Good morning, Chairman Murray, Ranking Member Sessions, and members of the committee. Thank you for the chance to discuss the effect of tax increases and spending cuts on economic growth. I appreciate the opportunity to testify today.

Last week the Congressional Budget Office released a revision of its budget outlook for FY 2013. According to CBO, our short-term outlook seems to be improving, at least on a superficial level, with this year’s deficit now expected to be $642 billion. That is $200 billion lower than projected in February, which would make it the smallest deficit since 2008.

There are many reasons for continued pessimism, however. At 76 percent, the debt-to-GDP ratio is still much higher than the 2008 level of 36 percent. Unfortunately, even under the new projections the debt-to-GDP ratio will still be around 74 percent at the end of the decade. And that’s assuming Congress doesn’t overturn sequestration and all of CBO’s assumptions hold true. In CBO’s alternative scenario, debt will be above 83 percent of GDP by the end of the decade.

The explosion of spending from programs such as Social Security, Medicare, and Medicaid will trigger even higher levels of debt in the years outside the 10-year budget window. Unfortunately, high debt levels are problematic. As CBO explains,

Such high and rising debt later in the coming decade would have serious negative consequences: When interest rates return to higher (more typical) levels, federal spending on interest payments would increase substantially. Moreover, because federal borrowing reduces national saving, over time the capital stock would be smaller and total wages would be lower than they would be if the debt was reduced. In addition, lawmakers

would have less flexibility than they would have if debt levels were lower to use tax and spending policy to respond to unexpected challenges. Finally, a large debt increases the risk of a fiscal crisis, during which investors would lose so much confidence in the government’s ability to manage its budget that the government would be unable to borrow at affordable rates.

In other words, a brief dip in the deficit is no reason to be complacent. The federal government should continue to work on addressing its long-term debt problem. However, in the pursuit of debt reduction, it is important to remember that the type of fiscal adjustment that we implement is more important than its size.

In theory, debt reduction can be achieved by cutting spending or by raising taxes, or by adopting a mix of spending cuts and tax increases.

When anti-austerity policymakers or critics talk about austerity without even alluding to this distinction in how deficit reduction is achieved, they do a disservice to the clarity of the issues at hand, since different types of austerity measures produce very different results.²

This testimony is based on a paper I wrote with Harvard University economist Alberto Alesina, called “Austerity: The Relative Effects of Tax Increases versus Spending Cuts.” As we explain in detail in that paper, the consensus in the academic literature is that the composition of fiscal adjustment is a key factor in achieving successful and lasting reductions in the debt-to-GDP ratio. The general consensus is that fiscal adjustment packages comprising mostly spending cuts are more likely to lead to lasting debt reduction than those composed of tax increases.

There is still significant debate about the short-term economic impact of fiscal adjustments, but some important lessons have emerged. First, fiscal adjustments and economic growth are not incompatible. Second, while fiscal adjustments may not always trigger immediate economic growth, spending-based adjustments are much less costly in terms of output than tax-based ones. In fact, when governments try to reduce their debt by raising taxes, the policy is more likely to result in deep and pronounced recessions, possibly making the fiscal adjustment counterproductive. Finally, there is some evidence that expansionary fiscal adjustments are more likely to occur when they are accompanied by growth-oriented policies, such as policies liberalizing both labor regulations and markets for goods and services, in addition to a monetary policy that keeps interest rates low.

These findings are key to designing proper policies for the United States. They also suggest that the budget plans proposed by both President Obama and Chairman Murray are unlikely to reduce the country’s debt and may also slow economic growth if implemented as proposed.

