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Regulation, Jobs, and Economic Growth: An Empirical Analysis

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Abstract: Claims about government regulation and its detrimental effects on job creation and economic growth are currently receiving substantial attention in the public sphere. Yet, conclusive evidence demonstrating this link between regulatory activity and macroeconomic indicators remains elusive. This paper seeks to empirically examine these linkages, using the on-budget costs of regulation over time as a proxy for federal regulatory activity. Our analysis finds that the macroeconomic effects of regulatory agency budgets as a whole as well as of subcategories of regulatory spending are indistinguishable from no effect based on the data and statistical methods available. This finding is generally robust throughout our sensitivity analysis. We explore possible explanations for this finding, as well as why our results differ from other studies on the same subject. This report highlights throughout the numerous challenges associated with both accurately measuring regulatory activity and obtaining valid estimates of its effects on the macroeconomy. It also offers recommendations moving forward on how to keep the public conversation about regulation constructive and evidence-based.

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I. Introduction

With the U.S. unemployment rate still painfully high at 8.3% as of January 2012, politicians in Washington and on the campaign trail continue debating over what steps government can take to help put Americans back to work. One popular topic of conversation in this vein has been government regulation. What we are currently hearing from politicians and the media is that regulation is the enemy of job creation, an argument that may be more driven by rhetorical salience than evidence. On this subject, a recent article in the *Washington Post* reports, "Economists who have studied the matter say that there is little evidence that regulations cause massive job loss in the economy, and that rolling them back would not lead to a boom in job creation" (Yang 2011). Some evidence points to a lack of consumer demand as the primary obstacle to reducing unemployment and growing the economy. According to the Bureau for Labor Statistics (2011), among mass layoffs recorded between 2008 and the first half of 2011, just 0.3% of employers reported government regulation as a reason behind the layoff, compared to 34.6% claiming that business demand was to blame. On the other hand, a recent Gallup poll reported that 22% of small business owners consider "complying with government regulations" as the most important problem they are facing right now, while "consumer confidence" and "lack of consumer demand" were named by 15% and 12% of respondents, respectively (Jacobe, 2011). The conflicting implications of these surveys reflect the complexity of this issue.

This paper seeks to shed some light on this debate over regulation and its true effects on job creation and economic growth through objective empirical analysis using the data and statistical tools available. This study has some critical limitations, which we will attempt to discuss openly and fully. Our results differ markedly from those of another study (Beard et al.,

2011) that uses similar data and methods, so our analysis will also examine the causes behind this disparity.

II. Previous Research

Numerous studies have attempted to quantify the cost of regulation in the U.S. using a variety of methods. In last year's report to Congress, the Office of Management and Budget (OMB) estimated the total annual cost of major federal regulations at an aggregate level to be in the $44-62 billion range (Office of Management and Budget, 2011). However, OMB acknowledges these cost estimates have their limitations, in part because they rely on agencies' ex ante estimates, and exclude any impacts that were unable to be quantified or monetized with the information available. Moreover, these figures (as well as the reports benefits estimate of $132-655 billion) only capture regulations that are subject to OMB review under Executive Order 12866, and for which agencies estimated both costs and benefits. Thus, regulations promulgated by independent agencies, as well as any regulations classified as "non-major" (roughly any rules with an estimated impact on the economy of less than $100 million), are not factored into OMB's estimates. Another report, commissioned by the Small Business Administration, drew on a number of sources in an attempt to arrive at a more comprehensive measure of regulatory costs, estimating the total federal regulatory cost burden on businesses to be $1.75 trillion in 2008 (Crain & Crain, 2010). Without passing judgment on the accuracy of this estimate, it is clear that its dramatic departure from OMB's cost estimates reveals just how uncertain and subject to debate the true cost of the regulatory burden on the US economy really is.

As difficult as measuring the full compliance costs of federal regulation can be, attempting to empirically measure the magnitude of regulations' effects on economic growth and employment can be even more challenging, in part because it is extremely difficult to know what the counterfactual is. Many studies have tried to address this question, frequently focusing on environmental regulation specifically. For example, the Congressional Budget Office (1985) found no evidence of a statistical relationship between environmental regulation and overall economic productivity in the U.S. at an aggregate level, though the study did find that the flexibility of the standard can have an effect on performance. Using econometric methods, Cole and Elliott (2007) looked at the relationship between environmental regulation and jobs in the United Kingdom, and while the coefficient on environmental regulation costs (measured using data on industry expenditures on environmental protection) was typically negative in their results, it was also statistically insignificant.

A more recent econometric study conducted by the Phoenix Center for Advanced Legal and Economic Policy Studies looks at the effect of on-budget regulatory agency spending on private sector employment and economic output in the United States (Beard et al. 2011). Unlike the previously cited studies, this report does show a statistically significant relationship at the aggregate level. According to this analysis, reducing the total budget of all U.S. federal regulatory agencies by just 5% (or $2.8 billion) is estimated to result in an increase in real private-sector GDP of $75 billion annually, as well as 1.2 million more private sector jobs each year. They put it another way too, claiming that firing one regulatory agency staff member will create 98 jobs in the private sector. Our study below uses data sources and econometric methods similar to those employed in Beard et al. (2011), but arrives at very different results. We will

therefore revisit this study's findings, and why they diverge so markedly from ours, later on in this report.

III. Data

To conduct our analysis, we constructed a dataset of annual values from 1960 to 2010 for the following three variables: regulators' budget[2], real Gross Domestic Product (GDP), and employment. Selection of these variables for inclusion in the model is explained below.

a. Regulators' Budget

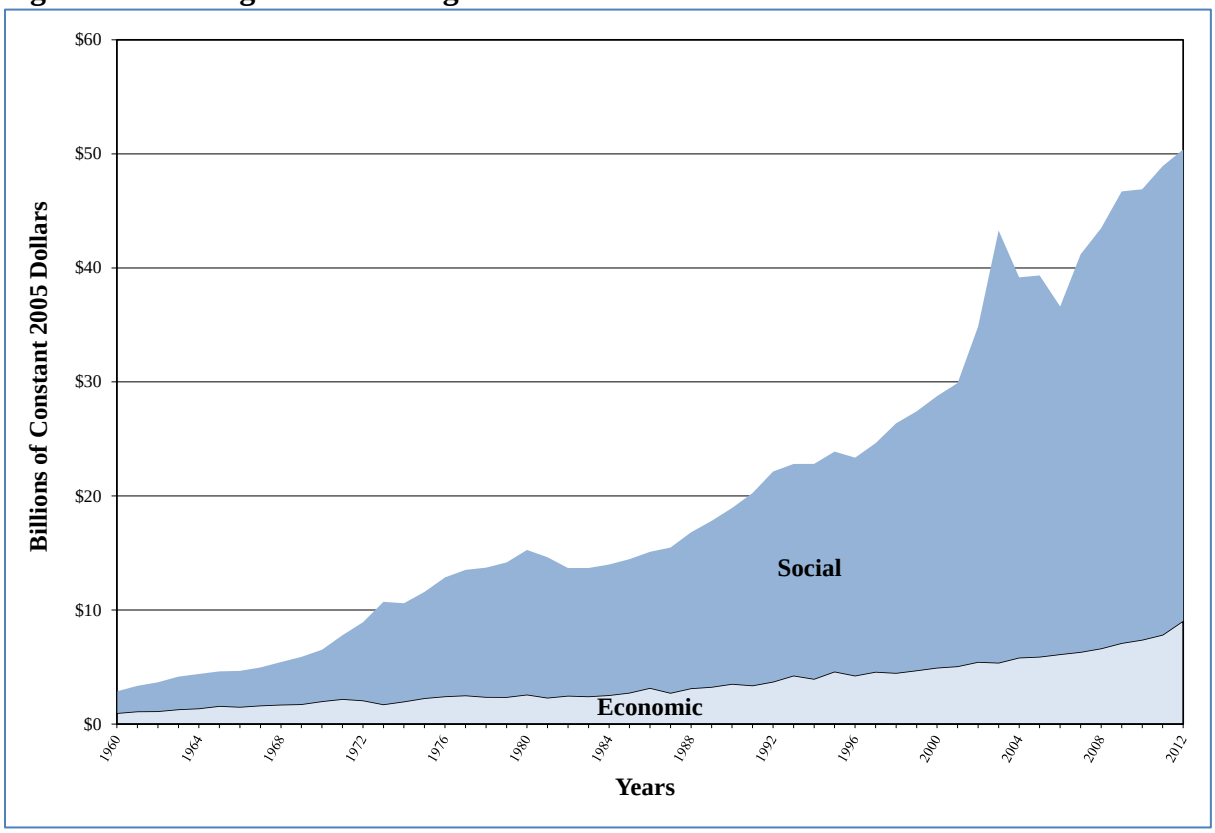
Conventional proxy measures for regulatory activity used in research include the Code of Federal Regulations (CFR) page count, the Federal Register page count, and the number of major rules issued. However, our analysis utilizes a different indicator for regulation – the "Regulators' budget" – that is, the on-budget costs of staffing and running federal regulatory agencies. Figure 1 below depicts these costs over time, with regulatory agency spending broken down into two categories: social and economic. Beard et al. (2011) were the first to use this proxy measure for regulation in an empirical examination of the impact that regulatory activity has on the macroeconomy.[3] In their paper, the authors make a strong case for why this proxy, while still far from perfect, has certain advantages over the more traditional measures used. For example, regulatory agency budgets may capture not only the number of regulations in effect, but also the extent to which they are enforced. This is a compelling argument, but it must still be recognized

