a researcher for Public Citizen’s Congress Watch division. See ADAM CROWThER, PUBLIC CITIZEN, REGULATION ISSUE: INDUSTRY’S COMPLAINTS ABOUT NEW RULES ARE PREDICTABLE—AND WRONG (Feb. 14, 2003), http://bit.ly/YtCZlg.
72 Id.
testifying to the EPA in June 1979 that the shortage of lead-substituting aromatics “threatens the jobs of 14 million Americans directly dependent and the 29 million Americans indirectly dependent on the petrochemical industry for employment.”

But as the phase-out of lead took effect, reality trumped the industry’s rhetoric. The levels of lead in Americans’ bloodstreams fell 78 percent between 1978 and 1991. The amount of lead in the air fell by 71 percent. Meanwhile, there was no hint of economic disaster or corresponding job losses. Substitutes for tetraethyl lead, such as ethanol, were readily adapted. In fact, some had proposed ethanol as an alternative as early as the 1920s.

Lead was fully banned as a fuel additive in 1995. Gasoline prices remained remarkably low during the period before and after the phase-out was complete. They never rose above $1.40 a gallon during the entire 1990s. Few would argue that the petrochemical industry has suffered in the time since the ban was implemented.

Nearly every country has since banned the use of lead in gasoline, and researchers have made more shocking discoveries about the harmful effects of lead. Perhaps the most provocative research has posited that reductions in lead are correlated with a steadily decreasing violent crime rate.

A study backed by the United Nations published in 2011 concluded that the worldwide phase-out of leaded gasoline had led to $2.4 trillion in annual benefits and 1.2 million fewer premature deaths annually.

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The examples above recount eight regulatory initiatives that industry or its allies claimed would cost or jeopardize 55 million jobs. This summary arguably presents an exaggerated picture because it relies heavily on the claim that banning lead from gasoline would jeopardize 43 million jobs, which was less precise than the other claims (jobs “jeopardized” versus outright lost) and was outlandish in scale even by industry’s typical forecasting standards. But even if one excludes the lead example, the foregoing examples still include predictions of jobs losses from regulations of 12 million, which exceeds the current number of unemployed Americans.

One could quibble that these predictions present a distorted picture because they rely on the most sensational predictions. But one could just as easily argue that those are exactly the sorts of claims that opponents of regulations are making today.

### III. Broad Assessments Blame Regulations for Extraordinary Levels of Job Losses

The aforementioned examples focus on discrete regulatory matters. But the ominous forecasts in the examples cited above are matched by generalized claims of job losses that critics have attributed to regulations as a whole.

This section recounts two studies—one published when the hyperbole surrounding regulations was at its height during President Obama’s first term—that accuse the nation’s regulatory rubric of costing astounding levels of jobs.

**Phoenix Center: Regulatory Expenditures, Economic Growth and Jobs: An Empirical Study (2011)**

The Phoenix Center, a Washington, D.C., nonprofit, published a report in 2011 that correlated various levels of job losses (or gains) to dollars spent by the federal government on regulatory matters and to the number of federal employees devoted to regulatory matters.
The study estimated that each million dollars in federal regulatory spending exacts a cost of 418 jobs. Likewise, the study concluded that each extra regulator on the federal payroll reduces employment by 96 jobs.79

The study said the “jobs consequences of a regulatory budget change are symmetric; that is, the job loss from a 5 percent increase in the regulatory budget is equal to the job gains from a 5 percent decrease in the budget.”80

According to the study, a 5 percent reduction in the federal regulatory budget would yield 5.9 million new jobs over five years. A 16 percent decrease (a figure the authors chose to parallel the amount by which they say federal spending had exceeded revenue since 2000) would result in the creation of 18.8 million new jobs over five years.81 In contrast, there are only about 11.3 million unemployed Americans.82 [See Figure 4]

<table>
<thead>
<tr>
<th></th>
<th>Private Sector Job Gains from 5 Percent Cut in Federal Regulatory Budget</th>
<th>Private Sector Job Gains from 16 Percent Cut in Federal Regulatory Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>703,226</td>
<td>2,234,301</td>
</tr>
<tr>
<td>Year 2</td>
<td>1,104,430</td>
<td>3,494,534</td>
</tr>
<tr>
<td>Year 3</td>
<td>1,322,742</td>
<td>4,175,238</td>
</tr>
<tr>
<td>Year 4</td>
<td>1,480,034</td>
<td>4,663,991</td>
</tr>
<tr>
<td>Year 5</td>
<td>1,330,555</td>
<td>4,199,555</td>
</tr>
<tr>
<td>Total</td>
<td>5,940,987</td>
<td>18,767,619</td>
</tr>
</tbody>
</table>

Source: Phoenix Center

The authors forecast that the recently formed Consumer Financial Protection Bureau (CFPB), with an anticipated workforce of 2,200 people, would in itself reduce employment by about 238,000 jobs per year, which would equal nearly 1 million jobs over four years.83

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80 Id.

