Presentation to the University of San Francisco
Center for the Pacific Rim
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The Role of Monetary Policy in Bolstering Economic Growth[1]

Thank you. It's a pleasure to be at the University of San Francisco. It's fitting that my talk here is sponsored by the Center for the Pacific Rim. The San Francisco Federal Reserve Bank is the westernmost of the 12 Reserve Banks in the Federal Reserve System. All five U.S. states on the Pacific Ocean are in our District. And our Economic Research Department, through our Center for Pacific Basin Studies, takes a special interest in the economies and financial systems of Asia. Every year, I travel to Asia as a representative of the Federal Reserve to meet government officials and economic experts, and learn in depth about the economic and financial issues facing the countries of the region. Later this month, I'm going to India, which is an increasingly important and absolutely fascinating player in the global economy.

Let me start by briefly describing what the Federal Reserve is. We are the nation's central bank, consisting of the Federal Reserve Board in Washington, D.C., and 12 Reserve Banks around the country. I am the President and CEO of one of those 12 banks, the Federal Reserve Bank of San Francisco. Now, we are not the kind of bank where you can open a checking account. Rather, we perform the specialized functions of a central bank, including regulating and supervising commercial banks and the financial system. One of our most important functions is setting monetary policy. That involves influencing interest rates and

[1] I want to thank John Fernald and Sam Zuckerman for their assistance in preparing these remarks.

broader financial conditions. Our decisions about monetary policy influence how fast the economy grows and the rate of price inflation.

Hence, the condition of and outlook for the economy is our constant concern. This evening, I will talk about the U.S. economy, noting some of the welcome improvements we've seen lately, as well as some threats to the recovery. In order to understand the economic landscape, it's essential to examine some specific issues. In that regard, I'll have a few words to say about global developments, including the ongoing European financial crisis and slowing growth in China. I'll also talk briefly about budgetary challenges here at home. And I'll present my forecast for the economy.

I'll end my remarks by discussing the steps the Federal Reserve has taken to bolster economic growth and move our economy towards our congressionally mandated goals of maximum employment and price stability. In particular, I want to explain the moves our policy committee made in September to step up our purchases of longer-term securities and extend the time frame for low short-term interest rates. I hope to make it clear that, even as we focus on solidifying the economic recovery, our commitment to keeping inflation low hasn't wavered. I should emphasize that my remarks represent my own views and not necessarily those of others in the Federal Reserve System.

We are now in the fourth year of the economic recovery. That in itself is a significant accomplishment, given how close our financial system came to collapsing in late 2008. The recession then already under way worsened, turning into the longest and deepest downturn since the Great Depression. The economy shrank more than 4½ percent and the unemployment rate eventually peaked at 10 percent.

Thanks in part to emergency first aid by the Fed, financial conditions stabilized and began to improve. By mid-2009, the economy was growing again. However, progress overall has been stubbornly slow. Production of goods and services didn't return to its pre-recession peak until a year ago. Private-sector payrolls have risen for over 2½ years now, adding nearly 5 million jobs.[2] But, despite these gains, the unemployment rate remains a very high 7.9 percent.

Perhaps the most encouraging signs of a turnaround have been the improvements in two key sectors of the economy: autos and housing. Car sales have bounced back almost 60 percent from their recession lows, thanks to pent-up demand and fabulous rates on auto loans. And housing has finally started to come back. Fewer homes are going into foreclosure. Credit is still tight for many potential homebuyers, but the market has firmed and home sales are off their lows. With a limited stock of homes to choose from, house prices are rising in many parts of the country. This is setting the stage for more homebuilding. Housing starts are up sharply from where they were a year ago.

As welcome as this progress is, the recovery has lacked the spark of past rebounds. That's not surprising when you consider what we went through in 2007 and 2008. Families are buried in debt accumulated during the housing boom, and many now find their homes are worth less than what they paid for them. Millions of homeowners are behind on their mortgages or have already lost their homes. And lenders, burned from their past mistakes, are tightfisted with credit. All these factors help explain the gradual pace of economic recovery.

