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REGULATORY EXPENDITURES, ECONOMIC GROWTH AND JOBS: AN EMPIRICAL STUDY

Bi-Partisan Priorities

- ◆ Increase Economic Output
- ◆ Increase the Number of Jobs
- ◆ Curb Regulatory Burden that hinders Growth and Jobs
- ◆ Reduce the Deficit
 - ◆ Reduced spending
 - ◆ Higher Revenues

The American people deserve a regulatory system that works for them, not against them: a regulatory system that protects and improves their health, safety, environment, and well-being and improves the performance of the economy without imposing unacceptable or unreasonable costs on society; regulatory policies that recognize that the private sector and private markets are the best engine for economic growth; regulatory approaches that respect the role of State, local, and tribal governments; and regulations that are effective, consistent, sensible, and understandable. **We do not have such a regulatory system today.**

Quoting Pres. William Clinton's EXECUTIVE ORDER 12866

Policy Strategy

ACTION

Reduce
Regulatory
Burden

INTENDED RESULT

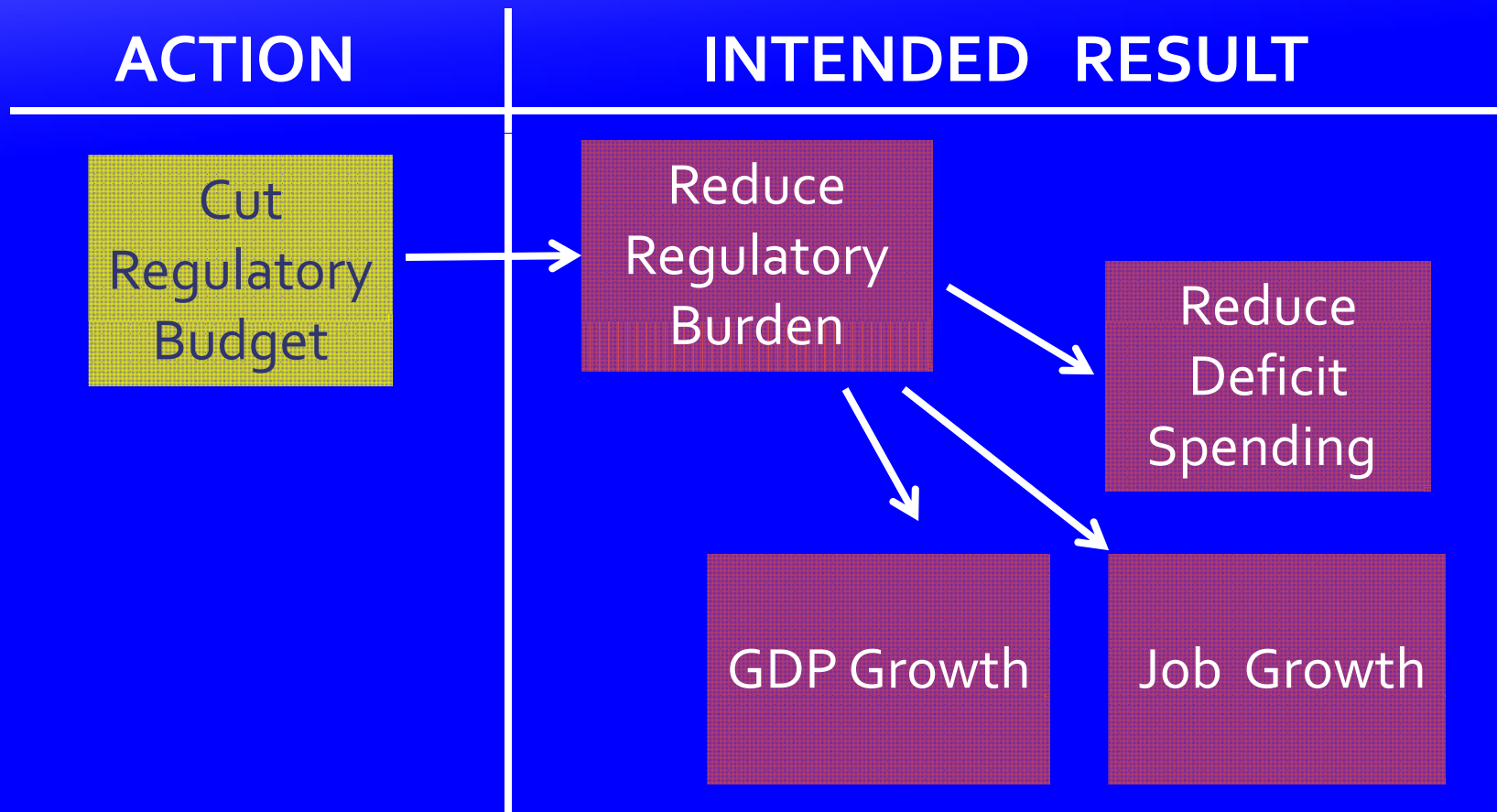
GDP Growth

Job Growth

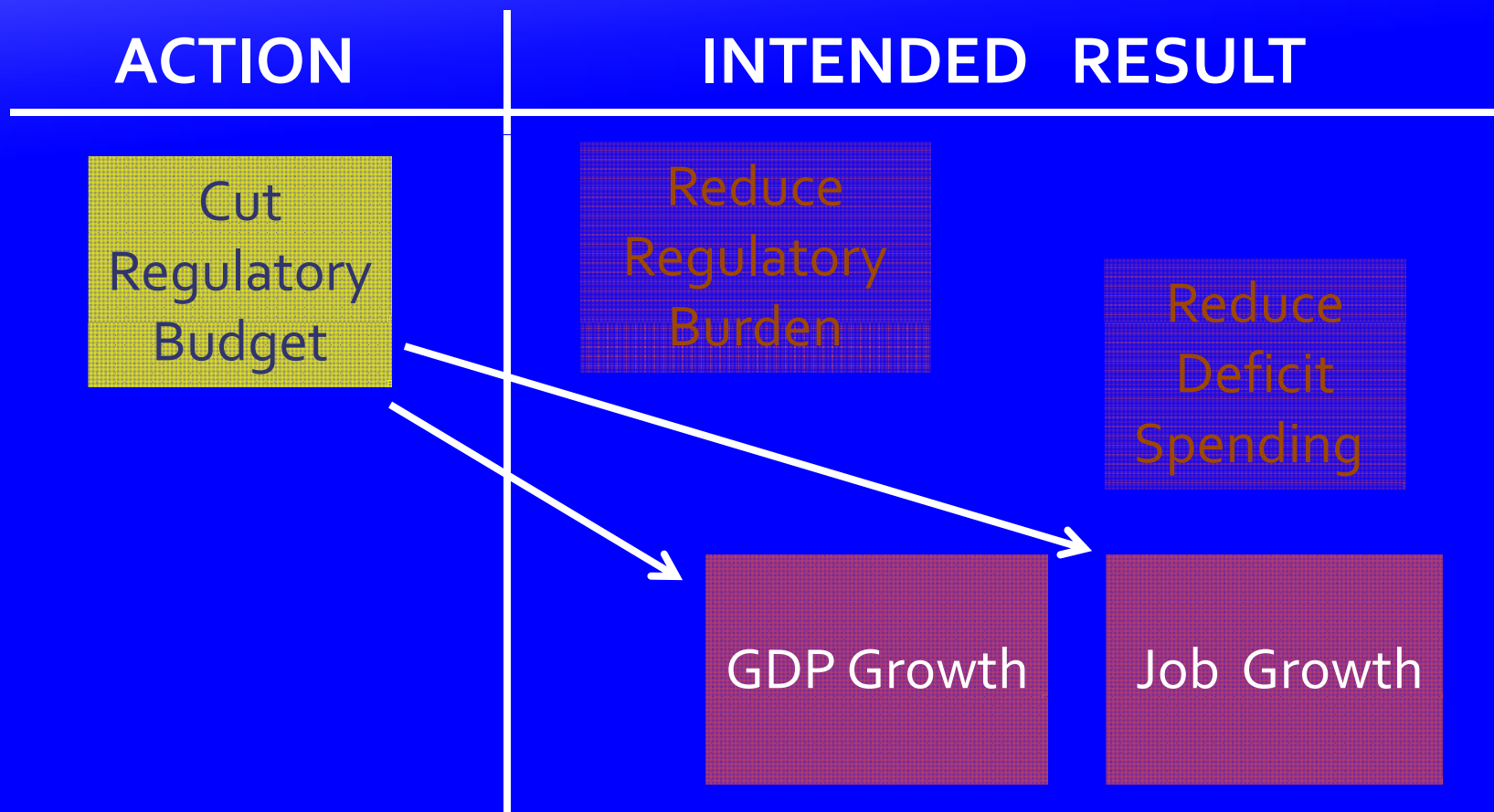
Policy Strategy

- ◆ Agency self-assessment of regulations?
- ◆ Congressional review of individual regulation?
- ◆ Since self-assessment and rule-by-rule review by Congress is not realistic, perhaps a higher level approach is preferred.

Alternate Policy Strategy



Alternate Policy Strategy: An Empirical Analysis



Relationships of Interest

