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Prospects for the Financial System and Markets
Donald Kohn

MR. KOHN: I’m going to talk about the current state of financial markets to lead us into a discussion of monetary policy and the Federal Reserve’s recent decision to expand its portfolio of intermediate and long-term Treasury securities.

Let’s start with the financial markets.

Figure 1

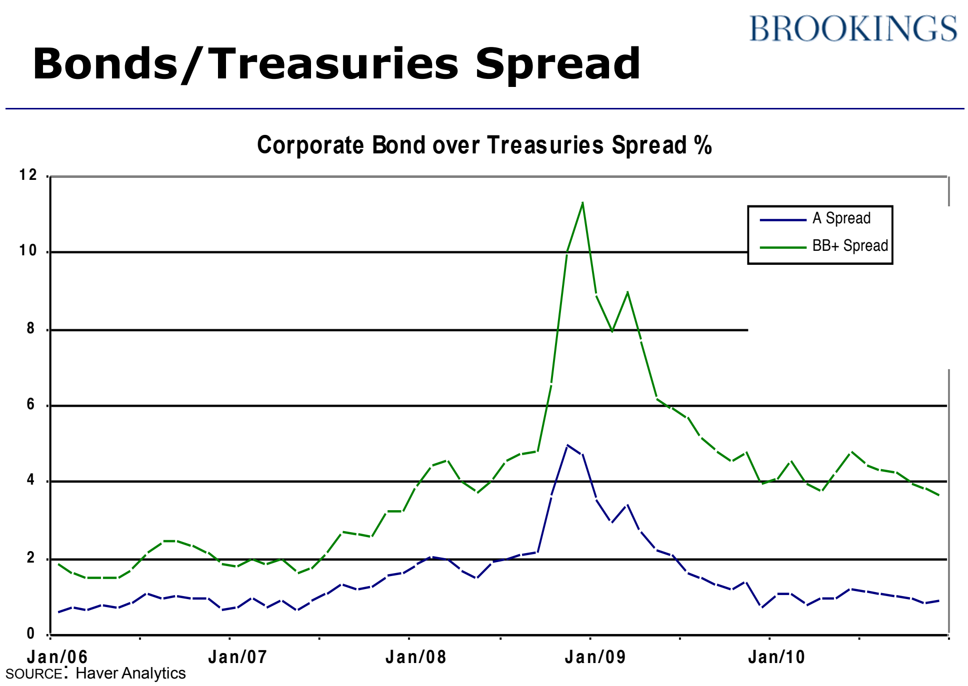

Figure 2

Figures 1 and 2 show something about the securities markets — bond spreads and stock prices. The theme here is that to a very important extent, securities markets have recovered from the difficult trauma of the financial crisis. Looking at bond spreads, this is the spread of investment-grade bond and junk bonds relative to Treasuries. You can see the huge spike in September-October 2008 and the return, particularly in the investment-grade market, of risk spreads back to where they were actually before the crisis began. The junk bond spreads, below investment-grade spreads, are still higher. I would say that's probably a good thing. I think one of the causes of the crisis was an inadequate appreciation of risk, particularly for riskier borrowers both in households and in businesses. So the fact that the spread of junk bonds is a couple of percentage points higher than it was in 2006 and early 2007 strikes me as a healthy appreciation for the risk.

You can see stock prices have recovered, but not entirely. Most people think valuations in the stock market are not unreasonable if you expect profits to continue to rise. And in the bond market there has been a huge volume of issuance, so that credit for corporations that have access to securities markets — larger corporations — is very, very good. There is money flowing and at pretty low rates.

I think the recovery of risk appetite in the securities markets is largely a function of the fact that the economy is expanding, profits are high, and risk has been considerably reduced relative to where it was in the depths of the recession. Corporations are sitting on very substantial piles of cash. One of the stories of the slow recovery from the deep recession is the caution that businesses are displaying about their investment and their hiring, and the very, very large amount of cash that they are sitting on shows they're not taking on much risk.

I think what's helped the economy come off the floor and the behavior of financial markets is in part the conduct of monetary policy. I probably think that in part because I was part of the conduct—I have to be able to sleep with myself at night. But I do think the Federal Reserve bears some of the responsibility, perhaps, for what happened and what got us into the mess, but also bears a lot of the responsibility for getting us out of the mess once it started.