[2] These reported employment gains since the recession are likely to be revised up, according to a preliminary announcement by the Bureau of Labor Statistics. Specifically, the BLS estimates that their upcoming benchmark revisions will add 453,000 private-sector jobs as of March 2012. The revisions will be implemented with the release of the January 2013 employment report. See BLS (2012).

When I look at the economic landscape ahead, I see several additional factors continuing to hold us back: a global economic slowdown stemming in large part from the European financial crisis, budget challenges here at home, and widespread uncertainty about where the economy is going. These factors are legacies of the financial crisis and recession of a few years back, which devastated public-sector budgets at home and abroad, and fueled economic anxiety.

Let's consider the international situation first, starting with Europe. The global financial crisis exposed weaknesses in the housing markets, financial systems, and public-sector finances of several countries that use the euro as their currency. By 2010, private investors were fleeing the riskier countries, such as Greece, driving government borrowing costs through the roof. The situation has snowballed into a much broader financial and debt crisis, and a persistent European recession. And that hurts countries around the world, including the United States. U.S. exports to Europe have begun to tail off after a period when manufacturing in our country was making real forward strides.

Another place where Europe's woes are being felt is China. Keep in mind that China came through the global recession of 2008–09 with flying colors. When that downturn hit, Chinese exports to the developed world fell. To offset that, Chinese authorities made credit easier to get and ramped up spending on projects such as roads, airports, and power facilities. The result was that China's economy continued to grow strongly through the global recession. From 2007 through 2011, China's economy expanded at a remarkable pace of more than 9 percent, driven by a surge in domestic investment. Here in the United States, China's growth was a real boon at a time when we desperately needed it. U.S. exports to China rose by about 90 percent from the end of 2008 to the end of 2011, and were a factor in the revival of manufacturing here.

This time though China has not been able to entirely dodge Europe's problems. Europe is a critical market for Chinese products, and exports to Europe have been sinking this year. That's a reason why the International Monetary Fund forecasts that China's growth will fall to 7.8 percent in 2012 and 8.2 percent in 2013. And slowing growth in China has meant weaker growth in U.S. exports to that country this year.

A second factor weighing on the economy is the budget picture here in the United States. In 2009, in the depths of the recession, fiscal stimulus in the form of federal tax cuts and spending programs was enacted to offset, at least in part, the collapse of private-sector demand. All this federal fiscal expansion cushioned the blow of the downturn.

But the stimulus measures put in place a few years ago have been rolling off. Now we're shifting to austerity in fiscal policy. And the economic drag from the public sector will get even worse at the beginning of 2013. Under current legislation, we face what's come to be called the "fiscal cliff." That refers to the huge federal tax hikes and spending cuts that under current law will take place automatically at the beginning of next year. I expect that Congress and the White House may come to terms on extending some tax reductions and deferring some spending cutbacks. All the same, at least some reductions in federal spending and increases in taxes are likely to go through, deepening the drag on the economy.

This brings me to a third factor holding back the recovery—uncertainty. We don't know what's going to happen in Europe and Asia. And we don't know what's going to happen with the federal budget. These are not trivial matters. They'll have a tremendous effect on the economic and business climate in the months and years ahead. That makes it hard for businesses and households to plan for the future. Add to that the general sense of unease that stems from the rocky course of the economy over the past five years. It's no wonder people are skittish. Just about every businessperson I meet tells me that economic uncertainty and fears about the future make them hesitant to break ground on new projects or boost their payrolls.

So what are we at the Fed doing in these circumstances? Let's start by considering the goals Congress has assigned us: maximum employment and price stability. What exactly do these concepts mean? Let's start with maximum employment. Now, maximum employment does not mean a situation in which everybody is working. Instead, economists think of it as the level of employment that the economy can sustain over time without inflation rising too high. Economists fiercely debate what the unemployment rate would be under maximum employment. Typical estimates are between 5 and 6 percent. Thus, by almost any credible measure, the current 7.9 percent rate is much higher than we would get at maximum employment.[3]

What about price stability then? Fed policymakers have specified that a 2 percent inflation rate is most consistent with healthy economic growth and our mandate from Congress.[4] So where are we? Inflation has averaged only 1.7 percent over the past year, below this 2 percent target.