- ◆ What is the historical relationship between expenditures on regulation and private-sector GDP?
- ◆ What is the historical relationship between expenditures on regulation and private-sector jobs?
- ◆ By quantifying these relationships, we can then simulate a “shock” to the regulatory budget and trace out the implications on GDP and jobs

Data

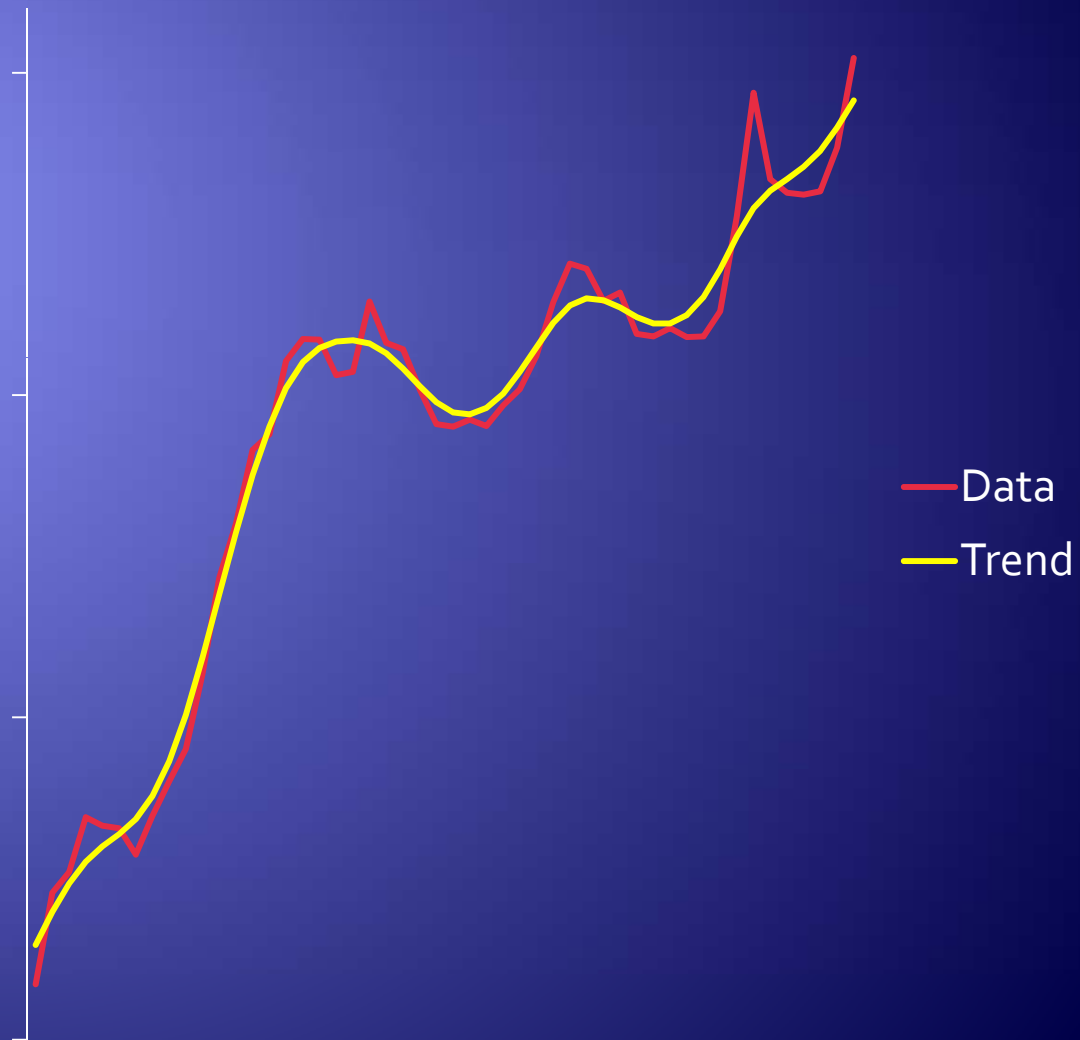
- ◆ Private Sector Economic Output (y_t)
 - ◆ (GDP – Government Spending)/Population
 - ◆ U.S. Government Data
- ◆ Private Sector Jobs (l_t)
 - ◆ U.S. Government Data
- ◆ Regulatory Budget (r_t)
 - ◆ Federal Expenditures on Regulatory Agencies ÷ Private Sector Economic Output (y_t)
 - ◆ Dudley & Warren, A Decade of Growth in the Regulator's Budget (May 2010)
- ◆ 1960 – 2009 (50 years of data)