Figure 3

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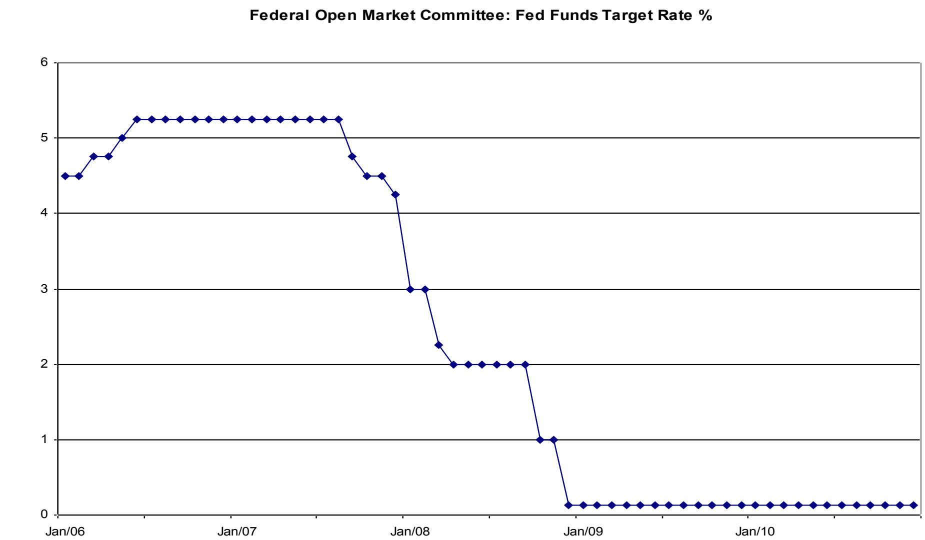
Short Term Rates



SOURCE: Haver Analytics

You can see from Figure 3 that short-term interest rates have been reduced effectively to zero from about 5-1/4 percent when the crisis began and really took hold in the summer of 2007. The Federal Reserve reduced rates very, very aggressively including as you can see in December 2007 and January 2008. We saw that things were weakening rapidly and cut rates very, very sharply. And eventually, by the time the crisis really took hold in the fall of 2008, rates were reduced to zero. That decline in rates flowed through to longer-term interest rates.

Figure 4

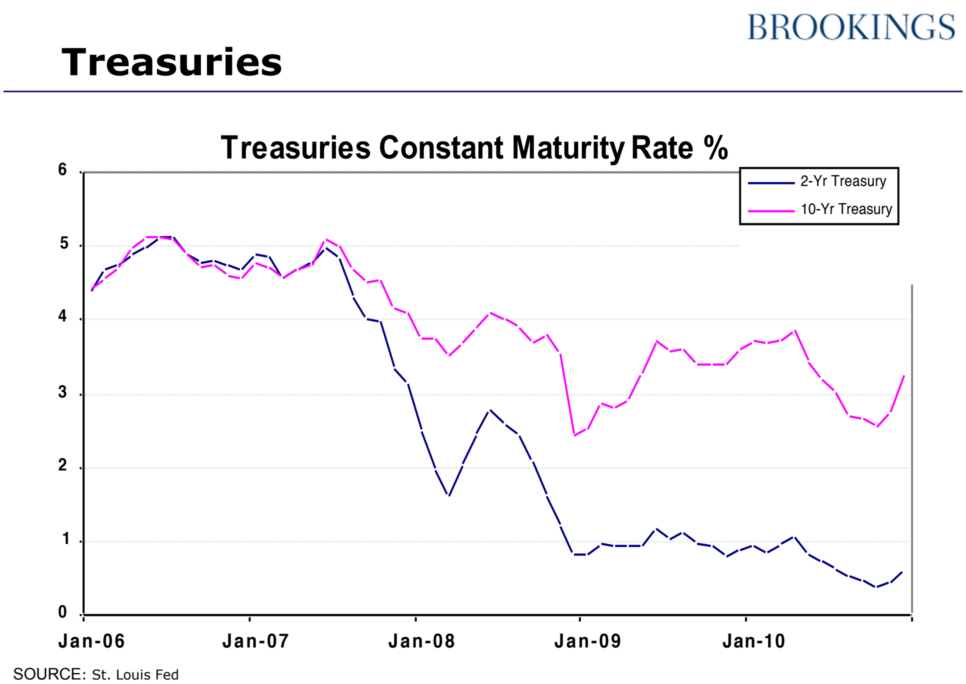


Figure 4 shows 10-Year and 2-Year Treasury rates. You can see the 2-Year rate is under 1 percent. This is a function both of the level of short-term interest rates, but also the expectations that short-term interest rates will be kept low for an "extended period," as they say in the Federal Reserve, that is, for quite a long time.

The Federal Reserve's words, these "extended period" phrases, the discussion of the outlook for monetary policy, are intended to shape people's expectations about monetary policy and to keep them expecting low interest rates more generally, in the intermediate and long-term. The resulting low longer-term interest rates help those who might be thinking about buying a house, a car, capital equipment, et cetera. That borrowing is done in longer-term markets.

The low intermediate and long-term interest rates also reflect to some extent, I think, the actions of the Federal Reserve to expand its portfolio.

