Statement before the House Ways and Means Committee
Reaching America's Potential: Delivering Growth and Opportunity for All Americans

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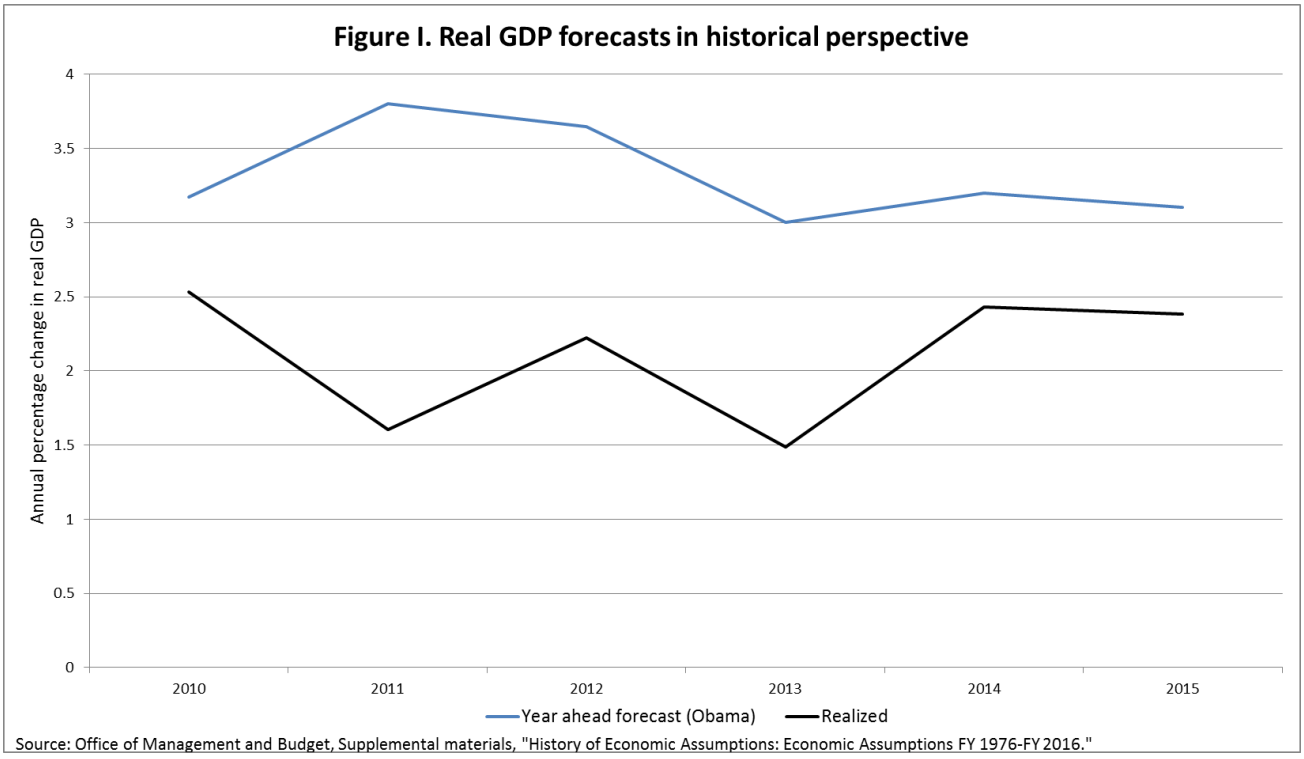
I. Introduction