This means we're falling short of both of our goals, especially the maximum employment mandate. What's more, the recovery faces serious threats. Some of these come from abroad. The European crisis could flare up, deepening the recession there and increasing strains in the

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[3] See Daly et al. (2012), Lazear and Spletzer (2012), and Williams (2012b).

[4] For more information, see the statement of longer-term goals and policy strategy released by the Federal Open Market Committee (FOMC) in January (Board of Governors 2012a).

global financial system. In addition, China's slowdown could worsen. If that were to happen, U.S. exports to China would fall even further.

Then, of course, there is the fiscal cliff. I said earlier that I expect some agreement to be reached that will keep us from falling off the cliff in its entirety. But there is a danger that Washington will not take action. In that case, the cliff's austerity measures will hit with full force, which could take us perilously close to recession.

As it stands then, unemployment is well above our mandate, inflation is below our target, and the recovery faces serious menaces. In this situation, the Fed must take action to keep our economy on track towards maximum employment and price stability. So let's look at our options. Our usual method of stimulating the economy is to reduce short-term interest rates. But we pushed those rates down close to zero almost four years ago. That route simply isn't available to us.

Instead, we have had to find other ways to stimulate the economy. One form of monetary stimulus we've turned to is known as large-scale asset purchases. In late 2008 and 2009, the Fed purchased over $1.7 trillion of longer-term Treasury bonds and mortgage-backed securities, a program often referred to as QE1, for quantitative easing. Then, in November 2010, our policy committee, the Federal Open Market Committee, announced an additional $600 billion in longer-term Treasury securities purchases—QE2. A little over a year ago, we launched a third asset purchase program, sometimes called Operation Twist. In Operation Twist, which is scheduled to end in December, we haven't increased the overall size of our securities holdings as we did with QE1 and 2. Rather, we've changed the composition of our securities holdings by selling $45 billion in short-term Treasury securities each month and buying an equal amount of longer-term Treasury securities.

These asset purchase programs work by raising demand for longer-term Treasury and mortgage-backed securities. As demand goes up, the prices of those securities rise and yields come down. The effects extend to other longer-term securities, pushing down longer-term interest rates across the board.[5] Of course, lower interest rates make it easier for consumers to buy things like homes and cars, and for businesses to finance new projects, all of which spurs economic activity.

A second form of monetary stimulus we've used has been to issue public statements about the likely future path of the federal funds rate. The federal funds rate is the short-term benchmark interest rate we lowered close to zero in 2008. In central banking language, such public statements are known as forward guidance. Starting in August of last year, we have indicated in our monetary policy statements that we expect to hold the federal funds rate at very low levels at least through a specified date. This guidance regarding future policy actions lets the public know that short-term rates are likely to stay low for years to come. That puts downward pressure on longer-term interest rates. The evidence suggests that forward guidance has effectively influenced financial conditions this way.[6]

At our meeting in September, the FOMC took two new actions aimed at strengthening the recovery.[7] First, we announced a new large-scale asset purchase program to buy $40 billion in mortgage-backed securities each month. This purchase program is intended to be flexible and

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[5] See Williams (2011, 2012a).

[6] See Swanson and Williams (2012).

[7] See Board of Governors (2012b).

adjust to changing circumstances. Unlike our past asset purchase programs, this one doesn't have a preset expiration date. Instead, its duration and the total amount that we purchase will depend on what happens with the economy. Specifically, we said we'll continue buying mortgage-backed securities until the job market shows substantial improvement. But, if we find that our policies aren't doing what they're supposed to do or are causing significant economic problems, we'll adjust or end them.

The second step we took was to announce that we expect to keep the federal funds rate exceptionally low at least through mid-2015. That announcement extended out in time the forward guidance we had previously given on how long we expected to keep our benchmark exceptionally low. We also said we'd maintain low rates "for a considerable time after the economic recovery strengthens." In other words, we intend to keep short-term rates low even as the economy improves to make sure this recovery takes hold.

