Joint Economic Committee
Republicans
Senator Sam Brownback *Ranking Member*
Representative Kevin Brady *Senior House Republican*

Republican Staff Commentary

IMF Research Shows the Type of Fiscal Consolidation Matters for Economic Growth

October 25, 2010

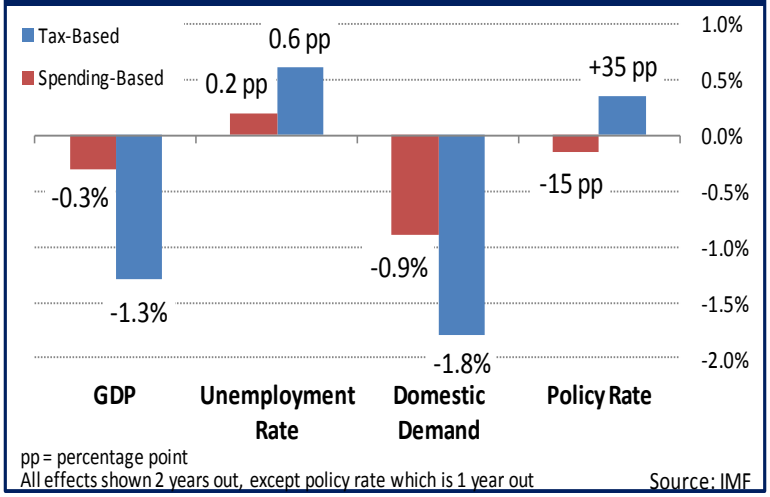
> ***"Fiscal [consolidation] that relies on spending cuts tends to have smaller contractionary effects than tax-based adjustments."***
>
> ***"The key idea is that cutting politically sensitive items may signal a credible commitment to long-term deficit reduction and that, in these cases, positive 'non-Keynesian' confidence effects offset the negative 'Keynesian' impact on aggregate demand."***

Fiscal Consolidation = Short-Term Contraction, Long-Term Expansion

Sparked by rising sovereign default risks and mounting debts across the globe, many countries are confronting serious calls for fiscal consolidation. Such consolidations, which take the form of tax increases or spending cuts, may increase long-term economic growth. But because they have a contractionary effect on short-term growth, consolidations can be politically difficult to achieve. The contractionary effects of consolidations vary significantly depending on both the type of consolidation (i.e., spending cuts or tax increases), and the conditions prior to and surrounding the consolidation.

A new study by the International Monetary Fund (IMF) provides important evidence for countries seeking to minimize the contractionary effects of fiscal consolidation.[i] The IMF study investigates the historical implications in advanced economies of fiscal consolidation on factors such as GDP, unemployment, demand, and interest rates. In particular, it examines: (i) the different impacts of tax-based versus spending-based fiscal consolidations; (ii) variance by types of spending cuts and tax increases; and (iii) possible changes in expected impacts of consolidation in light of current conditions such as near-zero policy rates and worldwide, simultaneous consolidations.

Effects Of A One Percent of GDP Fiscal Consolidation Fig. 1



pp = percentage point
All effects shown 2 years out, except policy rate which is 1 year out
Source: IMF

Tax Increases vs. Spending Cuts

A key confirmation of the IMF study is that fiscal consolidations based on spending reductions are significantly less contractionary than consolidations based on tax increases. For example, a 1 percent of GDP consolidation based primarily on tax increases reduces GDP by 1.3 percent after two years, while the reduction for primarily spending-based consolidations is 0.3 percent (Fig. 1). Additionally, the unemployment rate rises by three times as much for tax-based consolidations (+0.6 percentage point 2 years out) versus spending-based consolidations (+0.2 percentage point); domestic demand falls by about twice as much after two years for tax-based consolidations (-1.8 percent) versus spending-based