[2] Data supplied by Susan Dudley and Melinda Warren, 2011, *Fiscal Stalemate Reflected in Regulators' Budget: An Analysis of the U.S. Budget for Fiscal Years 2011 and 2012*, The George Washington University Regulatory Studies Center and Washington University in St. Louis Weidenbaum Center on the Economy, Government and Public Policy.

[3] Beard et al. (2011) also used regulatory agency staffing numbers – that is, the number of regulators – as another proxy for regulation. Our study only uses one proxy, the on-budget costs of regulation.

that their study's findings, as well as ours reported here, rest heavily on the validity of this measure for regulatory activity.

Figure 1. On-budget Costs of Regulation

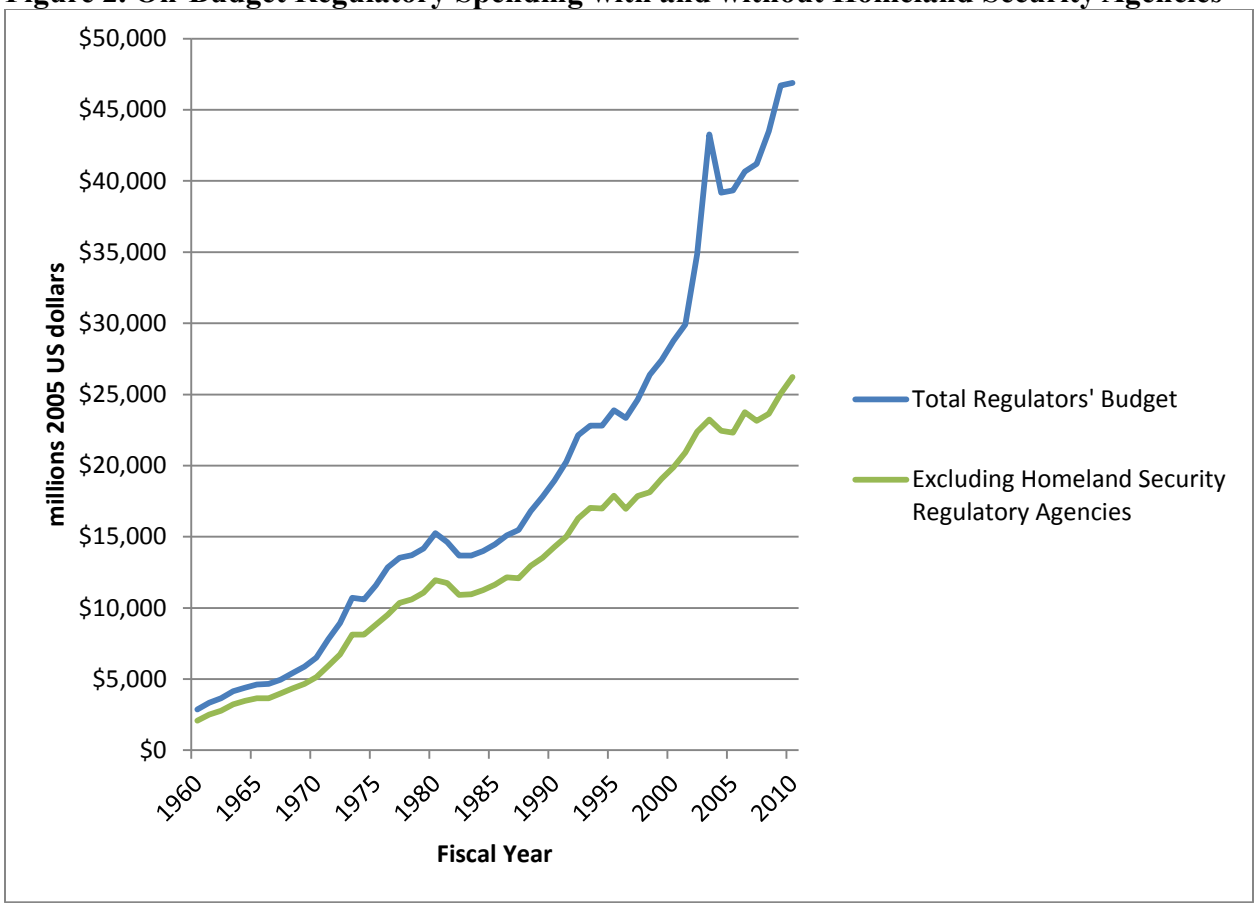


Source: Dudley & Warren (2011)

Of particular concern with respect to our decision to use Regulators' budget data as our proxy for regulation is one substantial outlier in the budget – Homeland Security regulatory spending, particularly spending by the Transportation Security Administration (TSA). As Figure 2 below illustrates, this area of regulation has been by far the largest driver of regulatory agency spending growth in the last decade since the Department of Homeland Security was created after September 11th. Based on this insight, it would be beneficial to determine what happens to the study's results when TSA is excluded from the sample, especially since it is questionable whether or not this agency really belongs in the regulators' budget from a theoretical perspective.

Therefore we will examine how excluding TSA spending, as well as all Homeland Security spending, from the regulators' budget affects our results. Furthermore, it may be that different types of regulatory spending may have different macroeconomic effects, so we will also examine the impact separately of different major regulatory areas as detailed below in Section III.b.

Figure 2. On-Budget Regulatory Spending with and without Homeland Security Agencies



Data Source: Dudley & Warren (2011)

b. Macroeconomic Indicators

Our baseline analysis will focus on US real GDP and total nonfarm payroll employment as our macroeconomic indicators. In the sensitivity analysis section we exclude the government from our macroeconomic indicators and focus only on the private sector.[4]

[4] We downloaded all our macroeconomic data from the Federal Reserve Economic Data (FRED) database maintained by the St. Louis Federal Reserve Bank: http://research.stlouisfed.org/fred2/. The real GDP data are

IV. Baseline Analysis

Using the data described above, we converted all data points to natural log form, took the first difference and multiplied all by 100 (to approximate annual growth rates in percentage points). We then employ a structural vector autoregression (VAR) model, commonly used by economists to analyze interconnected macroeconomic data observed over time. In order to identify the structural model we assumed that the regulators' budget can contemporaneously affect real GDP and employment but that both real GDP and employment only respond to changes in the regulators' budget with at least a one-year lag.[5]

a. Results Using Total Regulators' Budget

The impulse response graphs in Figure 3 show the accumulated impact over ten years of a one standard deviation shock to the (log change times 100 of the) regulators' budget on real GDP growth and employment growth.