81 Id


Most people would likely find it preposterous that cutting the federal government’s regulatory staff by one-sixth could completely wipe out unemployment within five years (and leave a massive surplus of unfilled jobs) or that the mere existence of a relatively small agency like the CFPB could be responsible for obliterating nearly a quarter of a million jobs per year.

But the Phoenix Center study’s methodology can be exposed as patently absurd if taken to its logical extreme. According to the Center’s formula, the whole of federal regulation costs the economy 23.2 million jobs per year, which would equal 162.7 million jobs over seven years. If true, regulations have eliminated more jobs over the past seven years than the 144.5 million jobs that remain in existence today.[See Figure 5]

**Figure 5: Private Sector Job Gains That Would Result From Total Elimination of Federal Regulatory Budget (rough estimate based on Phoenix Center study’s Formula)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Private Sector Job Gains from 100 Percent Cut in Federal Regulatory Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Year 2</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Year 3</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Year 4</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Year 5</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Year 6</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Year 7</td>
<td>23,248,200</td>
</tr>
<tr>
<td>Total</td>
<td>162,737,400</td>
</tr>
</tbody>
</table>

| Number of Employed Persons in the United States (August 2013) | 144,509,000 |


In fairness, the Phoenix Center study’s authors did not propose a complete elimination of regulations or even a 16 percent reduction. “Whether or not the regulatory budget could be cut responsibly by 16 percent is beyond the scope of this paper,” they wrote. Separately, they acknowledged that regulation “may also have social benefits, and this fact should be

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84 The Phoenix Center’s study assumed that there are slightly more than 242,000 federal regulatory employees and that elimination of one federal job creates 96 private sector jobs per year.


86 Id.
considered.” The extreme example in Figure 5 is simply intended to illustrate that the methodology underlying the Phoenix Center’s study is untethered to reality.


A 1993 Heritage Foundation study authored by William Laffer also arrived at astonishing claims about the toll of regulations on employment. Laffer’s formula assumed that replacing the regulations of the day with “a more efficient regulatory scheme” would increase the national GDP by up to 19.4 percent. Such an increase in GDP in 1993 would have yielded 9.6 million extra jobs, according to Laffer.  

As with the Phoenix Center’s study, the Heritage Foundation piece flirted with mathematically impossibilities. “Unfortunately for Laffer, there are only 7 million unemployed Americans,” *Washington Post* columnist Steven Pearlstein noted in response to the Heritage study’s claim that regulations had negated up to 9.6 million jobs.

The Heritage Foundation study’s conclusions appear even more ridiculous if applied to the current context. Today’s GDP is about 2.75 times greater than it was when Laffer wrote. If the same rate of job creation could be realized today by altering regulations as Laffer postulated in his 1993 study, Laffer’s approach would today generate 26.4 million new jobs, more than double the number of Americans who are currently unemployed.

“During the 1980s, America’s ability to create jobs was the envy of the world. No longer,” Laffer’s 1993 report began. “The American job-generating machine has ground to a halt, and regulation deserves much of the blame.” In a separate paper published a year earlier,  

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87 *Id.*  
89 Steven Pearlstein, *The Myths That Rule Us: In the Debate on Regulatory 'Reform,' Six Legends Bear a Closer Look*, WASHINGTON POST (March 5, 1995).  
Laffer wrote, “The U.S. economy is being strangled by new regulation.”\textsuperscript{92} But the 1990s ended up witnessing the longest-running economic expansion in U.S. history.\textsuperscript{93}

Because the study cited above is two decades old, one should be cautious in assuming that the Heritage Foundation holds the same views on regulations today as Laffer put forth in 1993. But recent emanations from the think tank leave little room to conclude that it has softened its tone. For instance, in May 2013, a pair of Heritage Foundation fellows published “Red Tape Rising: Regulation in Obama’s First Term,” which judged that the “magnitude of regulation” in Obama’s first term was “likely unmatched by any Administration in the nation’s history.”\textsuperscript{94} Heritage also has liberally claimed that regulations “kill jobs,” even asking in July 2012, “Has Any [Obama] Administration Policy NOT Killed Jobs Lately?”\textsuperscript{95}