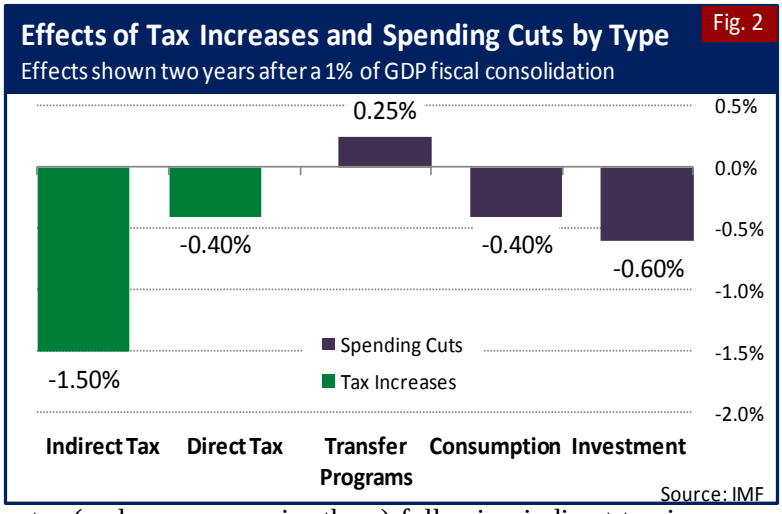
consolidations (-0.9 percent); and the policy rate is about 50 basis points higher one year after a tax-based consolidation than after a spending-based consolidation.

An important factor contributing to less contraction following spending-based consolidations is the role of monetary conditions, and to a lesser extent, exports. Compared to tax-based consolidations, interest rates and the value of the currency tend to fall more after spending-based consolidations. This is likely due to the view of many central banks that spending-based consolidations signal a stronger commitment to fiscal discipline, which in turn makes them more willing to provide monetary stimulus following spending-based consolidations.

Not all Tax Increases and Spending Cuts are Equal

An important aspect of the IMF analysis is the consideration of different types of tax increases and spending cuts and their effects on economic conditions.

In terms of tax increases, the study finds that indirect tax increases—such as a Value Added Tax (VAT), sales tax, or excise tax—have a significantly larger negative impact on the economy than do direct taxes—such as income, property, and estate taxes. For example, an indirect tax-based consolidation reduces GDP by 1.5 percent two years after a consolidation versus a reduction of only 0.4 percent following a direct tax-based consolidation (Fig. 2). This substantial difference in output effects can be largely attributed to monetary policy responses: an inflation-averse central bank is far less likely to provide monetary stimulus through reduced interest rates (and may even raise them) following indirect tax increases because such tax increases raise inflation on impact.



Politically Sensitive Spending Consolidations Are Best

When it comes to spending-based consolidations, the IMF study finds that cuts to politically sensitive spending, such as government transfers, and cuts to government consumption, such as government wages, are far less burdensome than cuts to government investment. In fact, politically sensitive spending cuts may even have an expansionary impact: the point estimates found that a one percent of GDP fiscal consolidation stemming from cuts to government transfers increased GDP by 0.25 percent two years after the consolidation; consumption-based cuts reduced GDP by 0.4 percent; and public investment cuts reduced GDP by 0.6 percent (Fig. 2).[ii] The rationale behind transfer program cuts being less detrimental or even having a positive impact on the economy is that they provide a stronger signal of fiscal discipline.

Sovereign Risks Lower Contractionary Effects

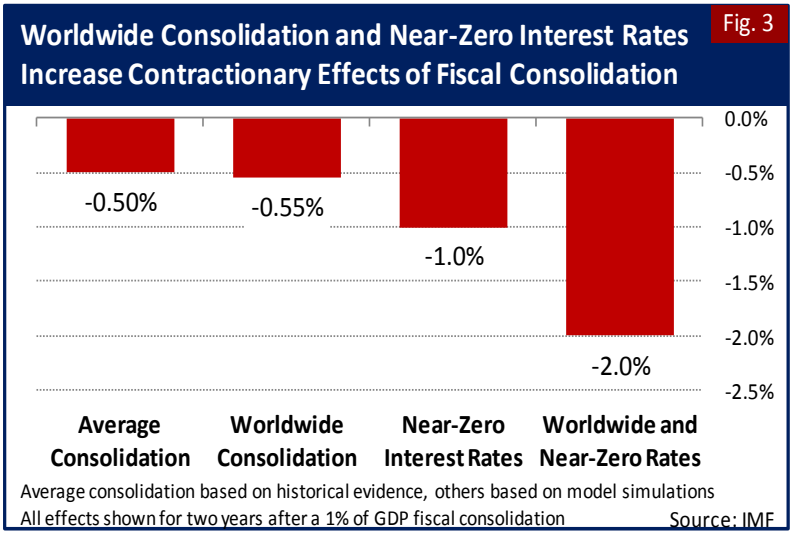
In light of the global environment with increasing concerns about the solvency of particular governments, fiscal consolidations have less of a contractionary effect on economic growth, and could even have a positive impact. Whereas increased sovereign risk raises borrowing costs, consolidation can sharply reduce those costs. On average, fiscal consolidations equal to 1 percent of GDP in "high-risk" countries result in a 0.4 percent of GDP reduction in economic growth after two years, compared to a 0.5 percent of GDP reduction for all countries and all types of consolidations. Historically, two countries have experienced economic expansions following fiscal consolidation: Denmark in 1983 and Ireland in 1987.