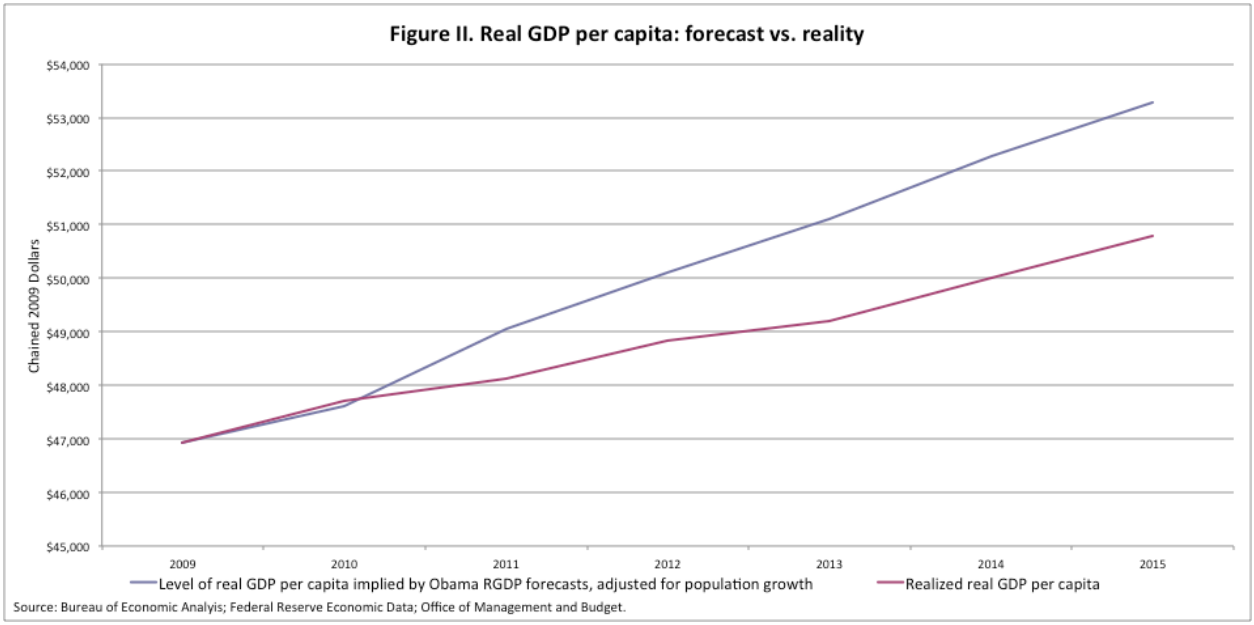
If any proposition generates a bipartisan consensus, perhaps it is that economic growth in the United States has been too low. We were reminded of this just last week when we learned that GDP increased at only 0.7 percent in 2015:Q4. As we review our economic experience, it is natural to ask whether such slow growth should be expected, and whether the disappointment might be related to policy actions that may have held the recovery back.

One simple way to evaluate this is to look at how real GDP performed, and to compare that to the outlook presented by professional forecasters. As can be seen in Figure 1, by this metric, the slow growth can be viewed as something of a surprise. The chart shows how real GDP growth has performed relative to the Obama Administration forecasts of real GDP growth generated during the year immediately preceding that year. (For instance, the real GDP annual growth rate forecast for the fiscal year 2010 was formed in February-May 2009, and was released with the budget for the fiscal year 2010. The value of the 2010 year-ahead forecast in Figure I is that forecast.) The pattern of underperformance is unambiguous.