Figure 5

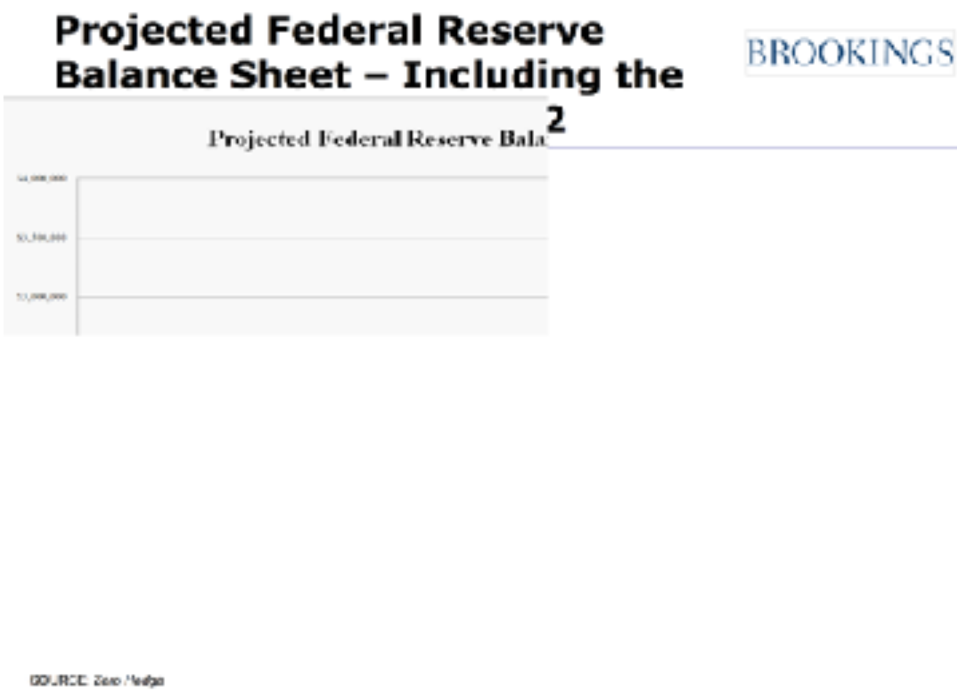


Figure 5 shows the Federal Reserve’s portfolio. As you can see, if you go back to let’s say the end of 2007 the portfolio is completely dominated by about $800 billion in Treasury securities . As the crisis deepened through 2007 and early 2008, we started lending money through various means.

You can see that the purple area and the top blue area are partly about borrowing at the Federal Reserve.

Initially, the Federal Reserve reduced its Treasury holdings to keep its portfolio the same, but when the crisis really hit in the fall of 2008, we reduced interest rates to zero and continued to buy securities. In the spring of 2009 the increase in mortgage-backed securities — the red area — and Treasury securities -— the blue — starts. Those purchases were designed to put additional downward pressure on intermediate and long-term rates by taking a lot of long-maturity assets out of the market, decreasing the supply relative to demand, which should raise the price and should lower interest rates. We saw from the previous chart that the purchases did have that effect.

So the story of the first few charts is that interest rates are very low, spreads in securities markets are low, the stock market has recovered a lot of its decline. But not everything is flowing so well in the financial markets.

Figure 6

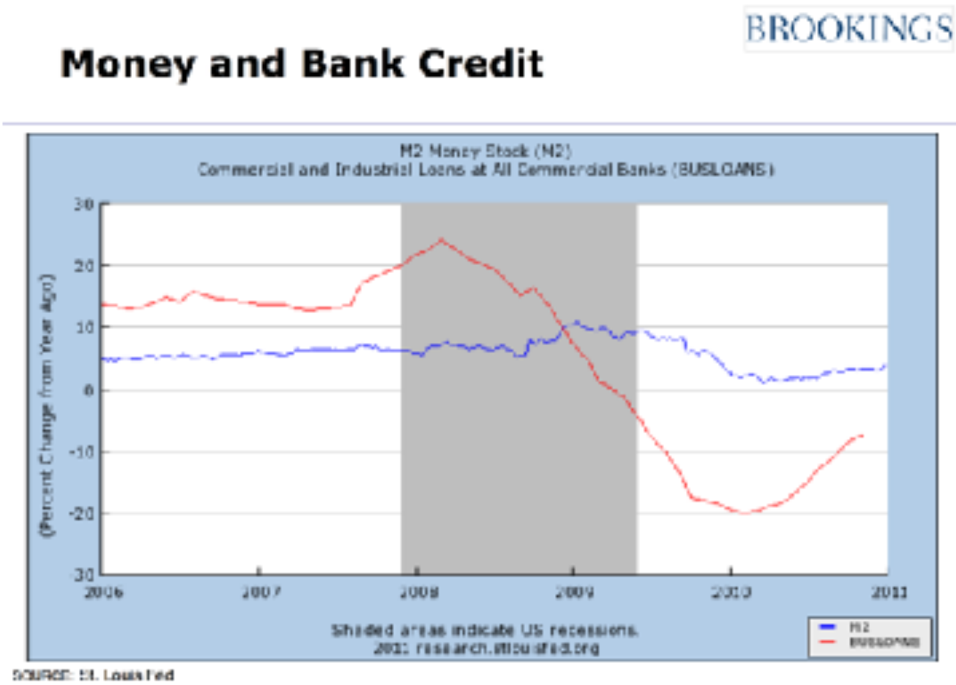


Figure 6 shows you something about money and bank credit. Despite all those reserves in the system, the rate of growth of the money supply (the blue line in this chart) has been quite damped and I think the most recent year over year is about 3 or 4 percent. So this issue of the reserves being put to work in money has not yet shown through. And banks have been pretty tight in lending.