Current Economic Constraints

The current global economic environment, including many countries with near-zero policy interest rates and the need for widespread fiscal consolidation, could alter the way in which economies will respond to fiscal consolidations. Because, historically, similar economic environments have been infrequent, the IMF generated the expected effects of these conditions through a dynamic general equilibrium model designed to simulate the effects of fiscal and monetary policy measures. The model considers what happens to a small open economy, modeled on Canada, when interest rates are near-zero and when many countries consolidate at the same time. The model results are based on a 1 percent of GDP reduction in spending (75% of which is government transfers and 25% government consumption).

Zero Interest Rate Floors Restrict Monetary Stimulus

On average, fiscal consolidation equal to 1 percent of GDP results in a 0.5 percent of GDP reduction in output two years after the consolidation. The reason the reduction is not one for one is that monetary policy, through the lowering of interest rates, helps offset the shock to domestic demand. If interest rates are near-zero, however, when the consolidation occurs (which is the case in many countries including the U.S. today), central banks cannot cut interest rates to offset reduced demand and lower inflation, which in turn raises real interest rates and exacerbates the decline in aggregate demand. Thus, when interest rates are near-zero, the output cost of fiscal consolidation approximately doubles to a 1 percent of GDP reduction after two years (Fig. 3). It should be noted that these estimates assume no unconventional monetary action is taken, such as the quantitative and credit easing in which the Federal Reserve and other central banks have recently engaged. Such unconventional actions presumably allow for lower output reductions than would otherwise occur.



Worldwide Consolidations Limit Exchange Rate Effects

When worldwide fiscal consolidations occur, countries cannot rely on currency depreciation to stimulate export demand. Consequentially, the forecasted output reduction is slightly larger during worldwide consolidations: GDP falls by about 0.55 percent of GDP compared to 0.5 percent of GDP based on all historical consolidations (Fig. 3). In large part, the additional contractionary effects of worldwide consolidation are modest because of central banks' ability to respond with monetary stimulus.

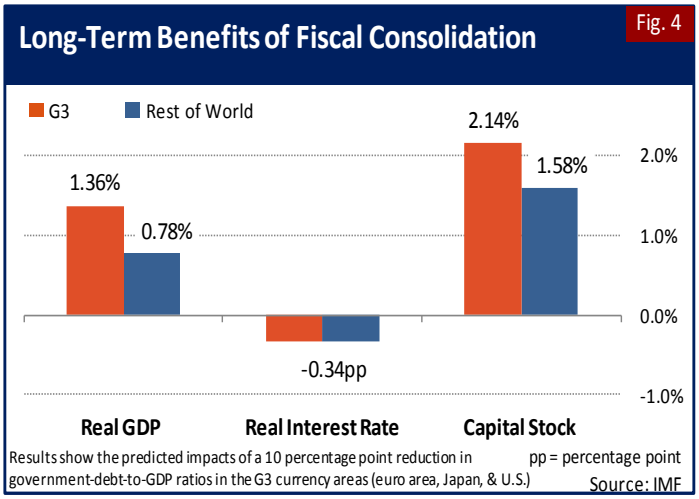
A Double-Edged Sword: Near-Zero Rates and Worldwide Consolidation