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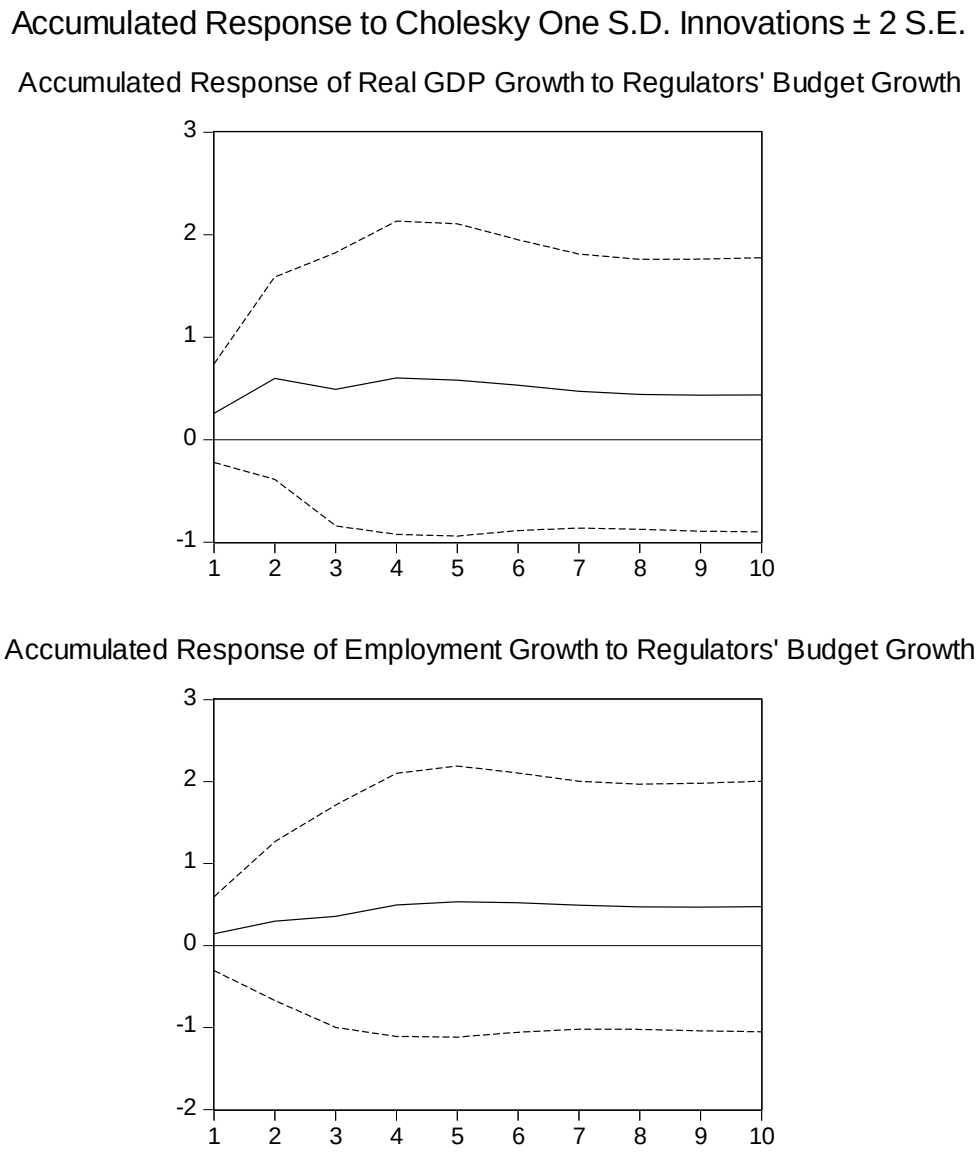
measured in annual billions of chained 2005 dollars and from U.S. Department of Commerce: Bureau of Economic Analysis (BEA), Series ID: GDPCA. The employment data are annual (end of year) total nonfarm payroll employment in thousands of persons from the U.S. Department of Labor: Bureau of Labor Statistics, Series ID: PAYEMS. The private sector data are described further in the sensitivity analysis section below.

[5] This identification scheme follows the recursive system proposed by Sims (1980). It is often called a Cholesky (or Choleski) decomposition because the residuals of the regression are decomposed in a triangular fashion. For more discussion of the estimation of the VAR, see Enders (2004). Our reported results are based on the following Cholesky ordering: Regulators' Budget, Real GDP, Employment. Our key results were similar when we tried different orderings. The lack of sensitivity to ordering choice is consistent with our overall finding of little evidence of a macroeconomic impact from changes in the regulators' budget.

Figure 3. IRFs Using Total Regulators' Budget, Real GDP, and Non-Farm Employment



As one can see, for both the accumulated responses of real GDP and non-farm employment, the 2 standard error (S.E.) bands contain zero. Thus, the effect of federal regulatory agency spending on these macroeconomic indicators is indistinguishable from no effect. Furthermore, we performed Granger causality tests to determine if past changes in the regulators' budget predicted future changes in either real GDP or employment. We were unable to reject

that there is no predictive content contained in the regulators' budget for either macroeconomic variable with p-values of 0.524 for real GDP and 0.907 for employment.

From a theoretical standpoint, this lack of statistical significance is not surprising for several reasons. First, there is bound to be much variation in employment and real GDP not accounted for by this macroeconomic model with just three explanatory variables. Second, as is the case with more commonly used proxies for regulatory activity, such as number of pages in the Federal Register or Code of Federal Regulations, the Regulators' Budget is a blunt measure of regulation, as discussed earlier in this report. Third, it is quite likely that different types of regulatory spending have diverse effects on the economy, and that these effects may vary over time. We will next extend our analysis to investigate this third concern further.

b. Results by Regulatory Agency Category

There is reason to suspect that the macroeconomic effects of regulatory agency spending may vary depending on the area of the economy or society being regulated. Thus, breaking down regulatory agency budgets by the same categories used in Dudley & Warren (2011) (see Table 1 below), we ran a series of Granger causality tests examining the relationships between each individual regulatory spending category and total GDP and employment.

Table 1. Regulatory Agency Spending Categories

Social Regulation	Consumer Safety and Health
	Homeland Security
	Transportation
	Workplace
	Environment
	Energy
Economic Regulation	Finance and Banking
	Industry-Specific
	General Business

In addition, we examined the relationship between the two macroeconomic performance indicators and all social regulation, as well as all economic regulation (as defined in Table 1 above). As discussed earlier in this paper, since Homeland Security regulatory agency spending, especially the Transportation Security Administration (TSA), is such an outlier in the regulators' budget, we also looked at how excluding all Homeland Security regulatory spending, as well as just excluding TSA spending, affected our model's results. Thus, in all, we used 14 different measures of the regulators' budget, listed in Table 2 below.

Table 2. Breakdown of Regulators' Budget Measures

Regulators' Budget Measures (all in millions 2005 $)
Regulators' Budget Total
Regulators' Budget (excluding TSA)
Regulators' Budget (excluding all Homeland Security)
Consumer Safety and Health
Homeland Security
Transportation
Workplace
Environment
Energy
Finance and Banking
Industry-Specific
General Business
All Social Regulation
All Economic Regulation

We begin our analysis by testing for Granger causality, an Ordinary Least Squares (OLS) technique that tests whether or not changes in one variable predict future changes in another variable. It does not assume correct specification of the model however, unlike standard OLS regression, and therefore cannot be used to estimate the existence or magnitude of a structural relationship. Rather, it only demonstrates whether "x precedes y." Thus, Granger causality tests are often run in advance of performing structural tests.

In particular, we are interested in finding out if there is any evidence that past changes in the regulators' budget provides any information about changes in future real GDP or employment. Without evidence of Granger causality there is in fact no reason to estimate an impulse response function (IRF) because we already know there is no indication of a relationship between the lags of the regulators' budget measure and future macroeconomic outcomes. Therefore, we only report IRFs for the cases where we find evidence of Granger causality.