A lot of this is on the demand side. Businesses are sitting on a lot of cash. They're very profitable and they don't need to borrow a lot. But a lot of it is on the supply side too: you can see the red line, which includes business loans—commercial and industrial loans— is still declining. They've actually leveled out in the last few months but a year-over-year basis they're still declining, albeit less rapidly than before.

Figure 7

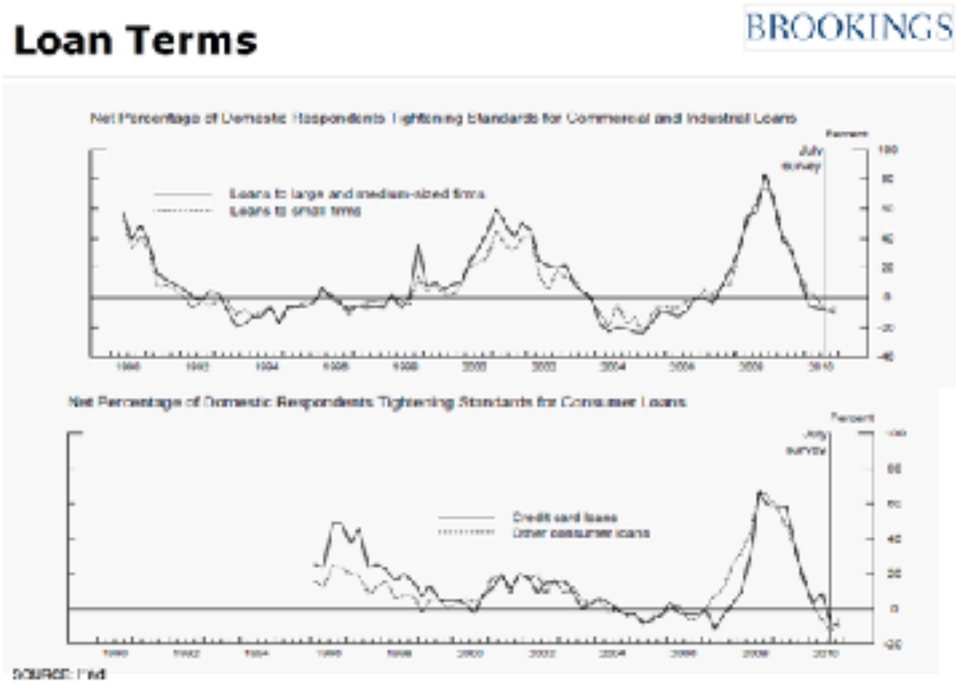


Figure 7 shows the banks' willingness to make loans—that is, the terms and conditions for lending. You can see the spike there in 2008 both for business loans in the top panel and consumer loans on the bottom panel. Banks tightened up the terms of the credit they were extending to the public very, very substantially. As you can see from the last few entries there, they've begun to ease up, but only a little. I think it's quite accurate to say that for those who are dependent on banks and don't have access to bond markets, bank credit remains pretty tight. Banks are still being very cautious. They're building their capital. They are not aggressively seeking loans. One reads to some extent that this is beginning to change. You can see in the figure that they're beginning to extend credit, but I think credit is still very tight for those who depend on banks.

As you heard in the previous session, the outlook for the economy is good but not great, with growth, but not very strong growth, and unemployment is likely to be high for some time, and inflation low. The economy is facing lots of headwinds having to do with rebuilding balance sheets for the banking sector, and deleveraging in the household sector with saving and not spending — which is a good thing over time but a headwind for economic recovery. And there is still a headwind in housing that I'm sure you heard about in the previous session.

All this has implications for how the Federal Reserve looks at its objectives and whether it's accomplishing its objectives.

Figure 8

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FOMC Objectives

- Federal Reserve Act:
  - Maximum Employment
  - Stable Prices
  - Moderate Long-Term Interest Rates
- Falling Short on Employment and Prices

The Federal Reserve Act gives the Federal Reserve three objectives for its policies: maximum employment, stable prices, and moderate long-term interest rates. The moderate long-term interest rates people don't discuss very much. People talk about this as a dual mandate in maximum employment and stable prices. I think on the maximum employment side, there is a lot of discussion these days about how much unemployment is structural versus how much is cyclical.