Trend in the Regulatory Budget

Regulatory budget defined as (the natural log of) federal spending on regulatory agencies divided by private sector GDP

Using a statistical technique (the Hodrick-Prescott Filter), the trend and cyclical components of the regulatory budget can be identified.

As shown in the figure, regulatory expenditures as share of GDP is rising over the past fifty years.



Empirical Approach

- ◆ Estimate a Trivariate Vector Autoregression (“VAR”) using our three variables (in first differences; all are $I(1)$)
- ◆ Using the estimates from the VAR, estimate the response of GDP and Jobs to a shock in the Regulatory Budget using the Generalized Impulse Response Function (“GIRF”)
- ◆ This approach is standard fare and commonly appears in the academic literature

Expectations

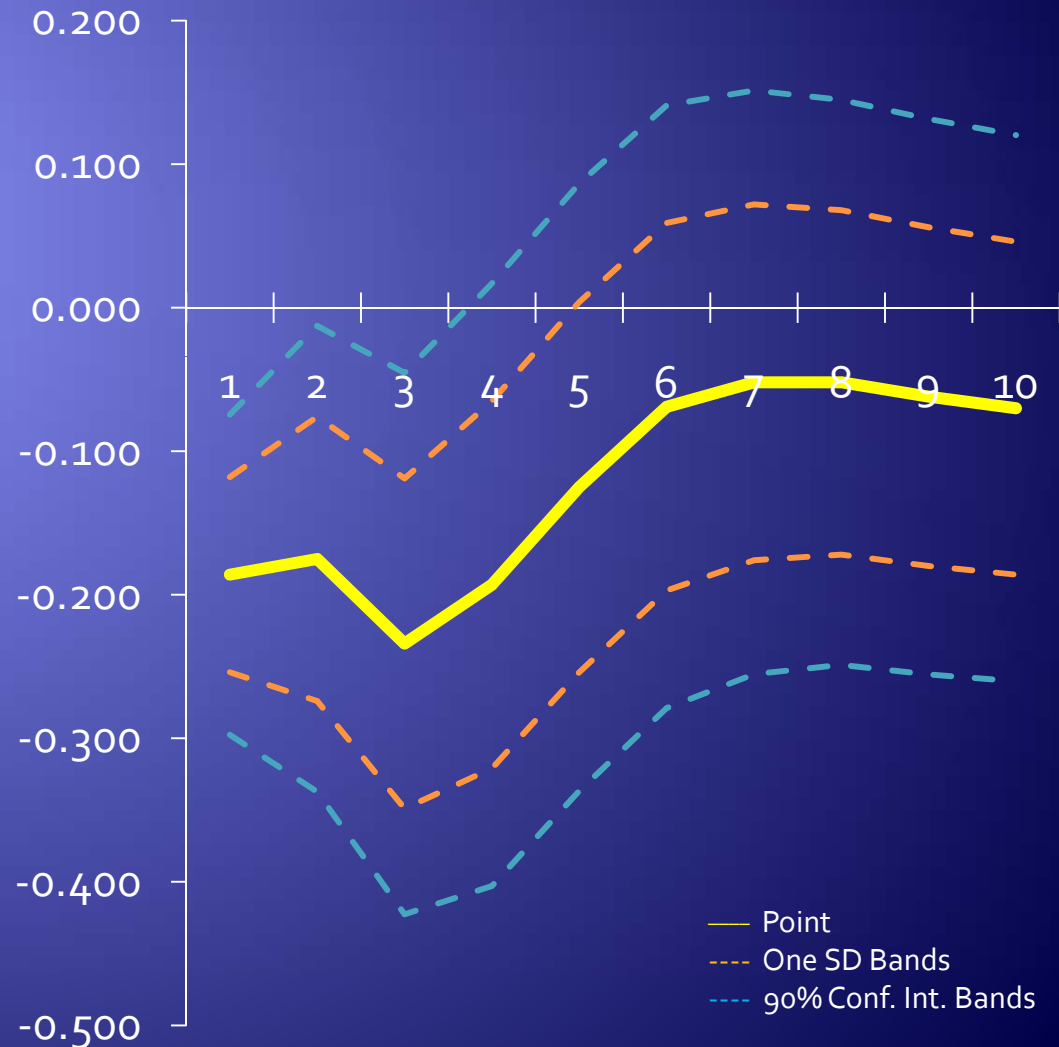
- ◆ Regulation imposes costs, and costs eventually find their way to prices. Thus, effect on GDP may not be strong. In effect, the cost of regulation are included in GDP.
 - ◆ Typical “cost of regulation” research focuses on such costs
- ◆ Effect on jobs is expected to be statistically and economically significant.
 - ◆ Most regulation today raises the cost of doing business, which reduces economic activity, though not necessarily prices.