1. HOW TO REDUCE DEBT-TO-GDP RATIOS

The United States is not the first nation to struggle with a worrisomely high debt-to-GDP ratio. The evidence suggests that the types of fiscal adjustment packages that are most likely to reduce debt are those that are heavily weighted toward spending reductions, not tax increases.³


3. Matt Mitchell of the Mercatus Center at George Mason University has reviewed the academic literature on this issue, finding that, of the 22 papers published that looked at this question, all of them find that the most promising way to shrink the debt is to not increase taxes and to restrain spending so that it shrinks relative to economic output. See Matt Mitchell, “Does UK Double-Dip Prove That Austerity Doesn’t Work?” Neighborhood Effects (blog), Mercatus Center at George Mason University, April 26, 2012, http://neighborhoodeffects.mercatus.org/2012/04/26/does-uk-double-dip-prove-that-austerity-doesnt-work/. See also Alesina and Ardagna, "Design of Fiscal Adjustments";
One of the difficulties of studying the impact of large fiscal adjustments on both debt and economic growth involves the definition and identification of successful and expansionary episodes. For a long time, the identification criteria were based on observed outcomes: a large fiscal adjustment was one where the cyclically adjusted primary-deficit-over-GDP ratio fell by a certain amount (normally at least 1.5 percent of GDP). Following the approach pioneered by University of California, Berkeley, economists Christina Romer and David Romer, IMF economists suggested a different way to identify large exogenous fiscal adjustments: a large fiscal adjustment is an explicit attempt by the government to reduce the debt aggressively and it is unrelated to the economic cycle. This new approach was meant to guarantee the “exogeneity” of the fiscal adjustments.

The authors also suggest that a difference in the way fiscal adjustments are measured would change the overall results. However, the difference in the way fiscal adjustments are defined does not change the overall result. A 2012 study by Alberto Alesina and Goldman Sachs's economist Silvia Ardagna shows that spending-based adjustments are more likely to reduce the debt-to-GDP ratio, regardless of whether fiscal adjustments are defined in terms of improvements in the cyclically adjusted primary budget deficit or in terms of premeditated policy changes designed to improve a country's fiscal outlook. Similar results with more advanced technical tools using the IMF episodes are also reached by Alberto Alesina and Bocconi University economists Carlo A. Favero and Francesco Giavazzi.

Other research has found that fiscal adjustments based mostly on the spending side are less likely to be reversed and, consequently, have led to more long-lasting reductions in debt-to-GDP ratios. Beyond showing whether spending-based adjustments or revenue-based ones are more effective at reducing debt, the literature has also looked at which components of expenditures and revenue are more important. The results on these points are not as clear-cut, partly due to the wide differences in countries’ tax and spending systems. With that caveat in mind, successful fiscal adjustments are often rooted in reform of social programs and reductions to the size and pay of the government workforce rather than in other types of spending cuts. Results about which type of revenue increases contribute to successful fiscal adjustment are much less clear.

Also, while successfully reducing the debt-to-GDP ratio is possible, a majority of historical fiscal adjustment episodes fail to do so. Data from studies by Alesina and Ardagna and by Andrew Biggs and his

colleagues show that roughly 80 percent of the adjustments studied were failures. One explanation is that even (or especially) in a time of crisis, lawmakers are driven more by politics than by good public policy. Countries in fiscal trouble generally get there through years of catering to pro-spending constituencies, be they senior citizens or members of the military industrial complex, and their fiscal adjustments tend to make too many of the same mistakes. As a result, failed fiscal consolidations are more the rule than the exception.

2. FISCAL ADJUSTMENTS AND ECONOMIC GROWTH

While there is little debate over the fact that sound fiscal balance and restraints in government spending have a positive impact on GDP in the long run, the question of whether, in the short term, budget cuts shrink or expand GDP is far from settled. This is an especially important question for countries where government spending as a share of GDP is close to or above 50 percent. A few uncontroversial points have emerged, however, despite the differences in approaches and in the definitions of successful or expansionary episodes.