There's a school of thought out there that says that a good portion of the 9-1/2 percent unemployment rate is structural, that people can't move, they're not well suited for their jobs, or their educations do not match the skill demands of society. My personal view is that most of the increase in the unemployment rate is cyclical and not structural. Those issues are there — it's hard to move when your house is underwater, your education and skills may not match what society is demanding, et cetera — but when we have an increase in unemployment from 5 to 9-1/2 or 10 percent, most of that increase is cyclical rather than structural. So I think if we define maximum employment as the structural unemployment rate, we’re still well above that.

There is still a lot of slack in the economy. Because there is so much slack in the economy and slack in the labor market, labor costs have been very damped, and inflation has been coming down — core inflation is at a record low now. We have very low inflation because market conditions are so competitive. So the Federal Reserve looked at the very low inflation rates and very high unemployment rate and with the outlook for only moderate increases in employment and slow declines in the unemployment rate, and ongoing low inflation, and saw that it was falling short on at least the two major pieces of its mandate.

Figure 9

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Achieving the Objectives

- Ease financial conditions to encourage spending
  - Interest rates
  - Stock prices
  - Dollar exchange rate
- Short-term interest rates at zero
- Fed purchases of Treasury Securities (QE2)

Under most circumstances, in a situation like this, if I were sitting in the FOMC room [Federal Open Market Committee] and we agreed that inflation was low and likely to remain very low, and unemployment was high and likely to remain very high, and if anything, on the inflation side there might be a little bit more of a risk of it going down than going up, I'd say, well, let's lower the Federal Funds Rate. That's the usual instrument that the monetary policymakers use. We would lower the overnight interest rate and in order to encourage spending in the economy. Lowering the Federal Funds Rate, under most circumstances, would tend to lower long-term interest rates and raise stock prices. Lowering the long-term interest rates, of course, makes the cost of capital, cost of credit, cheaper for those who want to buy houses, and for businesses who want to invest in capital. Raising equity prices increases households' wealth and their willingness to spend. And the third channel that often accompanies an easing of monetary policy is some decline in the dollar exchange rate. If interest rates in the U.S. fall relative to interest rates abroad, people tend to take money out of the U.S. and put it abroad, reducing the dollar exchange rate, which makes our exports a little more competitive in international markets. It also allows those companies that are competing with imports into the U.S. to take some market share because those imports are a little more expensive now.

So, these are the normal channels of monetary policy that would work if the Federal Reserve had a Federal Funds Rate of say 3 percent and reduced it to 2.5 percent. But as we saw a little while ago, the Federal Funds Rate's already at zero, so you can't do that. There's no way of lowering the short-term interest rate, so the Federal Reserve said, we can operate more directly on these financial conditions by buying more intermediate and long-term bonds. I think the purchase of Treasury Securities has to be seen not as something that's radically different from normal monetary policy, the raising and lowering short-term interest rates, but as a natural extension of normal monetary policy when you can't lower short-term interest rates.

By taking these bonds out of the market, the Federal Reserve expected bond yields to fall. The fall in bond yields should help the equity market. The fall in bond yields should also put a little bit of downward pressure on the dollar and help our international competitive position.

To stress and reiterate, the way I look at the Fed purchases of Treasury Securities is as a natural extension of normal monetary policy tools. The Fed wasn't achieving its objectives that it was given by Congress. It felt it needed to do something to come closer to those objectives. The purchase of the intermediate and long-term securities was the instrument that was open to it when short-term rates were already at zero.

Now, this is uncharted territory, as you know, and it's aroused quite a bit of discussion, both internationally and domestically. I have tried to highlight some of the issues here, and we can certainly get into this in the Q&A session.

Figure 10

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Uncertainties Associated with QE2

- Will it work?
- Will it just lead to inflation?
- Will asset price distortions come back to haunt us?
- Will adverse consequences for other economies overwhelm any benefits for the U.S.?

I think the first issue is, will it work? Will this accomplish the Federal Reserve's objectives — will it move the economy back closer to full employment and keep inflation from falling, and maybe even have it go up a little bit? And I think the true answer is, nobody really knows. We are in uncharted territory. The effects of monetary policy do work through financial markets. I think the expectation that the Federal Reserve would buy these bonds did lower interest rates, reduce the value of the dollar, and raise equity prices.

So, the first step in how the Federal Reserve tries to increase spending, which is to ease financial conditions to induce people to spend and produce more, occurred as the discussion was happening. Two caveats here: One is, of course, that long-term interest rates have risen since the actual decision to buy the bonds. A lot of people have interpreted that as a repudiation of the decision, or at least a negative answer to the ”Will it work?” question. My take on this is that the rise in interest rates over the last month or two is a response to the fact that the economy looks a little stronger and fiscal policy looks a little easier. So, the government’s going to be selling more debt into the markets, people will be borrowing more because the economy looks stronger, and that will put upward pressure on interest rates.

We’ll never know, but I suspect that interest rates are just a little — not much — lower than they would be if the Federal Reserve hadn’t announced this, even though they’re higher than at the time of the announcement.