GDP and the Regulatory Budget

Impulse Response
Function from a positive
shock to the Regulatory
Budget.

Increases in the regulatory
budget reduces private
sector output. Or,
decreases in the budget
increases private sector
output.

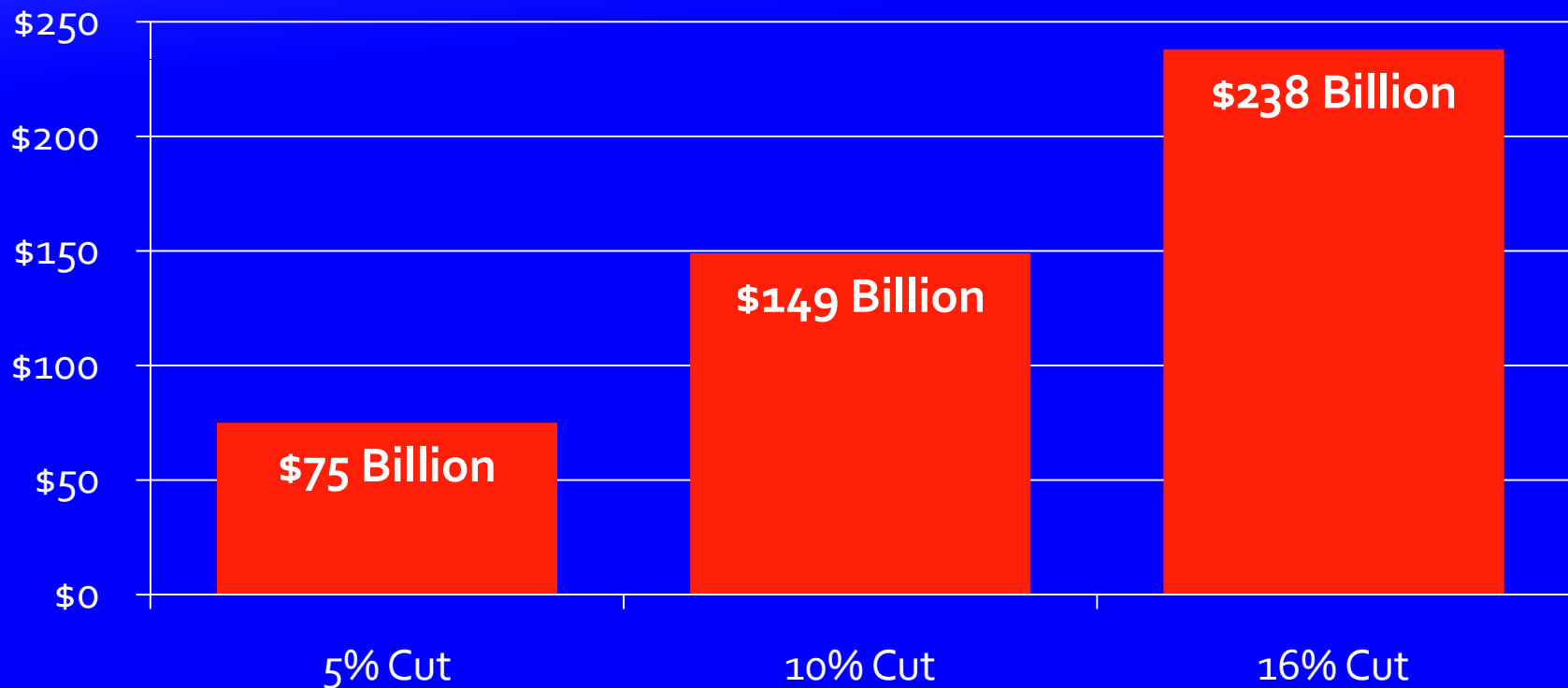
The effect weakens at
about the 5th year. Not
surprising. We limit our
attention to 5 years.