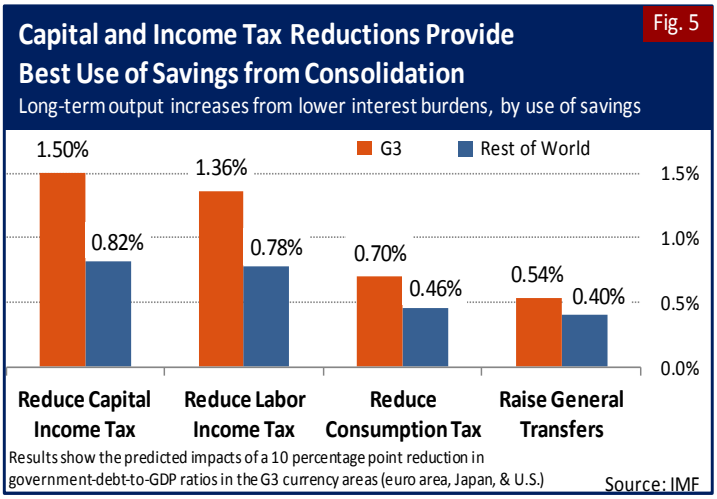
The largest negative output effects result from the combination of near-zero interest rates and worldwide fiscal consolidation—a situation in which neither exchange rates nor monetary policy can help support output growth. In this case, the forecasted output loss jumps to 2 percent of GDP for a 1 percent of GDP fiscal consolidation (Fig. 3).

Long-Term Expansions Outweigh Short-Term Contractions

While fiscal consolidations are typically painful in the short-term, they provide significant long-term benefits. The IMF analysis considers a scenario in which a fiscal consolidation (based on permanent cuts to government consumption and transfers) reduces the debt-to-GDP ratio of the G3 currency areas (euro area, Japan, and the U.S.) by 10 percentage points, over time. Declining debt reduces interest rate payments, and the savings from lower interest

payments are used to cut labor income taxes (savings could alternatively be used to cut other taxes or increase spending, as shown in Fig.5). A consolidation of this type and magnitude is predicted to raise long-term output by 1.36 percent of GDP in the G3 and by 0.78 percent of GDP throughout the rest of the world (Fig. 4).





The positive long-term effects of fiscal consolidation stem from increased savings and current account balances which lower the worldwide real interest rate (Fig. 4). In turn, lower real interest rates encourage private investment and raise the stock of physical capital and GDP (Fig. 4). The combination of lower interest rates and lower government debt reduces interest payments, which can be used to finance tax cuts or spending increases that, in turn, raise output. The increase in output varies significantly depending on the type of tax cut or spending increase. The largest increase in output comes from capital income tax cuts, followed by labor income tax cuts, consumption tax cuts, and to a lesser degree, spending increases (Fig. 5). In addition, worldwide incomes rise as income growth effects among the G3 spill over to the rest of the world through trade linkages.

How Long Is Long-Term?

The IMF simulations predict that fiscal consolidations cause GDP to be below baseline for three years before rising above baseline in all future years. The break-even point, at which the losses equal the gains, occurs five years after the start-date of fiscal consolidation.

Summary

History shows that fiscal consolidation produces long-term expansionary effects which outweigh the short-term contractionary impacts within five years. The specific findings of this IMF analysis provide helpful insight for countries facing serious need for fiscal consolidation. To minimize short-term economic contractions, countries should focus on spending cuts rather than tax increases. If tax increases are used, however, indirect tax increases should be avoided. Spending cuts should be focused on politically sensitive spending such as entitlements and government wages which may actually *increase* short-term economic growth. Additionally, current conditions including near-zero interest rates and simultaneous worldwide consolidations may result in larger short-term contractionary effects than would otherwise be expected.

[i] International Monetary Fund, "Will It Hurt? Macroeconomic Effects of Fiscal Consolidation," Chapter 3 of "World Economic Outlook, October 2010," http://www.imf.org/external/pubs/ft/weo/2010/02/pdf/c3.pdf

[ii] The point-based estimates indicate an expansionary response to politically sensitive spending-based consolidations, but the results are statistically indistinguishable from zero.