

## Is Fiscal Austerity Good for the Economy?

By *Renee Haltom and Thomas A. Lubik*

Concerns about fiscal imbalances in Europe and the United States have led to intense debates about whether governments should dramatically cut spending or increase taxes to reduce government debt—a course of action often called fiscal “austerity.” But is austerity likely to hurt economic growth? That question has not been definitively answered—but even if austerity is costly in the short run, it can provide long-run benefits.

The sustainability of government debt burdens has been the focus of economic policy in several developed economies in recent years. Europe experienced a sovereign debt crisis, starting in the spring of 2010, in which interest rates on government debt rose dramatically in some countries—notably Greece, Portugal, and Ireland. This crisis reflected heightened expectations of government default and heralded the possible breakup of the European Monetary Union. The United States has not experienced such a crisis, but many observers have expressed concern about the trajectory of its debt, especially in light of rising entitlement spending and the aging population.

Seen in isolation, the obvious policy response is to cut spending or increase taxes enough to generate budget surpluses that reduce indebtedness. Such fiscal “austerity” is necessitated by the logic of what economists call the “intertemporal government budget constraint,” which stipulates that the total debt outstanding has to be balanced by the present discounted value of future government surpluses. The current debt burden is considered sustainable if investors have the expectation that it will be repaid by future government surpluses.<sup>1</sup> However, the theory is es-

entially silent on when the future surpluses must arrive for those expectations to hold: for instance, whether small expenditure cuts and tax increases in the short run are preferable to large spending cuts and tax increases several years down the road. This is the issue policymakers in Europe and the United States have to face.

Should governments undertake austerity despite their weak economies, or could austerity actually be good for economic growth by ensuring intertemporal budget balance with associated beneficial effects through, for instance, lower interest rates? The view favored by many commentators is that temporary fiscal expansion, not contraction, is needed in a recessionary or a slow-growth environment to return the economy to its full capacity. This view often neglects intertemporal budget balance or considers it mostly irrelevant in the short run. The alternative view encompasses a unifying treatment of the short run and the long run, where any fiscal measures have long-run consequences that cannot be divorced from their short-run effects.

On the surface, it may be difficult to see how a fiscal contraction could be expansionary. From an accounting standpoint, the notion seems

counterintuitive since government expenditures are a component of gross domestic product (GDP). Thus, it would seem that a reduction in fiscal policy would necessarily reduce GDP, all else equal. Yet, there are second-round effects on economic activity that are not captured immediately in the national income accounts. One way that fiscal contraction could be expansionary is by calming financial markets during a debt crisis. A fiscal contraction could return interest rates to lower levels by convincing those who hold government debt that the likelihood of default is low. Lower market interest rates would fuel investment and consumption in sectors that are sensitive to interest rates, as well as raise the value of some assets, which could increase demand through the wealth effect. Fiscal contractions also could increase wealth if they prevent even larger contractions down the road.

Several countries recently have taken steps to reduce government deficits. At the height of the European debt crisis, the International Monetary Fund (IMF) and Euro-area governments attempted to calm markets through various lending programs, and fiscal contraction was often a precondition of those rescue packages. In the United States, deficit reduction recently has been the result of a “sequester” that went into effect in March 2013. The sequester consisted of roughly \$85 billion in automatic cuts to appropriations for the 2013 fiscal year that were put into place by lawmakers in the event that Congress would be unable to reach a deficit-reduction compromise.

It is too soon to tell what effect these actions have had on economic growth since economies remain weak for other reasons. But theoretical and empirical economic research can shed light on the probable effects of these policies.

### **What Counts as Austerity?**

Despite its ubiquitous use in the recent policy debate, the word austerity does not have a commonly accepted definition in economics. Merriam-Webster defines austerity as “enforced or extreme economy,” but it is not obvious what this means in the context of fiscal policy. How big of a fiscal contraction qualifies as austerity? Should fiscal consolidations be measured relative to historic averages of spending? Would a

slowdown in spending increases therefore count as austerity? Are the economic effects of a given fiscal contraction the same as a contraction of equal size spread over five years? Are the short-term effects on the business cycle different than the long-run effects?