Table 3. Granger Causality Tests for the Macroeconomic Indicators

Regulators' Budget Measures	P-Value GDP Granger Causality Test	P-Value Employment Granger Causality Test
Regulators' Budget Total	0.524	0.907
Regulators' Budget (excluding TSA)	0.697	0.948
Regulators' Budget (excluding all Homeland Security)	0.575	0.705
Consumer Safety and Health	0.733	0.864
Homeland Security	0.515	0.871
Transportation	0.984	0.826
Workplace	0.709	0.601
Environment	0.624	0.585
Energy	0.532	0.664
Finance and Banking	0.333	0.056*
Industry-Specific	0.007***	0.044**
General Business	0.683	0.972
All Social Regulation	0.799	0.954
All Economic Regulation	0.014**	0.016**

*significant at the 10% level, **significant at the 5% level, ***significant at the 1% level.

For nearly all measures of the regulators' budget, we in fact find no evidence of Granger causality. This result is consistent with the baseline results for the total regulators' budget reported in Section III above. The three exceptions to this were our tests using regulatory agency

spending for Finance and Banking, Industry-Specific, and all Economic Regulation. The statistically significant findings can be summarized as follows[6]:

- We found marginally statistically significant evidence that Finance and Banking regulatory agency budgets Granger cause total employment (p-value of 0.056).
- We found statistically significant evidence that Industry-Specific regulatory agency budgets Granger cause total GDP (p-value of 0.007), as well as total employment (p-value of 0.044).
- We found statistically significant evidence that all economic regulatory agency budgets Granger cause total GDP (p-value of 0.014), as well as total employment (p-value of 0.016).

For these three measures we also constructed IRFs but we found results similar to the IRFs reported for the baseline analysis using the total regulators' budget. Figures 4, 5, and 6 below depict these results. We only found a marginal indication of significance in the IRFs using All Economic Regulation. Given the number of tests performed here, we should expect the occasional significance even when the null is true. Finding just one marginally significant result leads us to conclude that the overall evidence does not support the case for a causal relationship between the regulators' budget and the US macroeconomy.

[6] Additionally we found statistically significant evidence of Granger causality between the macroeconomic indicators in a number of cases. We also found evidence that some of the regulators' budget measures may be Granger caused by the macroeconomic indicators. However, these results are not the focus of our study. We concentrate only on the impact of changes in the regulators' budget on the macroeconomic indicators.