First, expansionary fiscal adjustments are not impossible. There is now a long trail of academic papers that have studied and documented the impact of fiscal adjustments on economic growth. The first in the series was by Francesco Giavazzi and Marco Pagano in 1990. It was followed by a large literature, which was reviewed in depth by Alesina and Ardagna in 2010. However, today the question is not whether expansionary fiscal adjustments are possible, but whether in the current circumstances it is possible to design fiscal adjustments with as little cost as possible to the economy, given that monetary conditions will provide little additional help. It is perfectly possible that fiscal adjustment today might be on average more costly than in the past, but this does not mean that the medicine is not necessary.

Second, while not all fiscal adjustments lead to economic expansion, spending-based adjustments are less recessionary than those achieved through tax increases. Moreover, when successful spending-based adjustments were not expansionary, they were associated with mild and short-lived recessions, while tax


13. Alesina and Ardagna’s 2012 paper gives a detailed look at recent controversies by performing a host of sensitivity tests, changing definitions, and exploring alternative approaches. They try to clarify the differences between the methodologies and empirical results. Their paper brings other variables that sometimes accompany fiscal adjustments into the discussion, expanding the analysis to include the effects of a vast set of policies that constitute the “package” accompanying the fiscal cuts. By considering many alternative definitions of fiscal adjustments, they are able to do robustness checks on their previous results. Alesina and Ardagna, “Design of Fiscal Adjustments.”


increases were unsuccessful at reducing the debt and associated with large recessions. These findings hold even when using the IMF definitions of fiscal adjustments.

In fact, these findings are consistent with IMF studies themselves. For instance, IMF economists Jaime Guajardo, Daniel Leigh, and Andrea Pescatori study 173 fiscal consolidations in rich countries and find that “nations that mostly raised taxes suffered about twice as much as nations that mostly cut spending.”

Third, successful and expansionary fiscal adjustments were those based mostly on spending cuts rather than tax increases. Also, these adjustments lasted slightly longer and were associated with higher growth during the adjustment. Using data from 21 Organisation for Economic Co-operation and Development countries from 1970 to 2010, Alesina and Ardagna find that successful fiscal adjustments on average reduced the debt-to-GDP ratio by 0.19 percentage points of GDP in a given year. GDP grew by 3.47 percentage points in total, which is 0.58 percentage points higher than the average growth of G7 countries. Successful adjustments lasted for three years on average.

Table 1. The 10 Largest Episodes of Successful Fiscal Adjustments

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>PERCENT CHANGE IN DEFICIT/GDP RATIO</th>
<th>PERIOD</th>
<th>DURATION (YEARS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>−15.1</td>
<td>1983–1986</td>
<td>4</td>
</tr>
<tr>
<td>UK</td>
<td>−11.1</td>
<td>1994–2000</td>
<td>7</td>
</tr>
<tr>
<td>Germany</td>
<td>−10.7</td>
<td>1984–1990</td>
<td>7</td>
</tr>
<tr>
<td>Belgium</td>
<td>−10.6</td>
<td>1996–2000</td>
<td>5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>−8.6</td>
<td>1993–1997</td>
<td>5</td>
</tr>
<tr>
<td>Canada</td>
<td>−8.1</td>
<td>1993–1997</td>
<td>5</td>
</tr>
<tr>
<td>Japan</td>
<td>−8.1</td>
<td>1979–1987</td>
<td>9</td>
</tr>
<tr>
<td>Ireland</td>
<td>−7.6</td>
<td>1986–1989</td>
<td>4</td>
</tr>
<tr>
<td>Norway</td>
<td>−7.4</td>
<td>1999–2000</td>
<td>1</td>
</tr>
</tbody>
</table>


22. Alesina and Ardagna’s data indicate that successful fiscal adjustment episodes comprised 72 percent in spending cuts and 28 percent in tax increases, resulting in an average spending reduction of 4.18 percentage points of GDP and a 1.64 percentage point tax increase. However, even using the IMF definition, the authors find that successful fiscal adjustment comprised 67 percent in spending cuts and 33 percent in tax increases, resulting in an average spending reduction of 3.89 percentage points of GDP and a 1.6 percentage point tax increase. Alesina and Ardagna, “Design of Fiscal Adjustments.”
How can we explain the fact that spending-based adjustments can result in lower output costs for the economy than tax-based ones, or in no output costs at all? IMF economists Prakash Kannan, Alasdair Scott, and Marco Terrones argue that this difference in outcomes is not a result of the composition of the fiscal adjustment packages, but rather a result of the business cycle having picked up because of other forms of government interventions, such as expansionary monetary policy. However, Alesina, Favero, and Giavazzi’s work shows that taking the business cycle and monetary policy into account does not change the main finding.