Economic research typically has defined fiscal contractions in one of two ways. One is using cyclically adjusted budget balances—that is, changes in the government budget deficit or surplus that have statistically filtered out changes in taxes and spending that occur automatically with the business cycle, with the intention of leaving only those changes that are deliberate choices of fiscal policymakers. A second “narrative” approach looks at what governments actually say and do, that is, reductions in spending or increases in taxes made with the stated intention of reducing deficits.

Some studies have looked at a wide range of episodes in which government budget deficits were reduced, while others have focused on “large” adjustments. For example, a 2010 study by the IMF examines all narrative-based fiscal consolidations, which vary substantially in size but average 1 percent of GDP per year.<sup>2</sup> In contrast, a 2009 paper by Alberto Alesina and Silvia Ardagna looks at instances in which the ratio of cyclically adjusted budget surpluses to GDP rises at least 1.5 percentage points.<sup>3</sup> By this measure, many recent fiscal contractions count as “large.” (See Table 1.) Despite these recent fiscal contractions, the IMF estimates that one-third of advanced economies, comprising 40 percent of global GDP, still face major fiscal challenges.<sup>4</sup>

### **Is Austerity Expansionary?**

Some empirical evidence suggests that past fiscal contractions were expansionary. In a 1990 study, Francesco Giavazzi and Marco Pagano were the first to make this point, but they looked at only two isolated cases, Denmark and Ireland in the 1980s.<sup>5</sup> Three subsequent studies by Alesina and his colleagues—Roberto Perotti in 1995, Ardagna in 1998, and Ardagna in 2009; “AAP” hereafter—identify all episodes of significant deficit reduction in developed countries in the past several decades.<sup>6</sup> They find that some episodes of fiscal consolidation led

to increases in economic growth. In particular, spending-based consolidations led to economic growth, while consolidations based on tax increases were associated with recessions.

The AAP studies utilize cyclically adjusted budgets, but the 2010 IMF study criticizes their approach, arguing that the studies failed to remove important cyclical components, such as swings in tax revenue due to asset- or commodity-price changes. The IMF study also contends that their method may have disregarded fiscal consolidations that took place during economic downturns. This approach may have biased upward AAP’s estimated effect on GDP growth.

The IMF study instead utilizes the narrative approach—again, announced decisions by governments to remedy fiscal imbalances—across more than a dozen developed countries from 1980 through 2009. The IMF paper finds that fiscal consolidations tend to be contractionary in the short run. However, it agrees that fiscal consolidations based mostly on tax increases tend to be more harmful to economic growth than those based mostly on spending cuts.

How to measure fiscal contractions continues to be debated. Perotti argues in a 2011 study that fiscal consolidations span multiple years and don’t take consistent forms from one year to the next.<sup>7</sup> For example, a spending-based contraction in one year, and

an expansion based on tax cuts in the following year. Therefore, the annual data used by AAP and the IMF may not capture fiscal consolidations accurately.

Using case studies of four specific consolidation episodes in Denmark, Ireland, Finland, and Sweden, Perotti argues that other factors—such as exchange-rate adjustments that promoted stabilization—led to economic growth in the presence of fiscal contractions. He contends that, since depreciation is not available to governments in individual member countries of the European Monetary Union—and indeed, the current account channel is not available to the world as a whole—fiscal consolidation is not likely to be expansionary today.

### Can Monetary Policy Offset Austerity?

Fiscal policy doesn’t operate in a vacuum; any negative economic effects of fiscal consolidations can in principle be offset by monetary stimulus. The debate over fiscal austerity is especially interesting today because many central banks have reduced their policy interest rates essentially to zero. Most economists argue that nominal interest rates cannot realistically be pushed into negative territory, even if economic conditions call for easier monetary policy. Thus, when interest rates are at zero, the set of possible policy tools is considerably different from what was considered available when the empirical studies discussed above were conducted.