Figure 4. IRFs Using Finance and Banking Regulators' Budget Measure

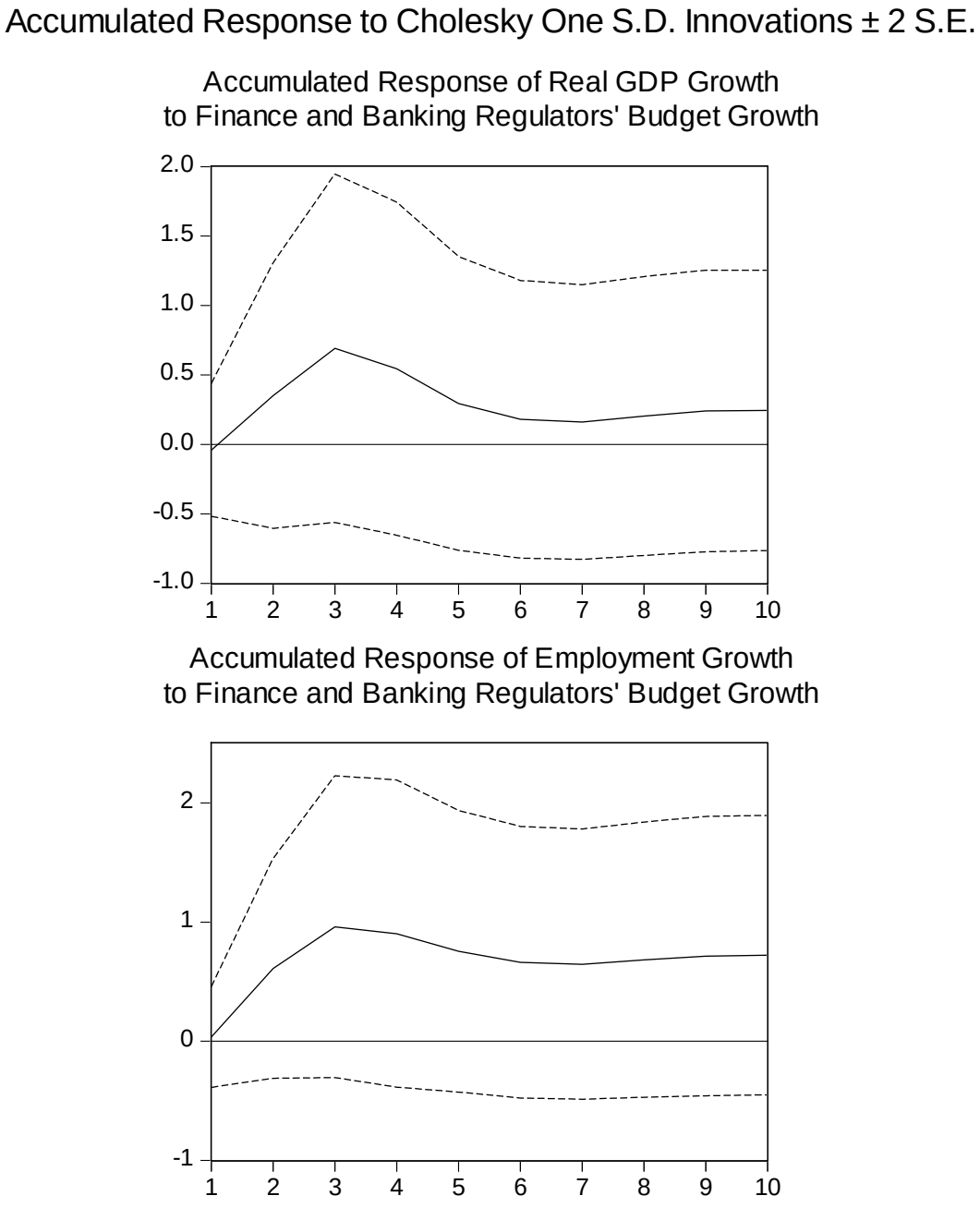


Figure 5. IRFs Using Industry-Specific Regulators' Budget Measure

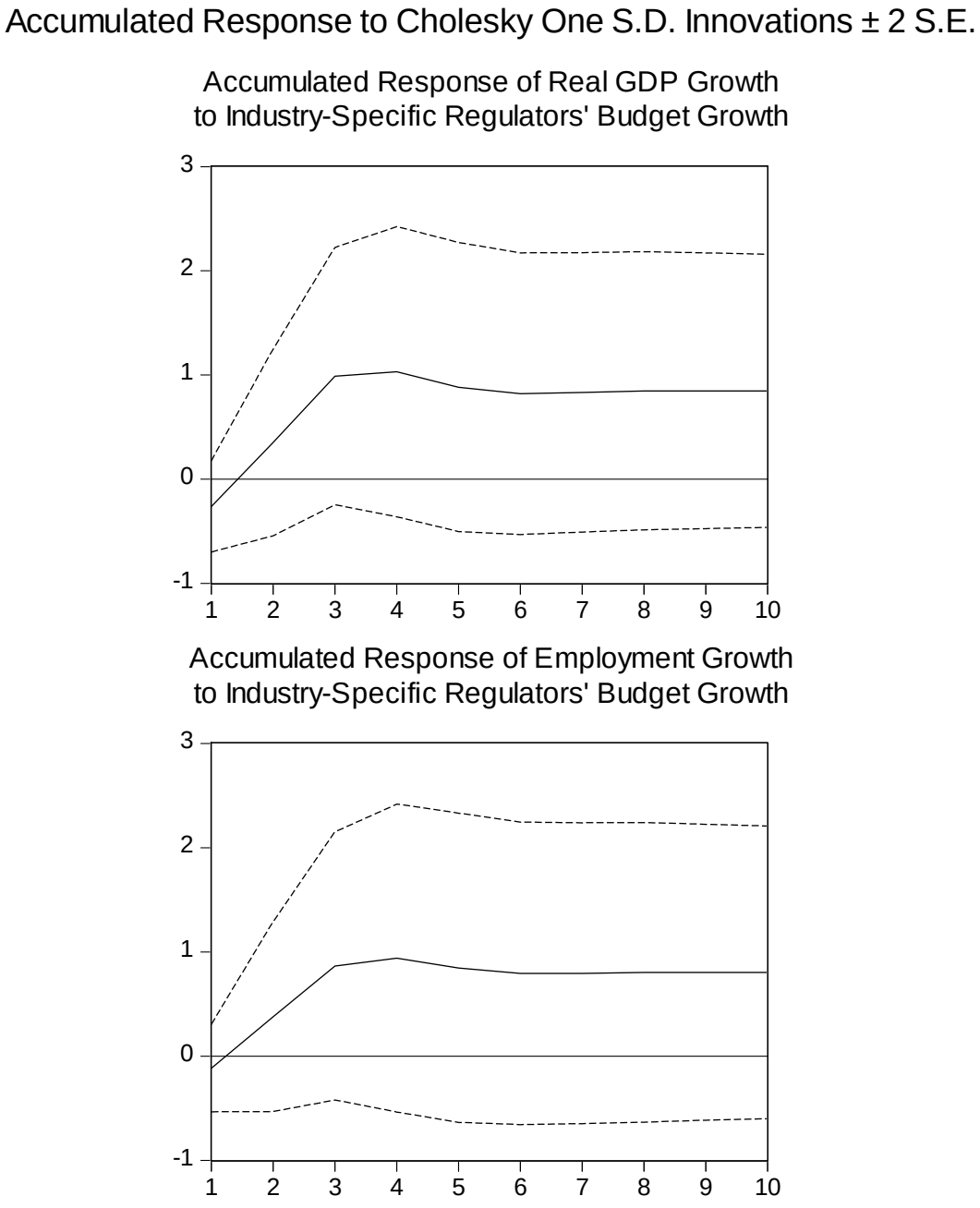
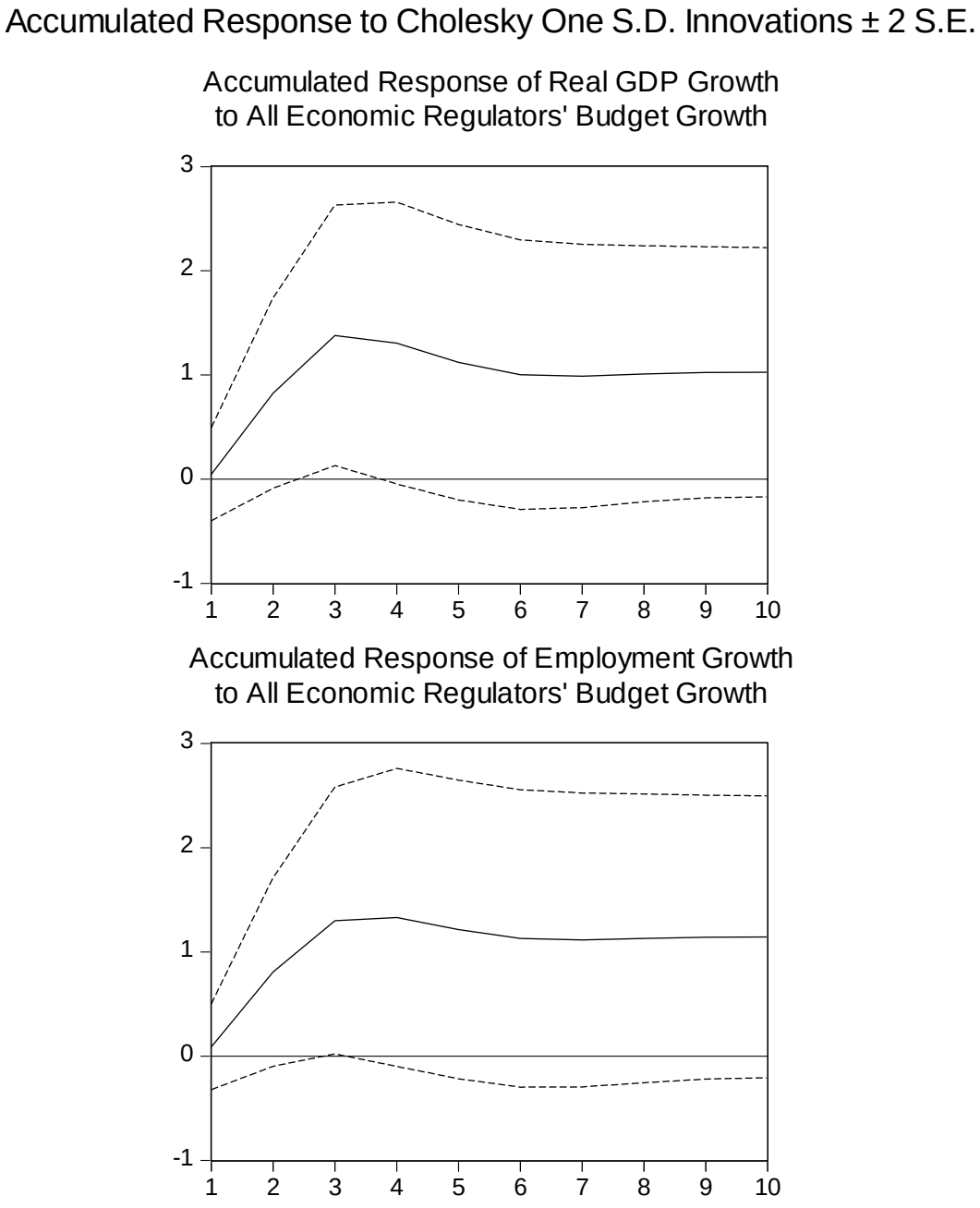


Figure 6. IRFs Using All Economic Regulation Regulators' Budget



V. Sensitivity Analysis

A case can be made that regulatory agency spending might affect the private sector differently than it does the economy as a whole. To explore this argument further, we also perform the same analysis as described above a second time using private sector GDP and private sector employment in place of total GDP and total nonfarm employment as our macroeconomic indicators.[7] Our results using the private sector macroeconomic indicators closely resemble those using the total values. For nearly all measures of the regulators' budget, we again find no evidence of Granger causality. We also find that the IRFs for total regulators' budget suggest no evidence of a causal relationship running from regulators' budget to either of our total macroeconomic indicators, as shown in Figure 7.

[7] To construct the private US real GDP data we took the nominal US GDP data (measured in annual billions of dollars and from the BEA, Series ID: GDPA) and subtracted nominal government current expenditures (measured in annual average billions of dollars and from the BEA, Series ID: GEXPND) to create a nominal private GDP series. We then deflated this series by the GDP implicit price deflator (also from the BEA, Series ID: GDPDEF). The private employment data are annual (end of year) total private industries employment in thousands of persons from the U.S. Department of Labor: Bureau of Labor Statistics, Series ID: USPRIV.