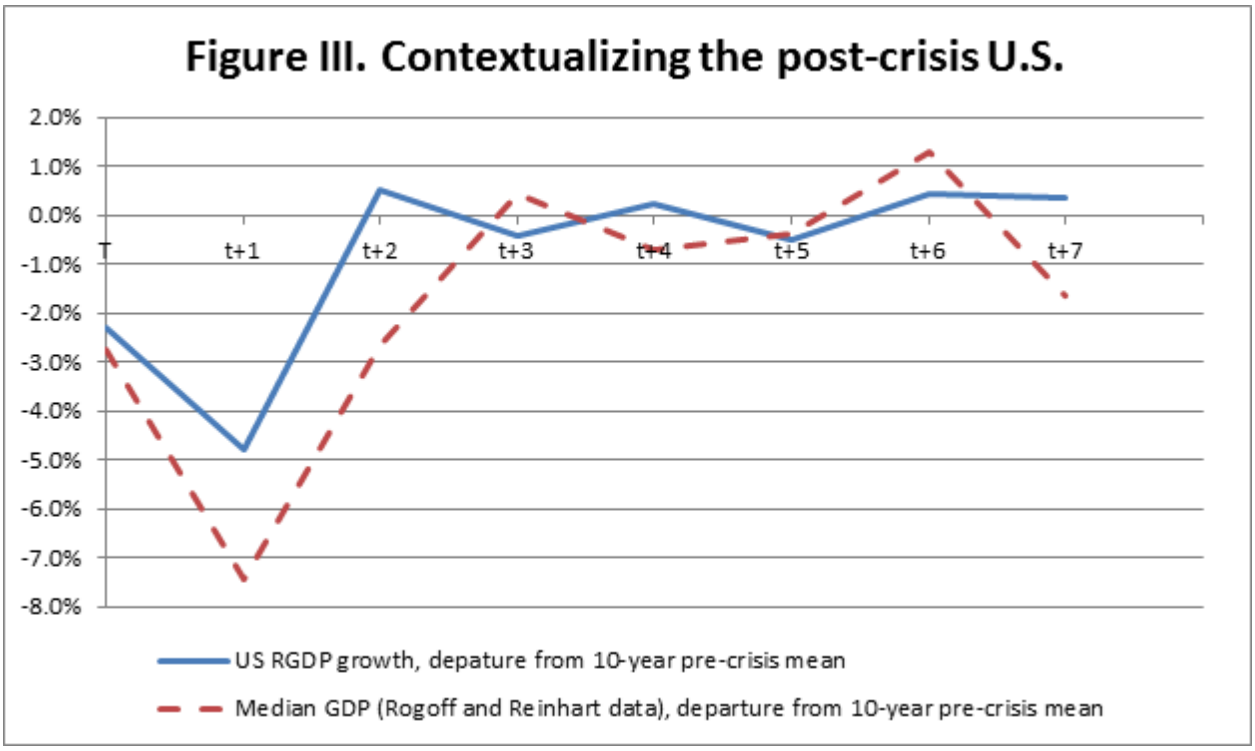
Another way of thinking about the situation is to assess how much higher real GDP per capita would be today, if real GDP per capita increased at the Obama Administration's year-ahead forecast of real GDP growth in every year since President Obama took office, adjusted for population growth. The first budget for which the Obama Administration provided growth forecasts was the fiscal year 2010 budget. If real GDP per capita, which was $46,930 in 2009, then increased at the year-ahead real GDP growth forecast in every year between 2010 and 2015, after adjusting for realized population growth, real per capita GDP would have been $53,293 in 2015. But the realized level of real per capita in GDP in 2015 was in fact only $50,797. As

Figure II shows, this "forecast-implied" level of real GDP per capita in 2015 is $2,496 (4.9%) higher than its realized value. To some extent, this captures well the stakes for economic policy.



I should add that such underperformance is not a unique characteristic of administration forecasts, and there is no reason to expect that the errors are in any way attributable to partisanship. Many private and independent forecasters made similar mistakes.

However, that does not mean that the slow growth should have been unexpected. Relative to other countries that experienced a financial crisis of their own—based on data that comes from Carmen Reinhart and Kenneth Rogoff, two Harvard experts on financial crises—the U.S. experience has been fairly typical. That is, as Figure III indicates, the U.S. growth path has been in line with what the history of recoveries from financial crisis would suggest it would be. For the most part, economies that have undergone a financial crisis go back to the "normal" they experienced before the crisis after an extended period of slow growth. We should be, if history is a guide, on track to return to normal. And Figure III suggests that we are.



To be sure, there are many other factors influencing growth besides the financial crisis. Regulatory and tax policy, in particular, will likely have to be adjusted if we are to experience growth on par with what the other countries that have fully recovered from a financial crisis have enjoyed. The good news is that the latest economic literature suggests that there is ample room for optimism if this committee pursues significant tax reform.

II. The latest evidence on taxes and growth

For many years, the economic literature has been fairly divided regarding evidence that marginal tax rates have a significant impact on economic growth. But some areas of the literature remain less divided than others.

The literature suggesting that current corporate tax policy in the U.S. is quite harmful, and that lowering corporate taxes would likely increase growth, is one that is less divided. That is, the literature on the benefits that stand to be gained from lowering U.S. corporate taxes is less controversial than many corners of the literature on taxation. As I once told the Joint Economic Committee, for instance, there is substantial evidence that a "Laffer curve" exists for corporate taxation: the amount of economic activity generated by cuts to corporate taxes is so high that even if the rate of taxation decreased, government revenues from the corporate tax would increase, as economic activity came to the U.S. and became part of the U.S. tax base (Hassett 2012).