\section*{IV. By Some Critics’ Reasoning, Regulations Are the Third-Leading Cause of Death in the United States}

If the claims by anti-regulatory critics are to be believed, public safety regulations are among the greatest causes of death in the United States. The logic, as outlined by Heritage Foundation fellow Daniel J. Mitchell in 1992, goes like this: Regulations impose costs; costs depress incomes; lower incomes result in premature deaths; therefore, regulations kill.\textsuperscript{96}

Mitchell supported his argument in part by comparing per-capita income and life expectancy in certain developing countries with those in the United States, and by comparing life expectancy and GDP over time within the United States. For instance, when Mitchell’s paper was published, Ethiopia had a per-capita income of $120 and life expectancy of 48 years. The United States, meanwhile, had an average income of $20,619

\textsuperscript{92} William G. Laffer, \textit{George Bush's Hidden Tax: The Explosion in Regulation} (Backgrounder # 905), HERITAGE FOUNDATION (July 10, 1992), \texttt{http://herit.ag/rPPo3f}. Among the regulatory initiatives that Laffer singled out were the 1989 increase to the federal minimum wage, the Nutrition Labeling and Education Act of 1990, the 1990 Clean Air Act Amendments, the 1990 Americans with Disabilities Act, the Pollution Prevention Act of 1990, the 1991 Civil Rights Act, and a grant of increased authorities to the Securities and Exchange Commission.

\textsuperscript{93} \textit{Job Growth in the 1990s: A Retrospect}, U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS (December 2000), \texttt{http://1.usa.gov/rjLyK}.

\textsuperscript{94} James L. Gattuso and Diane Katz, \textit{Red Tape Rising: Regulation in Obama’s First Term, Backgrounder #2783 on Regulation}, HERITAGE FOUNDATION (May 1, 2013), \texttt{http://herit.ag/160zxXQ}.

\textsuperscript{95} Amy Payne, \textit{Morning Bell: Has Any Administration Policy NOT Killed Jobs Lately? THE FOUNDRY} (Heritage Foundation), \texttt{http://herit.ag/NQ1rxw}.

and life expectancy of 76 years. Therefore, one might infer that the higher income in the United States explains the longer life expectancy in the United States.

Likewise, per-capita income increases in the United States throughout the 20th century occurred simultaneously with life-expectancy increases to a point at which “Americans are more prosperous and live longer than ever before,” Mitchell wrote.97 (Mitchell did not explain how the United States developed such prosperity amid its allegedly increasing regulatory burden, which his paper generally blames for dampening incomes.)

Mitchell cited various findings that associated levels of decreased income ranging from $1.9 million to $7.5 million with inducing a premature death.98 The $1.9 million estimate came from a literature survey by the Office of Information and Regulatory Affairs to which Mitchell referred but did not reference. The $7.5 million estimate came from a 1990 academic paper by Ralph L. Keeney that was expressly dedicated to studying the mortality risks posed by the costs of regulations. Mitchell’s paper treated a dollar of regulatory costs as synonymous with a dollar of lost income.

This paper will illustrate the results that would occur if Mitchell’s theory were applied to current conditions. To test Mitchell’s theory:

- Mitchell’s estimate of the amount of regulatory costs that cause a premature death would need to be increased to adjust for inflation. Under the adjusted figures, the amount of reduced income to induce a death would range from about $3.2 million to $12.3 million.99

- A determination of the nation’s total regulatory costs would need to be applied. Estimates on the total costs of regulations vary greatly. On his personal blog, Mitchell endorsed a 2010 report funded by the U.S. Small Business Administration that placed the annual, national costs of regulations at $1.75 trillion.100 The SBA-commissioned report has been widely discredited, and even the SBA has distanced itself from its findings.101 But given Mitchell’s endorsement of the study, it seems appropriate to use its findings to test his theory on the relationship between regulations and premature deaths.

97 Id.
98 Id.
100 Dan Mitchell, Strangling Entrepreneurship and Job Creation With $1.75 Trillion of Regulation and Red Tape, INTERNATIONAL LIBERTY: RESTRAINING GOVERNMENT IN AMERICA AND AROUND THE WORLD (Sept. 22, 2010), http://bit.ly/a8v3gL.
If one divides the purported $1.75 trillion cost of regulations by the inflation-adjusted estimates on the amount lost income (3.2 million to $12.3 million) that Mitchell’s study said would cause a premature death, one arrives at the conclusion that regulations are responsible for causing 142,585 to 562,835 deaths in the United States per year.