Figure 7. IRFs Using Total Regulators' Budget, Real Private GDP, and Private Employment

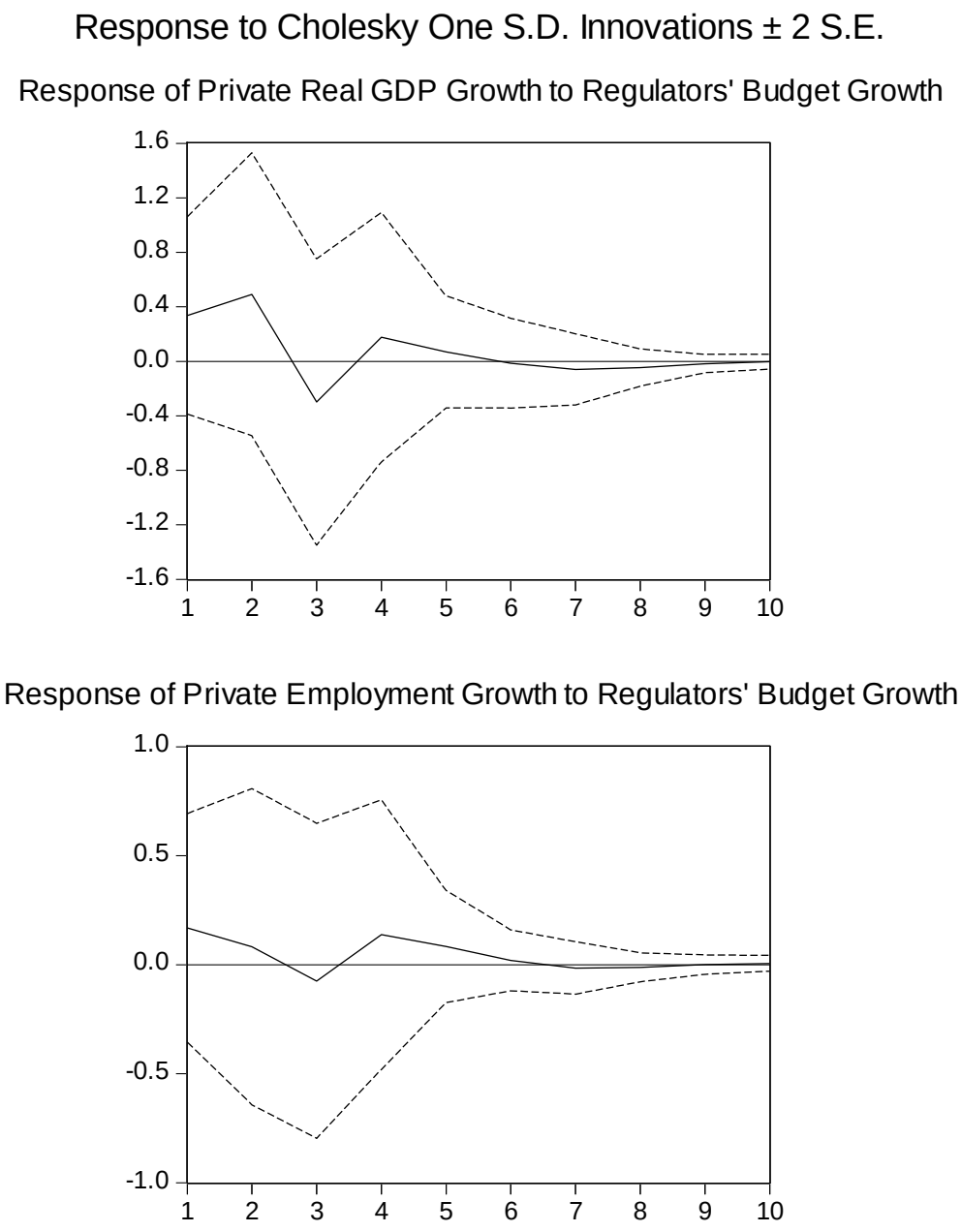


Table 4. Granger Causality Tests for the Private Sector Macroeconomic Indicators

Regulators' Budget Measures	P-Value Private GDP Granger Causality Test	P-Value Private Employment Granger Causality Test
Regulators' Budget Total	0.627	0.951
Regulators' Budget (excluding TSA)	0.797	0.984
Regulators' Budget (excluding all Homeland Security)	0.621	0.856
Consumer Safety and Health	0.807	0.846
Homeland Security	0.666	0.974
Transportation	0.969	0.821
Workplace	0.889	0.787
Environment	0.616	0.708
Energy	0.814	0.450
Finance and Banking	0.162	0.066*
Industry-Specific	0.079*	0.072*
General Business	0.685	0.922
All Social Regulation	0.901	0.822
All Economic Regulation	0.030**	0.025**

*significant at the 10% level, **significant at the 5% level, ***significant at the 1% level.

For the subcategories we again found three cases of statistical significance that were the same three measures discussed above: regulatory agency spending for Finance and Banking, Industry-Specific, and all Economic Regulation. The statistically significant findings can be summarized as follows:

- We found marginally statistically significant evidence that Finance and Banking regulatory agency budgets Granger cause private sector employment (p-value of 0.066).
- We found marginally statistically significant evidence that private GDP (p-value of 0.079) and private employment (p-value of 0.072) are Granger caused by Industry-Specific regulatory agency budgets.

- We also found statistically significant evidence that private GDP (p-value of 0.030) and private employment (p-value of 0.025) are Granger caused by economic regulatory agency budgets.

The IRFs indicated no significance for any of the variables (see Figures 8, 9, and 10).

Figure 8. IRFs Using Finance and Banking Regulators' Budget Measure, Real Private GDP, and Private Employment

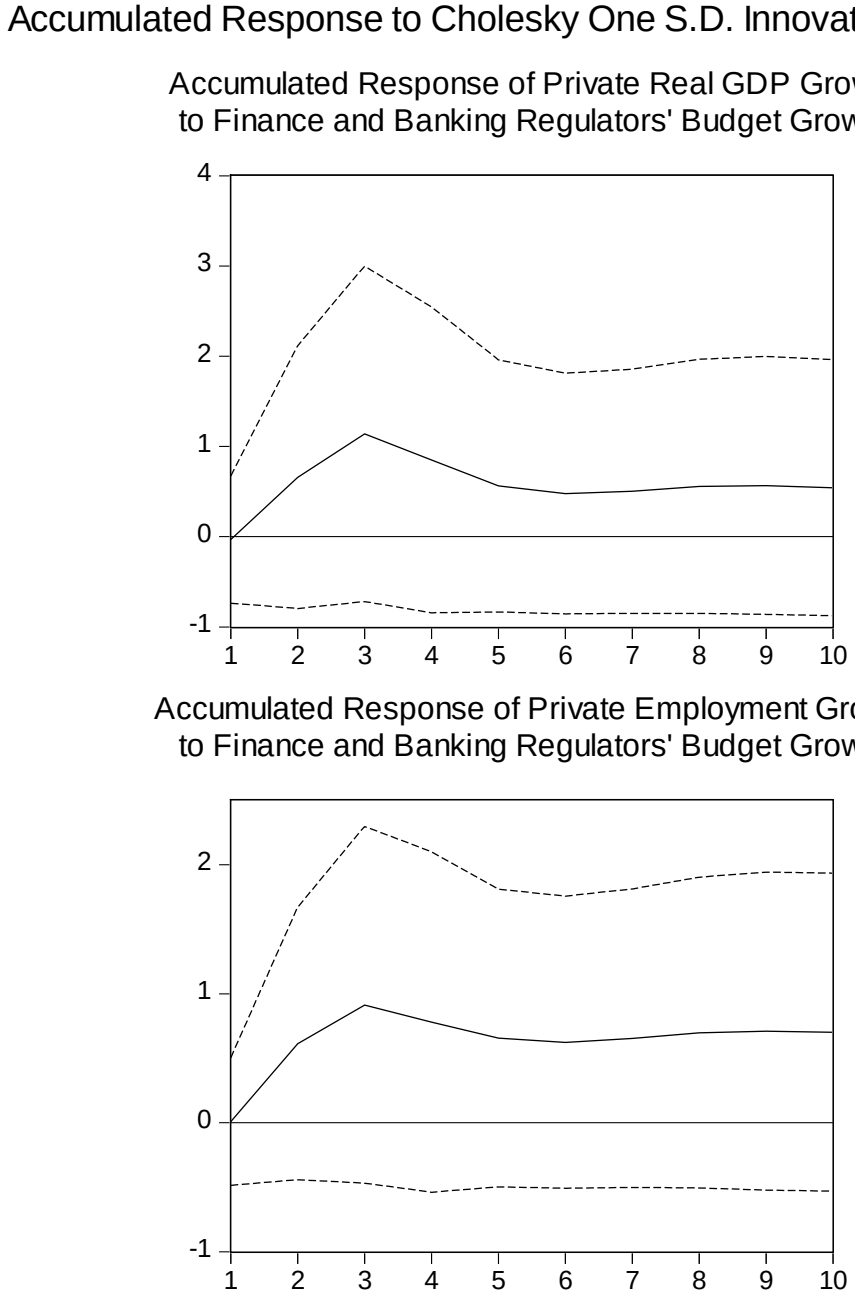


Figure 9. IRFs Using Industry-Specific Regulators' Budget Measure, Real Private GDP, and Private Employment