**Table 1: Recent Deficit Reductions**  
Cyclically Adjusted Deficits as Percentages of GDP

	Recent Deficit Peaks	Estimated 2013 Deficits	Average Annual Reductions*
Greece	19.1 (2009)	-0.2 (surplus)	4.8
Portugal	9.7 (2010)	3.0	2.2
Spain	10.2 (2009)	4.2	1.5
United Kingdom	9.7 (2009)	4.3	1.4
United States	8.5 (2010)	4.6	1.3
Ireland	11.9 (2008)	5.5	1.3
Entire Euro Area	4.8 (2010)	1.3	1.2
Italy	3.6 (2008)	0.2	0.7

\* As percentages of GDP from the recent peaks through the 2013 estimates

Note: Cyclically adjusted deficit changes are those due to explicit policymaker actions and not the business cycle.

Sources: International Monetary Fund *Fiscal Monitor*, April 2013, Table 1, and authors’ calculations

Ever since the “zero lower bound” was reached, the effects of fiscal policy have received new attention in economic research.<sup>8</sup> This literature generally has found that fiscal stimulus may be especially powerful when interest rates are at zero. Fiscal stimulus raises expected inflation, which, due to zero interest rates, pushes the real interest rate negative, spurring consumption. These models tend to be symmetric—meaning they can be interpreted as suggesting that fiscal consolidations are especially costly at the zero bound.

The IMF researchers suggest that spending-based consolidations appear less economically harmful than tax-based consolidations because central banks have been more stimulative during the former. They also suggest that central banks might view spending-based consolidations as more difficult politically and therefore stronger signals of commitment to fiscal sustainability. In this case, central banks may be less concerned about fiscal policy providing excessive stimulus in the future, and thus may be more willing to offset negative output effects today. The IMF researchers find that tax hikes, in contrast, can have a direct impact on inflation and don’t tend to be offset by monetary policy. If interest rates are near zero, both types of fiscal consolidations appear more costly because the central bank has less scope to provide monetary stimulus.

A more recent study by Alesina, Carlo Favero, and Giavazzi, using a narrative approach, finds that monetary policy does not explain the different output effects of spending- and tax-based consolidations.<sup>9</sup> They show that private investment rose after spending-based consolidations, raising output, whereas capital accumulation fell after tax increases. The authors suggest these effects may be due to the response of business confidence to spending-based versus tax-based consolidations. Therefore, spending-based consolidations may not be much more costly in terms of economic activity even though many central banks are constrained by the zero bound.

Even though the evidence is mixed on what role monetary policy has played during fiscal consolidations, theory suggests that, in the short run, fiscal

consolidation is more likely to be contractionary when undertaken at the zero bound. However, most economists argue that central banks are not powerless at the zero bound, as many models depict them. Central banks have employed many unconventional policy tools in recent years in order to provide additional monetary stimulus despite already low interest rates.<sup>10</sup>

### **Long-Term Effects**

Suppose fiscal austerity does cause economic activity to slow or contract in the short run. This actually might worsen the fiscal situation since a reduction in GDP increases the debt-to-GDP ratio, everything else equal. Moreover, the decline in activity can counteract the effects of fiscal consolidation by increasing mandated social spending and causing a decline in tax collections.

While these effects are certainly a concern, they miss the crucial long-run benefits of austerity through maintaining intertemporal budget balance, which could outweigh the short-run costs. Few studies on the effects of fiscal policy consider the short-run effects and the long-run effects together. One exception is recent work by Harald Uhlig.<sup>11</sup> He finds that fiscal stimulus leads to an initial output boom. Eventually, however, the long-run effects on output are negative because governments must raise taxes to pay for the stimulus. Symmetrically, this implies that austerity would initially cause an economic contraction that would be followed by a rise in output as economic agents expect lower taxes in the future due to lower government debt.