For the income tax, however, the estimates have been more mixed. There has, though, been a recent explosion in academic work that relies on a significant methodological innovation to better estimate tax effects. And this literature has strong implications both for understanding why growth in the U.S. has disappointed, and for understanding the likely growth path if marginal tax rates were reduced in the future.

Though this literature may seem technical, the innovation that sparked the recent explosion of academic work is quite easy to understand. The evidence it has generated, in fact, is so striking that it is essential that U.S. policymakers begin to incorporate it into their thinking. The basic problem for economists, the problem addressed by this innovation, is that policy tends to be set by policymakers with an eye toward how the economy is doing. For instance, if the economy is weak, a bipartisan consensus might emerge to cut taxes. But when a recession is out of mind and the economy is booming, it might be easier for policymakers to agree to raise taxes. This tendency would create a world where taxes might often be lower in bad economies not because taxes caused harm, but because tax cuts were introduced when stimulus was most needed. Economists can really only estimate the impact of something as complex as a tax cut if it were to happen exogenously—that is, if it were to happen as if by chance, without regard to the current state of the economy.

The innovation in the literature is to use narrative analysis to separate tax changes into those that were motivated by a weak economy, and those that were not, and then to estimate the impact of taxes using the latter, which are more likely to be exogenous and therefore informative as to the effects of tax changes. The literature is rapidly growing, and for brevity I will focus only on those papers in the *American Economic Review*, perhaps the leading economic journal.

The first study, the "inventor" of this methodological approach in some sense, was a 2010 study by David and Christine Romer of UC Berkeley (Romer and Romer 2010). They analyzed data from the U.S. and found that an income tax increase that raises revenues by 1% of GDP lowers output by 3% over three years. Karl Mertens of Cornell and Morten O. Ravn of University College London deployed a slightly different approach in a 2013 study also focused on the experience of the United States (Mertens and Ravn 2013). But, even using a different approach, they estimated effects similar in magnitude to those in the original Romer and Romer (2010) study. Specifically, Mertens and Ravn (2013) found that a change in the personal tax rate that lowers tax revenues by 1% of GDP increases output by up to 2.5%. The similarity of this estimate to that in Romer and Romer (2010) should give one confidence in the robustness of their estimates. This approach, rigorous and well-grounded, has since been used to analyze the experiences of other countries. James Cloyne of the Bank of England turned to the experience of the United Kingdom, which serves as a great case study because it has many clearly-identifiable episodes of tax reforms (Cloyne 2013). The estimate in Cloyne (2013) of the effect of tax cuts on output is, again, similar to the estimates in Romer and Romer (2010): a 1 percent cut in taxes increases GDP by up to 2.5% over three years. Others have applied the approach to other countries, and found similarly striking results.

A simple example can illustrate the relevance of these findings for understanding the recent U.S. economic experience. The year-ahead forecasts for GDP growth by the Obama Administration erred on the optimistic side for 2013 and 2014 by about 1 percent per year. If the Obama Administration had taken the results from the previous paragraph seriously, and factored into their forecast the negative effects of the increase in the top marginal income tax rate implied by the literature, then they would have reduced their forecast significantly. In other words, the forecast error would have been negligible if they had simply accounted for the impact of the tax increase using this latest evidence.

III. Theoretical underpinnings

One argument levied against the existence of these effects, even though they are now well-documented, is that it is difficult to reconcile such large effects of income tax changes with the idea that workers that have a job tend to work about the same amount each year. If they do not work much harder when tax rates are cut, the argument goes, then how can we possibly get much GDP out of tax cuts?

This argument falters once one factors in the results of the latest research. The key breakthrough came from Keane and Rogerson (2011). Fortunately, the results are once again quite intuitive. The idea is that the return to working is quite different depending on how old you are. If you are very young, then if you work an extra hour, you get paid an hour's wage, but you also gain experience that increases your wages for the rest of your career. For an older person like myself, if I work an extra hour today it probably does not influence my future wage very much. I personally feel comfortable putting it in the official record that my own human capital as I approach my mid-fifties feels like it is declining.

Accordingly, one might expect that a tax increase would not reduce the hours worked of younger workers very much, since the younger workers would factor in not only the lost hourly wage but the lost value of the extra experience. By contrast, one might expect to observe a big impact on the labor supply of older workers. And the output effects for these older workers might be large, since they have accumulated all of that experience. The analyses that argue that workers don't respond much to tax rates have not accounted for this difference, and Keane and Rogerson (2012) show that fairly large labor supply responses to taxes are visible once one accounts for this affect.