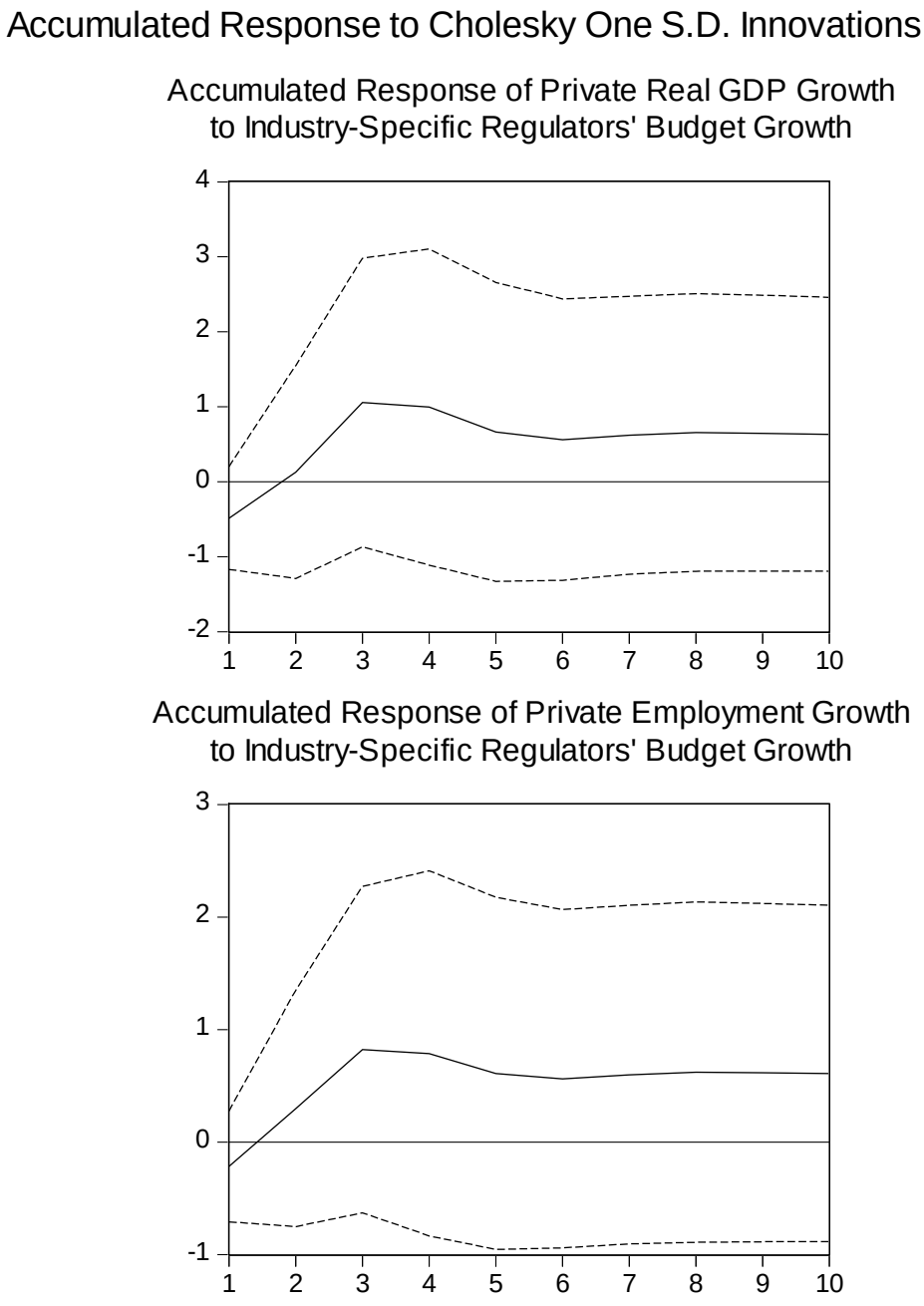
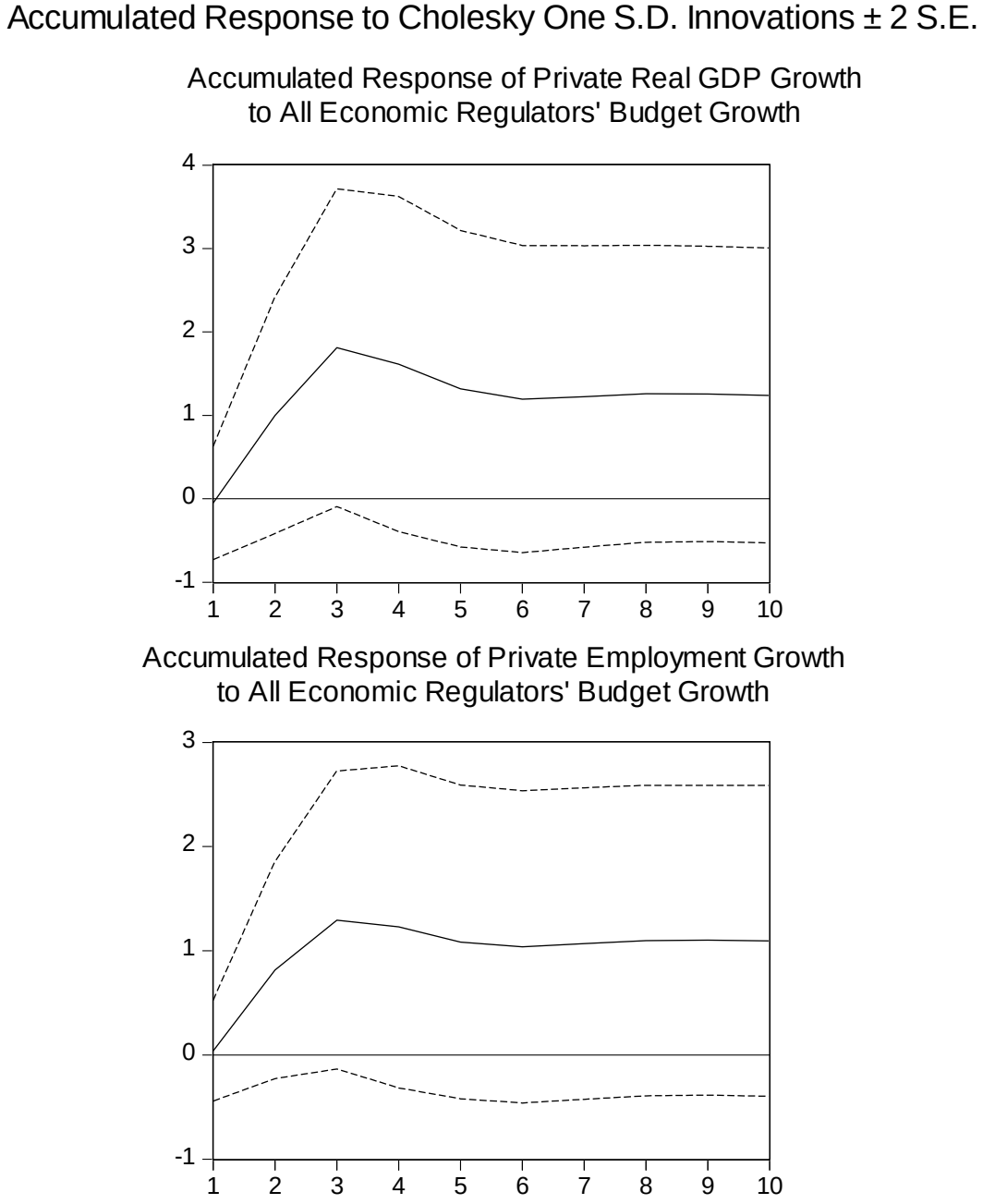


Figure 10. IRFs Using All Economic Regulation Regulators' Budget Measure, Real Private GDP, and Private Employment



VI. A Similar Methodology with Very Different Results

As mentioned earlier, a recent empirical study by Beard et al. (2011) used a similar methodology to ours but arrived at very different results. Their analysis identified a statistically

significant, negative relationship, very large in magnitude, between the on-budget costs of regulation and both private sector GDP and private sector jobs – results that were recently cited in an official congressional report on the Regulatory Flexibility Improvements Act (U.S. House of Representatives, 2011). We replicated the authors' study to better understand how they obtained these findings, and in doing so, discovered their results are sensitive to changes in how the variables and model are specified. After transforming their selected data variables several times, the authors eventually use a Generalized Impulse Response Function (GIRF) (method discussed further in the next section) to simulate a shock to the Regulators' Budget and observe how private-sector GDP per capita and private-sector jobs respond. To perform this simulation, the authors increase the Regulators' Budget by 1% (in dollar units). After doing so, they adjust the values for the g(t) variable - the Regulators' Budget *as a share of private GDP* - while at the same time holding the denominator (private sector GDP) constant. When they replace these new values for g(t) in the GIRF, the private sector GDP variable (y(t)) and jobs variable (l(t)) respond as the authors describe. They follow the same steps to simulate a regulatory shock of 5%, 10% and 16% to generate the core findings of their study.