I think the second part of this equation — the Federal Reserve announcement and action lead to easier financial conditions, the easier financial conditions lead to more spending — also remains to be seen. There are certain of these channels that are clogged. I don’t think anyone, in the Federal Reserve or elsewhere, thinks that tight monetary policy is what’s holding the economy back. There’s plenty of liquidity, interest rates are very, very low, banks are gradually easing the terms and conditions of their loans, but that doesn’t mean that slightly easier monetary policy can’t offset some of the other headwinds that are affecting the economy.

But there’s a lot of uncertainty about whether it will work and I think it’s important that the Federal Reserve not claim more for this policy than it can possibly deliver. It should have a marginal effect that might help around the edges a little bit in a very difficult situation, and I think there’s some expectation that it will, but it’s going to take time to know.

One of the worries that people have is that all these reserves, all these purchases, will just lead to inflation. The standard economic forecast is that inflation will remain low for some time because of all the slack in the economy, the high unemployment rate, the empty factories, et cetera. The people who worry about inflation worry about other channels from monetary policy to inflation. One channel would just be expectations. The Federal Reserve says it wants inflation to be a little higher than it is. The Federal Reserve is taking these unusual actions. Maybe it will not be able to control inflation once it starts to move up and inflation will end up much higher than it wants. Expectations of higher inflation will then result in inflation going up much faster than you would think given the slack in the economy.

You see a little of this, perhaps, in commodity prices now: one of the things that people who are worried about inflation can do to protect themselves — or they feel they can do to protect themselves — is buy commodities. I think most of the increase in commodity prices reflects the better economic performance globally, but if you talk to people in the markets they'll cite commodity prices as indicative of their concerns about inflation.

People worry about all those reserves. If you look back in history and see when we had big inflations, they are often preceded by a big expansion of a central bank balance sheet. When I was at the Federal Reserve in the spring of 2009, and the balance sheet had already begun to increase, I went to a number of symposiums at which people worried that the Federal Reserve was in the process of creating hyper inflations, as in Zimbabwe or the Weimar Republic in the 20s. They characterized all those reserves as dry tinder that was going to ignite at some point. They worried that the Federal Reserve wouldn't be able to stop the inflation.

Well, that was a year and a half or a year and nine months ago and so far no inflation. That doesn't mean it can't happen. I think it's very, very important for the Federal Reserve to be able to exit this policy, to take it back, to raise interest rates when it senses inflation might begin to increase. The Federal Reserve has spent a lot of time developing so-called exit tools. It has the tools to tighten policy when it wants to and the remaining questions are ones of judgment and determination: will it see the inflation risks coming in time and will it have the will to tighten when it needs to. I think it will, but we won't know until we get there.

Another aspect that bothers people about the so-called QE2 is the distortions in asset prices. It's driving bond yields down, to very, very low levels. The intent of the securities purchases is exactly to drive up bond prices, drive down bond yields, increase equity prices. But people worry about what happens when policy begins to return to normal. Aren't we recreating a bubble environment, which got us into this mess in the first place? And what will happen when the bubble breaks, when the Federal Reserve needs to tighten?

I think the Federal Reserve is looking very carefully at these distortions and it is incumbent upon the Federal Reserve and the other regulators to make sure that the key financial institutions of this country are not so exposed that when the Federal Reserve starts to raise interest rates it causes another crisis. So, the Federal Reserve is using its supervisory authority pretty intensely to make sure that the major banks are ready for an increase in interest rates when that happens, and presumably that will protect the country against a crisis environment. That doesn't mean that when interest rates begin to rise there won't be a lot of yelling and screaming. There will be in the political environment and there will be in the financial environment, but I think the Fed has got to make the right decision at the right time, take the consequences, make sure the system is robust enough to handle the increase in interest rates.

And the final set of objections one heard is that we are just passing our problems on to other countries. This is beggar-thy-neighbor monetary policy. As I noted before, I think the exchange rate and some softening in the exchange rate, is one of the normal channels through which monetary policy reaches its objectives. The QE2 was not aimed solely at reducing exchange rates; it was aimed at strengthening the U.S. economy. The lower exchange rate is a byproduct of those efforts to strengthen the U.S. economy. Several other channels are at work here as well. And this is the way the game is supposed to be played in a flexible exchange rate world: When countries allow their exchange rates to adjust against each other, each country can use monetary and fiscal policy to achieve its macroeconomic objectives. And the price of the currency between them will do the adjusting and the shock absorbing so that each country can pursue its domestic objectives.

I think one of the issues right now is those exchange rates aren’t moving the way they are supposed to. In particular the Chinese exchange rate is fixed, more or less, against the U.S. exchange rate. To the extent that China or other countries that have fixed their exchange rate relative to the U.S. and are complaining about the inflationary impulse that they’re getting from the United States, they can remedy that by tightening their own monetary policy and allowing their exchange rates to appreciate.

China is not the only country — there are lots of other countries that are also fixed relative to the dollar -- but other countries are constrained by China’s actions in that they are worried about China as their competitor.