Either answer would make regulations the third-leading cause of death in the United States, according to the latest available figures from the Centers for Disease Control and Prevention. At the high end, this would put regulations just a shade below heart disease and cancer as a cause of death. [See Figure 6]

<table>
<thead>
<tr>
<th>Cause of Death</th>
<th>Number of Fatalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>597,689</td>
</tr>
<tr>
<td>Cancer</td>
<td>574,743</td>
</tr>
<tr>
<td>Regulations, applying Mitchell theory (high estimate)</td>
<td>562,835</td>
</tr>
<tr>
<td>Regulations, applying Mitchell theory (low estimate)</td>
<td>142,585</td>
</tr>
<tr>
<td>Chronic lower respiratory diseases</td>
<td>138,080</td>
</tr>
<tr>
<td>Stroke (cerebrovascular diseases)</td>
<td>129,476</td>
</tr>
<tr>
<td>Accidents (unintentional injuries)</td>
<td>120,859</td>
</tr>
<tr>
<td>Alzheimer’s disease</td>
<td>83,494</td>
</tr>
<tr>
<td>Diabetes</td>
<td>69,071</td>
</tr>
<tr>
<td>Nephritis, nephrotic syndrome, and nephrosis</td>
<td>50,476</td>
</tr>
<tr>
<td>Influenza and Pneumonia</td>
<td>50,097</td>
</tr>
<tr>
<td>Intentional self-harm (suicide)</td>
<td>38,364</td>
</tr>
</tbody>
</table>

Source: Centers for Disease Control and Prevention (except for estimates based on Mitchell, which are shaded)

The sort of logic Mitchell used in his paper has had practical policy applications. In 1992, acting-OSHA Administrator James MacRae Jr. cited Keeney’s finding that a reduction of $7.5 million in income causes a fatality as a reason for blocking new rules on the permissible exposure limits for about 1,000 substances. Using the $7.5 million estimate as a guide, MacRae calculated that the costs of complying with the proposed rules would result in 22 deaths a year while the rules’ protections would save only 8 to 13 lives.

In his rejection of the rules, MacRae noted that Judge Stephen F. Williams of the U.S. Court of Appeals for the D.C. Circuit had recently cited the $7.5 million figure in a concurring opinion that struck down a separate OSHA rule. Less stringent regulation “is not necessarily adverse to health or safety,” Williams wrote. “More regulation means some

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combination of reduced value of firms, higher product prices, fewer jobs in the regulated industry, and lower cash wages."\textsuperscript{104}

Even those who believe that regulations may have fatal effects would likely distance themselves from the conclusion that regulations are among the biggest killers of all.

But to the extent that any aspect of this theory has the potential to be taken seriously, the methodology underlying it warrants examination. Adherents of the regulation-causes-death theory are correct that there is a correlation between income levels and life expectancy.\textsuperscript{105} (Whether income levels are a \textit{cause} affecting life expectancy is another question.) But they make enormous leaps in concluding that the expected cost of implementing a regulation equates to an equivalent level of lost income for ordinary Americans.

First, as shown in this paper and elsewhere, regulations rarely end up costing nearly as much as expected.\textsuperscript{106}

But, even more fundamentally, the regulations-induce-death theorists appear to have utterly omitted the economic benefits of regulations from their calculations. For instance, the methodology used in the paper authored by Ralph Keeney (which concluded that $7.5 million in regulatory costs induces a premature death and was cited by the federal judge and former OSHA administrator) does not take into account the offsetting economic \textit{benefits} that would accompany expenditures to comply with regulations.\textsuperscript{107}

“The basic idea to estimate cost-induced fatalities is rather simple,” Keeney wrote. “Economic costs of expensive programs are somehow apportioned as costs to individuals. These costs, which decrease the disposable income of individuals, increase their fatality risks.”\textsuperscript{108}

To illustrate his theory, Keeney invoked a hypothetical example of repealing a regulation requiring an underground storage facility that costs $15 billion in favor of a surface storage facility that costs $2 billion. “The difference [in cost] need not be taken from the public ...
Through one mechanism or another, reduced economic expenditures will lead to more disposable income for individuals.”

But costs to comply with regulations also provide incomes to the individuals who furnish the necessary labor and supplies. For example, in Keeney’s example, individuals would need to build the $15 billion underground facility, and they would be paid to do so. Therefore, constructing the facility would not reduce the national income by anywhere near $15 billion, if at all. Further, as shown in this paper and elsewhere, regulations often spur innovations that lead to increased efficiency for industry, which offers the potential for additional economic benefits.