The important thing to note about this method is that it holds private sector GDP constant as the denominator of the g(t) variable, while at the same time allowing it to respond as numerator of the y(t) variable. This compromises the integrity of the model. Our approach, on the other hand, does not have this same problem, as our model includes the regulators' budget as a standalone variable. The fact that our model arrives at such different results from those of the Phoenix Center study serves to further illustrate how unstable the statistical relationship between the regulators' budget and the macroeconomy likely is.

VII. Limitations of Vector Autoregression

Finally, it is important to recognize the limitations of vector autoregressive analysis in general and its applications in both our study and the Phoenix Center study in particular. Vector autoregressive models have been commonly used for macroeconomic analyses for decades. They can be extremely beneficial for describing data, and oftentimes for forecasting purposes too. However, as Stock & Watson (2001) state, "small VARs of two or three variables" – such as the one used in the Phoenix Center study – "are often unstable and thus poor predictors of the future" (p. 12). This technique also has important limitations with respect to data description:

> "…the standard methods of statistical inference (such as computing standard errors for impulse responses) may give misleading results if some of the variables are highly persistent. Another limitation is that, without modification, standard VARs miss nonlinearities, conditional heteroskedasticity, and drifts or breaks in parameters." (Stock & Watson 2011, p. 11)

Meanwhile, Stock & Watson are highly skeptical of applying vector autoregression to draw structural inferences due to concerns about omitted variable bias. When trying to infer causality from any regression model, controlling for all relevant variables is imperative. When one applies a "shock" to examine the impulse-response function, that shock largely reflects omitted variables, which, if correlated with the variables included in the model, will lead to biased estimates. Moreover, they explain how the validity of traditional structural VARs (using a Cholesky decomposition as our study does) rely on the researchers' assumptions, based in economic theory, about the proper ordering of the responses. They assert, "Structural VARs can capture rich dynamic properties of multiple time series, but their structural implications are only as sound as their identification schemes. While there are some examples of thoughtful treatments

of identification in VARs, far too often in the VAR literature the central issue of identification is handled by ignoring it." (p. 17) The *generalized* impulse response function (GIRF) was created as a way to get around this problem of having to assume the correct sequence of the responses in the model. However, the GIRF used by the Phoenix Center study is equivalent to the Cholesky ordering we reported in our study since both studies only examine what happens to the other variables when the regulators' budget is shocked.

The authors do acknowledge some of their study's limitations (see Beard et al. 2011, p. 18-19) that also apply to our study. They point out that their analysis does not attempt to quantify the *benefits* of regulation to society. They also make the observation that regulations are "heterogeneous" so that some will have higher benefit-cost ratios than others, but that their study looks only at the average impact of all regulations combined. In other words, not all regulations are "created equal." We have attempted to address this somewhat by dividing the measures into different categories and examining the individual response function, but even within one area of regulatory agency spending there can be substantial heterogeneity.

Finally, they do admit that their study utilizes a "rather simple closed model of the economy," and that other relevant variables associated with private sector GDP or private sector employment missing from the model may cause omitted variable bias if they are correlated with the regulators' budget variable. The authors therefore claim of their findings, "our estimates should be viewed as a benchmark and perhaps preliminary. Further research on the important topic of government spending and size of the regulatory budget is, as always, recommended." Our attempt at further study suggests that based on most measures there is no evidence of a causal relationship between changes in regulators' budget and macroeconomic performance. In fact most of our point estimates suggest, if anything, a positive relationship between changes in

the on-budget costs of federal regulation and macroeconomic outcomes. Perhaps this can be explained by the notion that, up to a point, increasing the size of government may tend to increase GDP, but that the relationship reverses after a certain threshold. If our model allowed for this possibility of a non-linear relationship, the signs of the coefficients might change. However, in the context of our study, we must emphasize that we found basically no evidence that the regulators' budget has anything other than a zero effect on GDP and employment.

VIII. Conclusion & Policy Considerations

Regulations have significant economic and social costs and benefits, as well as important distributional effects. The recent increase in awareness of this reality among citizens and politicians has the potential to affect positive changes to the U.S. regulatory system, making it smarter, more transparent, and more accountable. In order to keep the conversation constructive, it is important that the evidence drawn upon in the public discourse about regulation and reform be meaningful and well-informed. Our study here conveys how challenging it is to obtain reliable, robust estimates of the impact that the regulators' budget (a proxy for regulation) has on economic growth and job creation. Beard et al. (2011) predict that reducing the regulators' budget by a small percentage would have a dramatic, positive impact on private GDP and private employment based on their findings. Yet, according to our own study, using similar methods, we cannot draw any definitive conclusions about the direction or size of the impact of the regulators' budget on economic output and employment (whether we consider the total economy or strictly the private sector) because statistically-speaking, our results reveal no impact.

While the macroeconomic effects of regulation are uncertain, regulation continues to be an important factor to consider in our current economic climate. The distribution of regulations'

effects at a microeconomic level has important implications. Legislation such as the Regulatory Flexibility Act is guided by the widely accepted view that regulatory compliance costs fall disproportionately on small businesses, making it harder for them to compete with large corporations equipped with greater resources and the benefits of economies of scale. This helps explain the small business community's high level of concern about government regulation compliance, as revealed in the recent Gallup poll cited earlier in this paper. Meanwhile, as state and local governments across the country battle budgetary crises, they too must comply with onerous federal requirements. Reducing the regulatory burden on these parties can help the public sector direct scarce resources towards higher priority endeavors.

When we discuss prospects for regulatory reform, the conversation should not be centered on how regulations destroy jobs. While that may be a politically convenient way to frame the discussion, our study indicates that the evidence simply does not provide much support for that argument, as least on a macroeconomic scale. As the aforementioned Washington Post article points out, regulations oftentimes create new jobs. Whether those jobs are as productive as others is another subject for debate, but regardless, the use of "jobs" as a measure of regulatory burden is simply misguided.

Rather, it would be far more constructive to focus on how regulations – and the agencies issuing them – can be held more accountable. Government funding for discretionary programs is subject to approval annually during the appropriations process. However, once a regulation is issued, it remains on the books indefinitely. As a result, regulations are not subject to the rigorous performance management and evaluation systems that direct government spending programs are, and they are also more likely to stay alive after becoming obsolete. There is no

systematic process in place to monitor regulations to ensure they are still relevant and achieving their intended goals efficiently and effectively.

Greater use of sunset provisions, mandatory retrospective analyses, and other mechanisms built into the regulatory process have the potential to change this reality by better ensuring that regulations serve the best interest of the American people, particularly those most vulnerable parts of the population. Indeed, some of the regulatory reforms that have been introduced on the Hill are guided by these very ideas and offer promising methods to increase the transparency and accountability of the U.S. regulatory system. Talk of regulations as "job-killers" may lend itself to catchy campaign slogans and memorable sound bites. But reasonable, responsible dialogue about the true policy issues surrounding government regulation and potential reforms to address them offers the chance for real beneficial change for the American people.

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