So, the Chinese exchange rate is key. It’s not the only issue here. There are lots of other things going on, but it’s part of the problem and part of the adjustment process that needs to happen.

There are countries, Brazil and others, that have complained about the Federal Reserve's actions, who aren't in such a current account surplus position. One can be more sympathetic to those countries in that they are getting capital inflows at a time they feel they're already close to full employment, and so they're worried about the sustainability of asset prices. They need to do their own supervision and regulation to make sure that they maintain financial stability in their own country.

I don't think it's in anybody's interest anywhere in the world to have a weak U.S. economy. It's incumbent upon both the U.S. to act responsibly in an international dimension, but also incumbent upon our trading partners to do likewise.

Those are my comments. I'd be glad to entertain questions about financial markets, monetary policy. Yes?

Discussion

Speaker: I'd like to follow up on the question of how China might affect the Federal Reserve. When our investment committee sits down and worries about the endowment, it seems like China is the key to almost every asset class, whether it's international bonds or domestic bonds or equities or natural resources. And how do you hedge China?

So, also in monetary policy, the Chinese have said they intend to diversify away from the dollar, and when they started doing it last year they just about ruined the Japanese economy by driving the yen so high. And if we could experience inflation from the Chinese buying natural resources or the dollar going down so much that our exports are going up, so we've got inflation but not really a robust economy. My question really is, how do you see the Chinese situation unfolding, not just in their exchange rate, but also their holding of Treasuries? For all I know, the Chinese are the sellers when we're the buyers, and it sort of works out. But do they have a seat at the table when you're talking about monetary policy?

MR. KOHN: (Laughter) No.

Speaker: Shouldn't they?

MR. KOHN: Well, I would say the global economy has a seat at the table, and as you think about monetary policy and how it's going to affect the U.S., you have to think about the response of other countries. So, to some extent, China, but also Europe and Japan, are all ghosts in the room when you're talking about monetary policy.

I think the Chinese have a difficult problem, which is they are facing increasing inflation pressures right now and they need to do something about that, which they recognize. They have tried to tighten their monetary policy through increases in reserve requirements and to some extent through increases in interest rates. But on another aspect of this, it seems to me to be in their interest to also allow their currency to appreciate, which they've begun to do a little bit of late. And I agree with you that the rapid growth in China is putting upward pressure on commodities globally, and you can see those commodity prices react when the Chinese begin to tighten their monetary policy or their fiscal policy a little bit.

China needs not only to fight inflation, but it needs to shift the composition of its demand from exportled growth to domestic demand-led growth. The U.S. was running huge international deficits with inadequate savings. As we get back to full employment we ought to be doing this with more of our own saving, less consumption, less housing spending, less financial innovation, which came back to haunt us. So, we need to stop doing some of the things we were doing, run better balances in our international accounts, which means less reliance on domestic spending here and more reliance on net exports abroad.

The Chinese cannot count on the U.S. consumer at Wal-Mart supporting their economy anymore. They need to find domestic demand in China to support their economy. So we have this very peculiar situation globally, what people call the "uphill flow of capital." Why should capital be flowing out of an emerging market economy? It's not the way this has worked historically.

The appreciation of the yuan would help in that regard too: it would help contain inflation and it would help shift demand in China from export-dependence to domestic demand-dependence. It's not going to be easy for China.

Speaker: Essentially that's a really rosy scenario. So, you see the decline in the dollar being a soft landing and everything working out?

MR. KOHN: I think, so far, so good. The key, to me, is confidence in the U.S. There isn't any competition for a reserve currency, so I think the dollar will remain at the center of trade. The euro is having terrible problems. I can remember going to conferences 15 years ago where people talked about a tri-currency world — the deutschmark, the dollar, and the yen — but Europe and Japan aren't real competitors for a reserve currency. The U.S. dollar is going to remain the focus, I think, of a lot of financial activity, a lot of trade activity. But that requires people to have confidence that the Federal Reserve will not let inflation get out of control so that the purchasing power of the dollars they acquire will be protected. And I think ultimately it's going to require some confidence that our fiscal authorities will bite the bullet and do the tough stuff because if they don't, at some point, I think we're going to find ourselves in a very difficult position where the Treasury is competing with the private sector for scarce savings, driving up interest rates. So, I think it requires the policy authorities to behave in a responsible way, and if they do, I don't see a hard landing for the dollar. If they don't, yes.

SPEAKER: Let me follow up with a question going in the opposite direction. So, China's currency is going up a little and it will keep going up a little, but everybody else seems to be in a competition to hit the bottom. So, what happens if the U.S. fails to lower its currency sufficiently and everybody else gets there first? What kind of challenges does that pose for the U.S.?

MR. KOHN: I don't think most other countries — the big, developed countries — are in a competition to lower their currencies relative to the dollar. I'm not sure I agree with the premise of your question. People worry about that. So, this was the accusation thrown at the Federal Reserve when it started this QE, that it was trying to start a competition, a beggar thy neighbor dollar policy where you just lowered your currency.