Sizing the Effects: GDP (Billions)

Budget Cut	-5%	-10%	-16%
GDP Effect Year 1	\$84	\$168	\$267
GDP Effect Year 2	\$78	\$155	\$247
GDP Effect Year 3	\$104	\$207	\$328
GDP Effect Year 4	\$87	\$172	\$274
GDP Effect Year 5	\$57	\$113	\$181
Five-Year Total GDP (PV)	\$376	\$474	\$1,189
Avg. Annual GDP Increase	\$75	\$149	\$238

Annual GDP Gains from Cutting the Federal Regulatory Budget

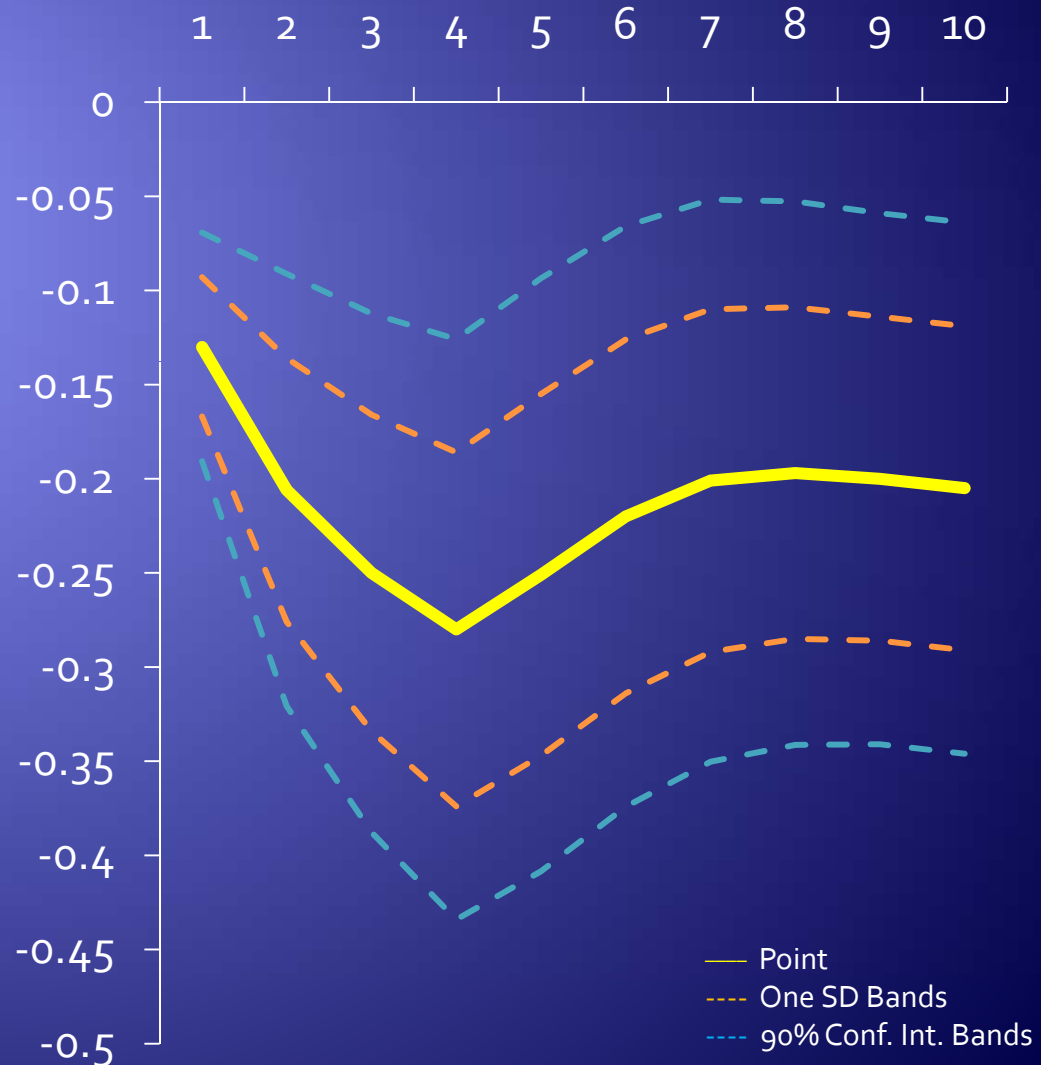


Jobs and the Regulatory Budget

Impulse Response
Function from a positive
shock to the Regulatory
Budget.

Increases in the regulatory
budget reduces private
sector employment. Or,
decreases in the budget
increases private sector
employment.

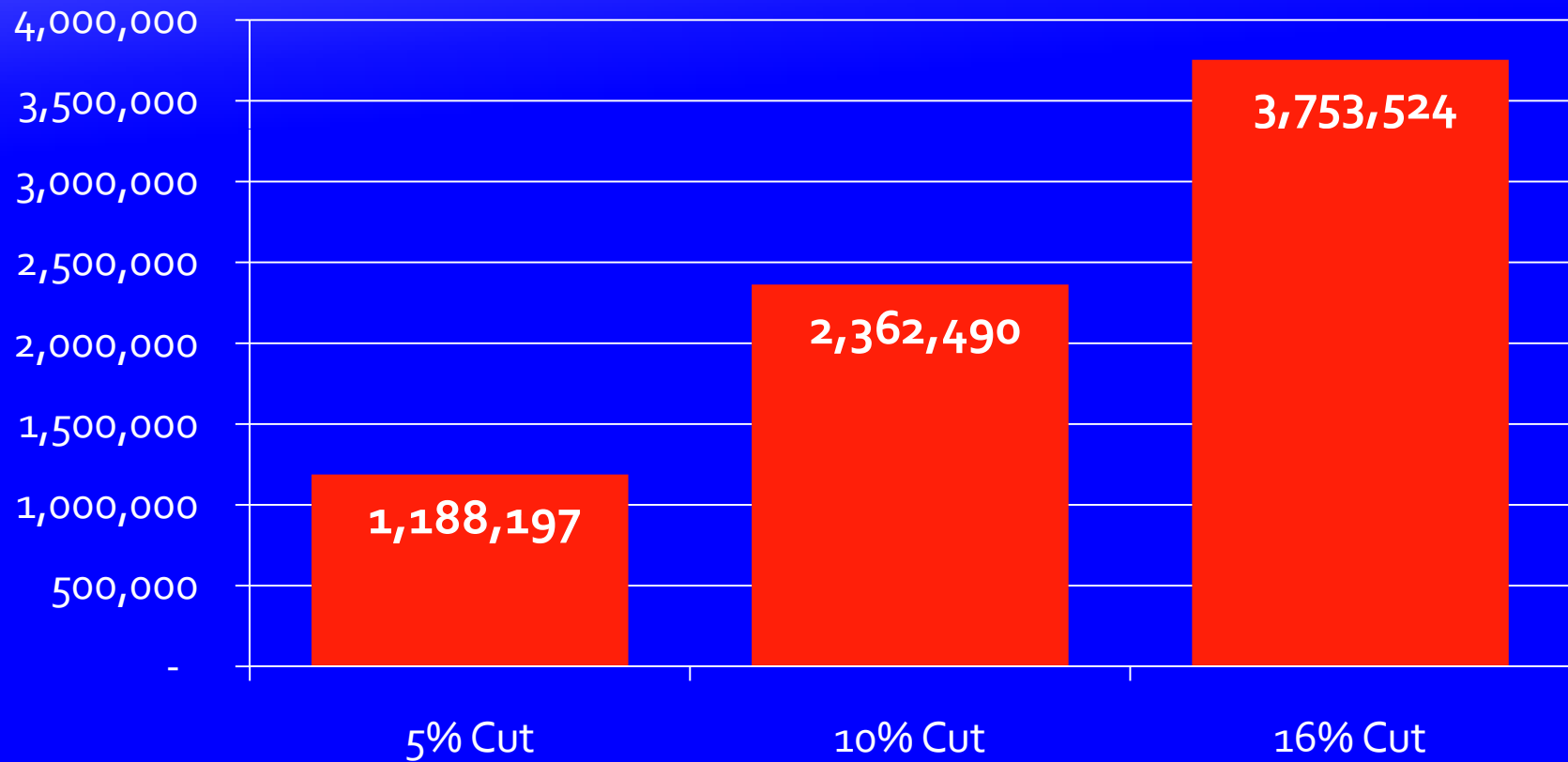
The negative effects
persist over the 10-year
window.