If the difference between tax-based and spending-based fiscal adjustments is not the result of the business cycle or of monetary policy, what explains it? The standard explanation is that lower spending reduces the expectation of higher taxes in the future, with positive effects on consumers and investors. In particular, there might be a boost in the confidence of the latter—as Alesina, Favero, and Giavazzi have shown. But there is more. As is often the case, the devil is in the details. Studies by Alesina and Ardagna and by Roberto Perotti have noted that fiscal adjustments are multiyear rich policy packages. Austerity measures are often undertaken at the same time that other growth-enhancing policy changes are made, and, as such, there is much to learn by looking into the details of each successful episode.

One important lesson is that several accompanying policies can moderate the contractionary effects of fiscal adjustments on the economy and enhance their chances of success. For instance, spending-based fiscal adjustment accompanied by supply-side reforms, such as liberalization of markets for labor, goods, and services; readjustments of public sector size and pay; public pension reform; and other structural changes tend to be less recessionary or even to have positive economic growth.

Such reforms signal a credible commitment to more market-friendly policies: less taxation, fewer impediments to trade, fewer barriers to entry, less labor market and business regulation. And, of course, with enhanced economic freedom, unit labor costs fall and productivity improves, making an expansionary fiscal adjustment more likely than a contractionary one.

Germany’s fiscal adjustment of 2004–2007 provides a good example. First, the country implemented a stimulus by reducing income tax rates. This reduction was part of a series of supply-side-oriented reforms implemented between 1999 and 2005, including a wide-ranging overhaul of the income tax system that was meant to boost potential growth but that did not have much effect until 2004. In addition, significant structural reforms to tackle rigidity in the labor market were put in place, as well as changes to the pension system to relieve demographic pressures. These reforms included “an increase in the statutory retirement age, the elimination of early retirement clauses, and tighter rules for calculating imputed pension contributions.” Finally, Germany adopted large expenditure cuts to the fringe benefits in public administration (such as ending Christmas-related extra payments) and also serious reductions in subsidies for specific industries, including residential construction, coal mining, and agriculture.

Sweden provides another example of successful adjustment. The data show that after the recession Sweden’s finance minister, Anders Borg, not only successfully implemented reduction in welfare spending but also pursued economic stimulus through a permanent reduction in the country’s taxes, including a 20-point reduction to the top marginal income tax rate. At the same time, Sweden benefited from a very aggressive monetary policy followed by strong export revenues and firm domestic demand. The country’s economy is now the fastest-growing in Europe, with real GDP growth of 5.6 percent, which has helped the country to rapidly shrink its debt as a percentage of GDP over the past decade.

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29. Ibid., 107.

30. The German consolidation also responded quickly to unanticipated challenges arising from the reforms. For instance, the government responded to the higher-than-expected cost of labor-market reforms by raising the Value Added Tax (VAT) rate, with part of the VAT collection going toward financing a reduction in the overall tax burden through a cut in unemployment contribution rates.