Our policy measures are having the desired effects. Take mortgage interest rates. Our purchases of mortgage-backed and Treasury securities have helped push conventional 30-year mortgage rates to historically low levels under 3½ percent.[8] And low mortgage rates are a great way to pep up the economy. They make owning a home more affordable, which increases demand for housing. Higher demand puts upward pressure on house prices, making it easier for existing homeowners to refinance or sell their homes. The happy result is a virtuous circle of growing confidence and improving fundamentals in the housing market. And, over the next few years, a homebuilding rebound should be a key driver of economic growth, creating more jobs for construction workers, furniture salespeople, real estate agents, and the like.

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[8] Hancock and Passmore (2011) and Krishnamurthy and Vissing-Jorgensen (2011) find significant effects of mortgage-backed securities purchases on mortgage rates. See Stroebel and Taylor (2012) for a contrary view.

Thanks in part to the policy actions I've described, I anticipate the economy will gain momentum over the next few years. I expect real gross domestic product, that is, the nation's total output of goods and services, to expand at a modest pace of about 2 percent this year, but improve to about 2½ percent next year and about 3½ percent in 2014. I see the unemployment rate remaining above 7 percent through at least the end of 2014. I expect inflation to remain slightly below 2 percent for the next few years as labor costs and import prices remain subdued.

As you can see from this outlook, I expect it will be some time until the job market makes substantial progress towards our congressionally mandated maximum employment goal. Therefore, I anticipate that we will need to continue our purchases of mortgage-backed securities and longer-term Treasury securities past the end of this year and likely well into the second half of next year in order to best achieve our mandated goals. As I noted, the ending date for these programs will hinge on the performance of the economy.

Of course, with our latest policy measures, we find ourselves in waters that haven't been extensively charted. That raises questions about unintended consequences. The concern I hear most often is that our securities purchases might ignite a bout of inflation. In my view, that worry isn't warranted. The fact is, the economy isn't operating at full speed. We have lots of spare economic capacity and an abnormally high number of workers who can't find jobs. That keeps inflation in check by making it hard for businesses to raise prices or for workers to press for higher pay. Inflation has been tame, averaging 1¾ percent since the recession started in late 2007. That's happened despite the fact that our holdings of mortgage-backed and Treasury securities have climbed by over 200 percent, to about $2½ trillion. In short, we have substantial scope to use monetary policy to stimulate the economy without creating too much upward pressure on prices.

I want to emphasize that we certainly don't take this view on inflation for granted. We watch how prices are behaving with the utmost attention. In addition, we always keep an eye on the public's expectations of inflation in the future. Specifically, we closely follow inflation expectations measured in surveys of households and professional forecasters. We also monitor financial market indicators of inflation expectations. I've been reassured to see that our stimulus measures have not caused an undesirable increase in longer-term inflation expectations.

In closing, I'd like to make a point about the Fed's dual mandate. We are unusual among central banks in that, since the 1970s, we've been charged with both employment and inflation goals. Both aspects of the mandate are important. But which is the most pressing concern has changed over time. From the late 1960s through the early 1990s, inflation was consistently running well above 2 percent. Naturally, during that period, much of the discussion about monetary policy centered on inflation and how to bring it down.

Today the situation is very different. Since the early 1990s, inflation has been consistently low, averaging right around 2 percent, and, most recently, even less than that. At the same time, the unemployment rate has remained far above the maximum employment level for over four years straight. Thus, unemployment is—and should be—a central focus of monetary policy right now. This concentration on getting unemployment down in no way represents a lessening of the importance of price stability. Quite the opposite. Consider that, if the recovery loses steam, inflation could fall too low—further below our 2 percent goal.

The steps the Fed has taken to boost the economy won't quickly return our economy to full strength. I know that. But they can help speed the recovery and make it more secure. I'm convinced they represent the best course to move us toward maximum employment and price stability. Thank you very much.

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