Under Keeney’s methodology, it would seem that voluntary investments made by private industry (especially for objectives that parallel typical regulatory prerogatives) may warrant categorization as income-depressing efforts that would inevitably lead to fatalities. For example, Chrysler announced in 1988 that it would implement airbags as standard equipment on all its cars in 1990, long before federal rules required them. The company sought a market advantage for doing so. Was the cost for Chrysler’s voluntary provision of airbags an income-depressing killer? Or did this expenditure warrant exclusion from such categorization simply because the government did not require it? And, if so, did Chrysler’s provision of airbags suddenly become a regulatory cost (and therefore an income-depressing killer) starting in 1998, when federal law made airbags mandatory?

The regulation-causes-death theory does not appear to enjoy as much salience among regulatory critics today as in the 1990s. But it is not forgotten. For instance, Patrick A. McLaughlin, a senior research fellow at the Mercatus Center at George Mason University, wrote in a 2013 letter to Sen. Richard Blumenthal (D-Conn.): “Some regulations can be so costly, and therefore diminishing to the overall size of the economic pie and income, as to actually cause more statistical fatalities than save statistical lives.” McLaughlin cited a 2003 study that he said yielded a conclusion that “any regulation that costs more than $21 million per life saved is actually causing more people to die than it is saving.”

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109 Id.
V. Conclusion

“History suggests that the ingenuity of the industry, once put in gear, responds admirably to most technological challenges.”

In recent years, opponents of regulations may have become bolder than ever before in demonizing regulations. As Washington Post columnist Ruth Marcus noted in 2012, the term “job-killing regulations” barely appeared in U.S. news sources in 2007, but became a staple by 2011. “It is a seemingly immutable law of modern Republican rhetoric that the word ‘regulation’ can never appear unadorned by the essential adjective: ‘job-killing,’” Marcus wrote.114

Critics have been unabashed in predicting huge numbers of lost jobs if new regulations are enacted. Cumulatively, they have forecast that at least 12.9 million jobs will be lost over roughly the next decade due to the implementation of new environmental regulations, the Dodd–Frank Wall Street Reform and Consumer Protection Act that was passed in the wake of the financial crisis, and the Patient Protection and Affordable Health Care Act. [See Figure 7]

**Figure 7: Estimate on Job Losses Pertaining to Recent Regulatory Matters**

<table>
<thead>
<tr>
<th>Legislation or Regulation</th>
<th>Maximum Alleged Prospective Job Losses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corpus of proposed environmental regulations</td>
<td>9,748,000</td>
</tr>
<tr>
<td>Dodd-Frank Wall Street Reform and Consumer Protection Act</td>
<td>2,900,000</td>
</tr>
<tr>
<td>Patient Protection and Affordable Care Act</td>
<td>262,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12,900,000</strong></td>
</tr>
</tbody>
</table>


One lesson to be drawn from past predictions of job losses from regulation is that they almost certainly will not occur on anything approaching the scale suggested, if at all.115 This

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115 Although not the subject of this report, regulations also have been shown to have a job creating effect, regardless of the accuracy of claims that regulations may concurrently hinder employment in some contexts.
is true for two primary reasons. First, predictions of job losses from regulations are bound to embed gross exaggerations because the industries or industry allies that peddle them have every incentive to paint as bleak of a picture as possible. Second, forecasts usually do not take into account the likelihood of industry's capacity to adapt and innovate.

“History suggests that the ingenuity of the industry, once put in gear, responds admirably to most technological challenges,” U.S. District Court Judge William Sessions III said in 2007, when he dismissed a lawsuit by automakers challenging the rights of states to regulate greenhouse gases.116

A vital role of regulations is to compel industry to channel its ingenuity to solve problems that do not offer immediate financial rewards. In that way, regulations protect businesses that seek to fulfill their moral responsibilities—by doing such things as limiting pollution or protecting workers—because the rules require their competitors will do the same.

A second lesson from the historical record on regulations is that the public will likely pay an enormous price if it yields to industry's scare tactics. Many of the regulatory initiatives outlined in this report provided priceless gains. Imagine the state of our country if pollution had increased unabated since the 1970s instead of declining greatly; if children were still growing up with dangerous levels of lead in the air; or if employees were expected to work in fear of known hazards because, in the minds of some, mitigating the dangers would just cost too much.