The Swedish example raises the question of the appropriate role of monetary policy in successful fiscal adjustments. For instance, there is some evidence that at times exchange rate devaluation (induced by an accommodating monetary policy) can help to boost a country’s exports as the country becomes more competitive and, as a result, can compensate for a previous slowdown in domestic demand.\(^{32}\)

Economist Scott Sumner has made the case that the best way to get austerity and growth simultaneously is to increase “[nominal] GDP and budget surpluses—the Swedish way.”\(^{33}\) To be sure, monetary policy in Europe—or in the United States, for that matter—could increase the effectiveness of spending cuts and structural reforms (a little like the water you drink to help the medicine to go down). But it is a mistake to oversell it, and it certainly will not achieve our long-term goals without serious reductions in government spending. In particular, the devaluation of a country’s currency is neither a necessary nor sufficient condition for success, as shown by Alesina and Ardagna.\(^{34}\)

There is growing evidence, however, that private investment tends to react more positively to spending-based adjustments. The data from Alesina and Ardagna, and Alesina, Favero, and Giavazzi, for instance, show that private-sector capital accumulation increases after governments cut spending, which compensates for the reduction in aggregate demand due to the fiscal adjustments.\(^{35}\)

The good news is that it is possible to design a fiscal adjustment that could both reduce the deficit and have a minimal or even, in some cases, positive impact on the economy. It requires austerity based mostly on spending cuts. This can be accomplished without hurting the least advantaged in society. As Alesina wrote in November 2012,

> But if we cut spending, do we necessarily hurt the poor? Not in such countries as Greece, Portugal, Spain, and Italy, whose public sectors are so inefficient and wasteful that they can certainly spend less without affecting basic services. Even in countries with better-functioning public sectors—such as France, where public spending is nearly 60 percent of GDP—there’s a lot of room to economize without hurting the poorest and most vulnerable. And even in America, public spending is about 43 percent of GDP, a level common in Europe not long ago, and up from 34 percent in 2000.\(^{36}\)

In other words, Western governments can save money and avoid inflicting injury on lower-income earners or the poor by improving the way welfare programs are targeted; scaling back programs such as Medicare that use taxes raised in part from the middle class to give public services right back to the middle class; and gradually raising the retirement age to 70. The same holds true for Social Security. What is more, lots of savings could be achieved by cutting subsidies going to businesses—which are often large, well-established, and politically connected firms, such as gas and oil companies, farms, automobile manufacturers, and banks.\(^{37}\)

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\(^{32}\) Alesina and Ardagna, “Design of Fiscal Adjustments.” Also, the current devaluation debate surrounding the G20 “currency war” has been a prime example. See Jan Strupczewski, “G20 Currency Promises Unlikely to End Devaluation Debate,” Financial Post, February 18, 2013, http://business.financialpost.com/2013/02/18/g20-currency-war-promises-unlikely-to-end-devaluation-debate/.


\(^{34}\) Alesina and Ardagna, “Design of Fiscal Adjustments.”

\(^{35}\) Ibid.


CONCLUSION

Economists disagree a lot when it comes to fiscal policy. For instance, there is no consensus about the size of the spending multiplier or where on the Laffer curve most countries are situated. However, a consensus seems to have emerged recently that spending-based fiscal adjustments are not only more likely to reduce the debt-to-GDP ratio than tax-based ones but also less likely to trigger a recession. In fact, if accompanied by the right type of policies (especially changes to public employees’ pay and public pension reforms), spending-based adjustments can actually be associated with economic growth.

Fortunately, successful fiscal adjustments are possible when based mostly on spending cuts and accompanied by policies that increase competitiveness, as we have seen in the case of Germany, Finland, and other more recent examples, such as Estonia and Sweden. However, it is important to refrain from oversimplifying these results since fiscal adjustment packages are often complex and multiyear affairs. Also, many of the successful (i.e., expansionary and debt-to-GDP-reducing) fiscal adjustments in this literature are ones where the growth is export-led during times when the rest of the global economy is healthy or even booming. While there has been some recovery in the midst of the recession, we should recognize that it may be much harder today to achieve export-led growth when many countries are struggling.

The cost of well-designed adjustments plans will not be zero, but will be relatively low. Besides, it is not clear that the alternative to reducing spending is more economic growth. In fact, the alternative for certain countries could be a very messy debt crisis.