In collaboration with the Brigham Young University Macroeconomics and Computational Laboratory and professors from BYU and Montana State University at the Open Source Policy Center (OSPC) at AEI, we have developed a model that allowed us to run a simulation that is consistent with the empirical findings of the last section. DeBacker et. al. (2015) deploys the methodology pioneered by the OSPC and its collaborators, which incorporates bridges between a microsimulation and a general equilibrium over-lapping generations (OLG) model to generate dynamic estimates of the effect of tax policy.[1] Modeling the effects of an across-the-board 10% statutory cut to marginal tax rates, they estimate that such a reform would result in a contemporaneous GDP increase of 1.64%. Though the growth rate effects diminish as time goes on, it remains significant.

These estimates rely on larger labor supply responses as discussed, and also suggest that the recent tax hike would have caused significant economic harm. According to that framework, younger individuals are less responsive to changes in marginal tax rates because human capital accumulation increases are a larger share of the marginal benefit of working an extra hour. This suggests that the labor force participation of younger individuals would have dropped much less than the labor force participation of older individuals in response to the recent marginal tax rate increases. If one looks at the changes in labor force participation between December 2012, the last month before rate hikes took effect, and October 2015, the data reveal precisely the pattern

[1] The microsimulation is based on a rich set of realistic demographic characteristics, constructed by matching data from the IRS Public Use Files to data from the Current Population Survey.

across the age distribution that one would expect to observe under this view. Whereas labor force participation decreased by over 2% in the 55+ age group during this time period, it decreased by less than .5% in the 35 to 44 year old age group. In the 45 to 54 category, the decrease is just north of .5%.

Thus, evidence of the positive potential effects of tax reform appears to be robust in the data. The effects are consistent with results drawn from cutting edge models of the economy when we account for the different responses of workers at different stages of the life cycle. Recent forecasts of the economy by the administration have missed by about the amount one would expect if they underestimated the effects of recent tax hikes, and the labor force participation data have precisely the age pattern our discussion predicts.

IV. Conclusion and looking ahead

While literatures evolve, and there are always uncertainties, the level of confidence that members of this committee should have about the growth possibilities of tax reform is very high indeed. I would like to close by mentioning collaborative work we have been engaging in at AEI that we hope will help the members of this committee in its deliberations. AEI's Open Source Policy Center has developed a fully transparent suite of economic models for studying taxes. You shouldn't have to wait for weeks or months or years to learn about the effects of your proposals; you should be able to learn about the effects of your tax reform ideas as quickly as you think of them. Our new application allows anyone with a web browser to analyze individual and payroll tax changes under a variety of different growth and behavioral assumptions and to then receive a score, a dynamic score, and distributional tables at your desk. A wide range of assumptions concerning the impact of dynamic effects can, of course, be explored. As we look ahead to all of the positive possibilities of tax reform, our hope is that access to real time analysis of the ideas of every member of this committee will help stimulate debate and progress.

References

Cloyne, James. "Discretionary tax changes and the macroeconomy: new narrative evidence from the United Kingdom." *The American Economic Review* 103.4 (2013): 1507-1528.

DeBacker, Jason, Richard W. Evans, and Kerk L. Phillips. "Macroeconomic effects of a 10% cut in statutory marginal income tax rates on ordinary income." AEI Working Paper (2015): 2015-15.

Hassett, Kevin. "How the Taxation of Capital Affects Growth and Employment." Testimony before the Joint Economic Committee, April 17 2012.

Keane, Michael, and Richard Rogerson. "Micro and macro labor supply elasticities: A reassessment of conventional wisdom." *Journal of Economic Literature* (2012): 464-476.

Mertens, Karel, and Morten O. Ravn. "The dynamic effects of personal and corporate income tax changes in the United States." *The American Economic Review* 103.4 (2013): 1212-1247.

Romer, Christina D., and David H. Romer. "The Macroeconomic Effects of Tax Changes: Estimates Based on a New Measure of Fiscal Shocks." *The American Economic Review* (2010): 763-801.