Fiscal consolidation is also more likely to have net positive effects if markets perceive a high default risk on sovereign debt, in which case consolidation may help calm market fears. For example, sovereign risk was high during the economic expansions that coincided with the fiscal contractions that Giavazzi and Pagano studied in Denmark and Ireland in the 1980s. Sustainable fiscal policy could have beneficial effects in the short run, too. In the IMF study, fiscal consolidations during states of high sovereign risk are less contractionary—though still negative for growth—than those implemented during states of low sovereign risk.

Additionally, many studies on the effects of fiscal policy focus on output effects while ignoring implications for welfare. In general, an increase in output does not necessarily mean that welfare has increased for everyone. The effects of austerity may create tradeoffs between the short and long runs, and how individual households value such tradeoffs is important to determining whether or not austerity is beneficial. Also, in some models of fiscal stimulus, higher output is the result of households working harder due to the expectation of future taxes, so they may not actually be better off.<sup>12</sup>

In summary, economists have not definitively answered the question of whether and when austerity is likely to be beneficial. Much of the debate ignores the question of whether implementing austerity is feasible in nations with nonexistent records of long-run fiscal consolidation or that rely on foreign sources of deficit financing. The economic volatility of recent years provides a ripe area of future study regarding the true effects of fiscal contractions. ■

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## Endnotes

- <sup>1</sup> Haltom, Renee, and John A. Weinberg, "Unsustainable Fiscal Policy: Implications for Monetary Policy," Federal Reserve Bank of Richmond *Economic Brief*, July 2012.
- <sup>2</sup> See Devries, Pete, Charles Freedman, Jaime Guajardo, Douglas Laxton, Daniel Leigh, and Andrea Pescatori, "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation" in *World Economic Outlook: Recovery, Risk, and Rebalancing*, Washington, D.C.: International Monetary Fund, October 2010.
- <sup>3</sup> See Alesina, Alberto, and Silvia Ardagna, "Large Changes in Fiscal Policy: Taxes Versus Spending," National Bureau of Economic Research Working Paper No. 15438, October 2009.
- <sup>4</sup> See *Fiscal Monitor: Fiscal Adjustment in an Uncertain World*, Washington, D.C.: International Monetary Fund, April 2013.

<sup>5</sup> See Giavazzi, Francesco, and Marco Pagano, "Can Severe Fiscal Contractions Be Expansionary? Tales of Two Small European Countries," National Bureau of Economic Research Working Paper No. 3372, May 1990.

<sup>6</sup> Alesina, Alberto, and Roberto Perotti, "Fiscal Expansions and Adjustments in OECD Countries," *Economic Policy*, October 1995, vol. 10, no. 21, pp. 207–248; Alesina and Silvia Ardagna, "Tales of Fiscal Adjustment," *Economic Policy*, October 1998, vol. 13, no. 27, pp. 489–545; Alesina and Ardagna, "Large Changes in Fiscal Policy: Taxes Versus Spending," National Bureau of Economic Research Working Paper No. 15438, October 2009.

<sup>7</sup> See Perotti, Roberto, "The Austerity Myth: Gain Without Pain?" Bank for International Settlements Working Paper No. 362, November 2011.

<sup>8</sup> For a summary of this literature, see Haltom, Renee, and Pierre-Daniel G. Sarte, "Is Stimulative Fiscal Policy More Effective at the Zero Lower Bound?" Federal Reserve Bank of Richmond *Economic Brief*, August 2011.

<sup>9</sup> See Alesina, Alberto, Carlo Favero, and Francesco Giavazzi, "The Output Effect of Fiscal Consolidations," Manuscript, May 2013.

<sup>10</sup> For a summary of these policies, see Haltom, Renee, and Alexander L. Wolman, "A Citizen's Guide to Unconventional Monetary Policy," Federal Reserve Bank of Richmond *Economic Brief*, December 2012.

<sup>11</sup> See Uhlig, Harald, "Some Fiscal Calculus," *American Economic Review*, May 2010, vol. 100, no. 2, pp. 30–34.

<sup>12</sup> For detail, see Haltom and Sarte (2011).

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