Chairman Casey, Vice Chairman Brady, and members of the Committee,

I am grateful for the opportunity to discuss the challenges to the U.S. economy posed by the combination of rising government debt and high unemployment. I will also comment briefly on current Federal Reserve policy, which your committee is also considering.

The Costs of Fiscal Consolidation

Indisputably, Congress must address the problem of rising debt to prevent a fiscal crisis that could gravely damage the economy. *How* to solve this problem is a complex issue. We need policies that will keep debt on a sustainable path while providing essential government services and minimizing the economic distortions caused by taxation. I will not analyze all these issues or presume to say what fiscal policies Congress should adopt. Instead, I will focus on a more narrow question: What are the short- and medium-run impacts of fiscal consolidation–-of cuts in government spending or tax increases--on economic growth and unemployment? Congress must understand these effects to choose the best response to rising government debt.

Opinions about the effects of fiscal policy vary widely. Most economics textbooks teach that a fiscal consolidation slows the economy in the short run. Higher taxes or lower government spending reduce the demand for goods and services, reducing growth and increasing unemployment. Yet some economists and policymakers disagree with this view, suggesting that fiscal consolidations are expansionary. One view is that lower budget deficits strengthen confidence in the economy, leading to higher consumption spending and more investment by firms.

Both sides of this debate present logical and plausible arguments. If we want to know who is right, we have to look at the evidence. Fortunately, history provides numerous examples of fiscal consolidations that we can study. And in my reading of the evidence, the verdict of history is clear: fiscal consolidations slow the economy, with adverse effects that last for five years or more. That is, if Congress cuts spending or raises taxes today, the consequences will include slower economic growth and higher unemployment than we would otherwise expect until at least 2016.

Numerous studies (admittedly, not all studies) support the conclusion that fiscal consolidations are contractionary. I will focus, however, on several studies performed over the past two years in the Research Department of the International Monetary

Fund. In my view, this work provides the best available evidence on the effects of fiscal consolidation, because of the wealth of data that it examines and its straightforward and compelling methodology. In addition, the expertise of the IMF's staff and its history of promoting responsible fiscal policy lend credibility to its analysis. (I should note that I am a part-time visiting scholar at the IMF, but not a lead researcher in its work on fiscal policy.)

The basis of the IMF research is a painstaking review of history in 15 countries over the period from 1980 through 2009. Based on records of fiscal policy decisions, the researchers have identified a total of 173 years in which governments adopted policies to reduce budget deficits-–either spending cuts, tax increases, or a combination of the two.

Having identified fiscal consolidations, the IMF researchers measure the effects with very simple statistical techniques. They ask whether economic growth and unemployment were higher or lower after consolidations than one would expect based on their normal behavior. The central conclusions concern the *average* effects of consolidation across the 173 episodes. It is essential to average over many episodes to eliminate the influences of factors besides fiscal policy that may affect the economy in any one case.

How does a fiscal consolidation affect growth and unemployment? The IMF research finds that a consolidation that reduces the budget deficit by one percent of GDP reduces future GDP by 0.6 percent after two years. The effect then diminishes, but GDP is still 0.4 percent lower after five years. The consolidation raises the unemployment rate by 0.4 percentage points after two years and 0.2 points after five years.

The research also finds that the effects of fiscal consolidations vary with economic circumstances. In particular, the average effects I have just cited are likely to understate the contractionary effects of consolidation in today's U.S. economy. In a typical episode in the IMF data set, a country's central bank responds to fiscal consolidation by reducing short-term interest rates, and this monetary easing dampens the effects of the consolidation. In the United States today, the Federal Reserve cannot reduce interest rates because short-term rates are already near their lower bound of zero. According to the IMF study, the effects of fiscal consolidation are about twice their normal sizes if interest rates are near the zero bound. This doubling means that a consolidation of one percent of GDP reduces GDP by 1.2 percent after two years and raises unemployment by 0.8 percentage points.

What do these numbers mean? To understand them better, let's focus on unemployment effects and consider one hypothetical fiscal consolidation. The Congressional Budget Office forecasts that the budget deficit will be about 3% of GDP in 2014 and stay near that level through 2020. Suppose that Congress chooses to eliminate this 3% deficit: it cuts spending and/or raises taxes by a total of 3% of GDP, so the deficit settles near zero. What will happen to unemployment?

As I have discussed, the IMF research suggests that a consolidation of one percent of GDP under current circumstances raises unemployment by 0.8 percentage points after two years. This implies that the 3% consolidation in our example would raise unemployment by 2.4 percentage points. With a U.S. labor force of 150 million people, an additional 3.6 million Americans and their families would suffer the consequences of a lost job.

Let me mention another important finding of the IMF study. Recent debates about U.S. fiscal policy have focused on the choice between deficit reduction through cuts in government spending and through tax increases. This choice matters greatly to the beneficiaries of government spending and to taxpayers. In one way, however, the choice is *not* important. The IMF researchers perform separate analyses of spending cuts and tax increases and find that the adverse effects on economic growth and unemployment are similar (at least in the case when interest rates are near zero).

Is there any way to control government debt without harming the economy in the short run? The IMF's findings suggest a type of policy that could achieve this goal: a fiscal consolidation in which spending cuts and tax increases are backloaded in time. Under such a policy, the government commits to lower deficits in the future without sharply cutting the current deficit. An example is a cost-saving change in entitlement programs, such as an increase in the retirement age, that is phased in over time. Such a policy could put government debt on a sustainable path without raising unemployment sharply. By the time major spending cuts occur, we can hope the economy has recovered from its current slump and unemployment is lower. Spending cuts would be less painful at that point than they would be now. One reason is that interest rates would be above zero, allowing a monetary easing.

Will Inflation Rise?

I have mentioned the fact that the Federal Reserve is holding short-term interest rates near zero-–a highly unusual policy by historical standards. The Fed has also purchased large quantities of Treasury bonds and mortgage-backed securities, causing the monetary base to triple. Further asset purchases appear to be under consideration. Some economists and policymakers have expressed concern that these policies will cause inflation to rise to undesirable levels. Let me comment on this issue briefly, explaining why I believe that fears of inflation are unwarranted.

At first blush, the Fed's near-zero interest rate target and its expansion of the monetary base are highly expansionary policies. In normal times, such policies would indeed cause inflation to rise. But these are not normal times.

We need to remember why expansionary monetary policy normally causes inflation. Inflation occurs when businesses around the country raise their prices. These businesses generally do *not* monitor the Fed's balance sheet, and they do not base their pricing decisions on changes in the monetary base. Instead, monetary policy affects inflation indirectly, through its effects on aggregate spending. If policy is too expansionary, the economy overheats. Firms see their sales rise and their productive capacity is strained, and workers find that jobs are plentiful. Under these conditions, firms are likely to raise prices rapidly and workers push for large wage increases.

Given this mechanism, inflation is a danger only if the economy is overheated--regardless of what the Fed is doing to its balance sheet. In today's environment, with unemployment above 9% and likely to stay high for years, an overheated economy is the last thing we should worry about. Some day the economy will recover and the Fed will need to exit from its current expansionary policy. But today's challenge is the terrible problem of 9% unemployment. Rather than scale back its policies, the Fed should redouble its efforts to stimulate the economy and push unemployment down.