Sizing the Effects: Jobs

Budget Cut	-5%	-10%	-16%
Jobs Effect Year 1	703,226	1,401,888	2,234,301
Jobs Effect Year 2	1,104,430	2,197,551	3,494,534
Jobs Effect Year 3	1,322,742	2,629,057	4,175,238
Jobs Effect Year 4	1,480,034	2,939,465	4,663,991
Jobs Effect Year 5	1,330,555	2,644,487	4,199,555
Average Job Effect	1,188,197	2,362,490	3,753,524
Loss in Regulatory Jobs	-12,109	-24,217	38,747

Annual Private-Sector Job Gains from Cutting the Federal Regulatory Budget



Cost Per Regulator

- ◆ On average, each Federal Regulatory Agency Employee Cuts GDP by \$6,200,000
- ◆ On average, each Federal Regulatory Agency employee Eliminates 98 Private-Sector Jobs and Destroys the Equivalent of the Economic Output of 134 Persons

Jobs Multiplier

- ◆ A common way to assess the impact of spending on jobs is to compute the number of jobs gained or lost from a \$1 million change in spending – the jobs multiplier
- ◆ For spending on telecommunications plant, the jobs multiplier is about 17
 - ◆ A \$1 million increase creates about 17 jobs
- ◆ For regulatory budget, the jobs multiplier is computed to be -418
 - ◆ A \$1 million increase reduces private sector employment by 418 jobs

Robustness

To assess the effect of sample size, we estimated the effects using samples of 1960-2009 (Full Sample), 1970-2009, and 1980-2009.

Both the GDP and Jobs effects rise slightly, suggesting regulation may be more costly in recent years.

We also estimated using larger and smaller VARs.

Sample Years	Avg. GDP Effect	Avg. Jobs Effect
1960-2009	\$75 Billion	1,188,197
1970-2009	\$101 Billion	1,234,565
1980-2009	\$126 Billion	1,381,238

Finding

- ◆ Responsible cuts in the federal regulatory budget may have significant impacts on economic growth and job recovery
- ◆ The cost of regulatory bureaucracy is large
- ◆ Reducing regulation may have a relatively high payoff versus other actions to stimulate economic recovery

Keep in Mind ...

- ◆ Regulation has benefits. The question is whether Benefits exceed Costs. We find the costs are high.
- ◆ We do not address specific regulations, but the budget in total.
- ◆ We do not address state regulation.
- ◆ Compliance costs are embedded in GDP, so we undercount the costs.

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