I think first of all, the yen, if anything, has been remarkably strong for reasons that aren’t obvious to me. The euro is having its problems but this is not deliberately engineered to weaken the euro. What I sense is that the emerging market economies — China and the ones tied to it — are not trying to lower their currencies, but they’re not allowing them to appreciate as rapidly as they should. So, so far, I’m not as concerned about a race to the bottom. I do worry that if those currencies don’t appreciate and the U.S. trade balance remains very adverse, the protectionist pressures in the Congress and in the country will get more intense.

If you said three years ago, we’re going to go through the kind of recession we’ve been through, and the slow climb out, I would have predicted much worse protectionism than we’ve actually experienced. I think both the Bush and Obama Administrations and countries abroad have done a good job resisting some of those protectionist tendencies, but I don’t know how long that will hold up.

I worry about that and I worry about the capital controls that these emerging market economies are putting on to keep their currencies from appreciating. Some of that might be okay in a temporary, targeted way, but a spread of capital controls is going to impede the efficient flow of capital around the world. There’s a lot of discussion that the G-20, the IMF, should start putting in place some guidelines about what are acceptable capital controls and what aren’t, and I hope there’s movement in that direction. Yes?

SPEAKER: There’s an article recently in the *Financial Times* questioning the importance of the link between exchange rates and exports. The argument is that U.S. companies, if they see a market, they can expand production in that market and not export. And so the argument is that CEOs view the world very differently, and they just don't see the importance that's being placed on the discussion of exports and the link to exchange rates.

MR. KOHN: I think one can easily exaggerate that importance, but I don't think it's zero. Empirically, over time, as you look at the flows of imports and exports, they do respond to relative prices. And those CEOs, yes, are moving, as they see China which, I think, was the focus of this article — and Southeast Asia developing as markets, they want to be involved in those markets. They move factories there, but I also think that exactly what's produced over there versus what's produced here isn't always clear, whether some of the capital equipment might be produced here that goes into those factories there, how much is imported, how far up and down the value chain the imports go — all those factors, on the margin, will be affected by relative prices. Those same CEOs are trying to maximize profits for their shareholders and if it's cheaper to produce something here and ship it to China than it is to produce it in China, over time, that's what will happen.

So, I think those prices matter.

SPEAKER: I'd like to ask a question about the Fed's balance sheet and the exit strategy. One of the things that I think many of us watched with astonishment and admiration was the way the Fed took the patient into the operating theater and hooked him or her up to all kinds of life-sustaining devices. The commercial paper market vanished, suddenly you were providing short-term financing, and it went on and on. And as I look at your Figure 5, which is one that I think we've seen in various incarnations before, the one remaining big lump in here is mortgage backed securities. And knowing as we do that so much of the flow of reasonably priced credit has depended on the securitization markets, and knowing that the banks, although they have restored their capital, do not seem to be taking reserves and writing off bad assets in such a way that would begin to restore a flow through the securitization market on anything like the terms that we'd seen before, I'd be interested in your view as to how this impacts both what you're going to do and credit in the economy generally.

MR. KOHN: Right. So, just as a little bit of background, the first effort at quantitative easing in the fall of '08 was to buy a whole bunch of mortgage-backed securities. And that was a particularly attractive option at that time because even government guaranteed mortgage-backed securities — and these are all government guaranteed mortgage-backed securities, there's no private stuff here — weren't trading very well in the markets. They were very illiquid, and the spread between mortgage rates and the rates on mortgage-backed securities and Treasury rates was extraordinarily high. So, that looked like an effective way we could get into the markets without taking any credit risks because it was backed by the U.S. Government. By that time the U.S. Government backed Fannie and Freddie, so we weren't taking any credit risk and we could be particularly effective in these purchases, helping both the housing market but also the economy more broadly.

My impression right now is that the government guaranteed mortgage-backed securities markets are working fine, the spreads are very low. I was on the Board as recently as August when we debated what to do about the maturing mortgage-backed securities and the thought was that the Fed's holdings of mortgage-backed securities were so large relative to the market that, if anything, it might even be impeding the liquidity in that market, so we decided to roll them over into Treasury securities. That was attractive both because it seemed like it would help the market and also it would get the Federal Reserve a little bit out of this credit allocation game. So, actually I'm not concerned about the market for mortgage-backed securities with government backing, which is the one we were involved in.

The other securitization markets are reviving slowly. The consumer credit markets seem to be coming back. In the mortgage markets, I would say the commercial real estate securities markets, there are some signs of life, some of the better deals are getting done. This is slowly reviving as that market seems to be coming sort of to a bottom. But it's still quite impaired and the same I would say is true for non-conforming residential mortgages, which aren't backed by Fannie and Freddie.

So, I think those markets are coming back slowly. That's another example of markets where, unlike the bond and the stock market, things haven't quite revived, but there's not much the Fed can do about those markets. We were limited to the government guaranteed market and that's working fine.

All right. Time for lunch.