UNWINDING EMERGENCY FEDERAL RESERVE LIQUIDITY PROGRAMS AND IMPLICATIONS FOR ECONOMIC RECOVERY

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UNWINDING EMERGENCY FEDERAL RESERVE LIQUIDITY PROGRAMS AND IMPLICATIONS FOR ECONOMIC RECOVERY

Thursday, March 25, 2010

U.S. HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, D.C.

The committee met, pursuant to notice, at 10:03 a.m., in room 2128, Rayburn House Office Building, Hon. Barney Frank [chairman of the committee] presiding.

Members present: Representatives Frank, Waters, Velazquez, Watt, Sherman, Meeks, Moore of Kansas, Capuano, Baca, Lynch, Miller of North Carolina, Green, Cleaver, Bean, Perlmutter, Donnelly, Foster, Minnick, Adler, Grayson, Himes, Peters; Bachus, Royce, Paul, Hensarling, Garrett, McHenry, Marchant, McCotter, Posey, Jenkins, Lee, Paulsen, and Lance.

The CHAIRMAN. The hearing will come to order, which means the photographers will get out of the way. This is an important hearing. We have had for some time now the Federal Reserve System under the leadership of Chairman Bernanke playing a very active role in dealing with the problems generated by the financial crisis of 2008 or that culminated in 2008. I believe the Federal Reserve has played a very constructive role in providing liquidity in ways that helped diminish the negative effects, and I believe the chairman and the system have also been responsible in making clear that they are aware of the need to undo this in a way that is protective of the taxpayers but also is not going to damage the economy and is not done prematurely.

The chairman of the Subcommittee on Domestic Monetary Policy, the gentleman from North Carolina, Mr. Watt, has been closely monitoring this. I think he has been playing a very constructive role, and I will be turning over the job of presiding over this hearing to him, because he has taken the lead in this. And as we said, the Federal Reserve has a dual role, which is to make sure that it continues to be supportive of the economy, but that it also gets back to a more normal status in a way that does not cause damage.

I will repeat publicly now what I have mentioned privately to Chairman Bernanke. Part of my job here as chairman is to hear from other members about what their current concerns are. Not surprisingly, in a bipartisan way, I have heard concerns from a number of members about commercial real estate and the impending problems with commercial real estate, with loans that have to be rolled over with problems of valuation, people concerned that loans that are fully performing in terms of the income may be jeopardized. One of the facilities that we are talking about here that's due to expire has a role in commercial real estate, so while I will not be able to stay for the whole hearing, Mr. Chairman, I hope you will be addressing what we can do about commercial real estate. I appreciate the fact that you, as well as other regulators, had sent some members of your staff here to talk to us about what could be done. Some of the members on this committee—Ms. Kosmas of Florida, Mr. Minnick of Idaho, Mr. Klein of Florida, and Mr. Gutierrez of Illinois—have various proposals both to the regulators and that could be legislated to deal with this. I think there's general agreement that dealing responsibly with the commercial real estate is very important.

One of the things that occurs to me again to stress is some of this has to do with concerns over the accounting, and I would reiterate the position we have been taking. I don't think we should be telling the accounting board what to do or trying to, but we can, I think, urge the regulators to show some discretion and flexibility as they act on what the accounting rules require.

So with that, I am now going to recognize the gentleman from Alabama for 2 minutes, according to the Minority's list, and the remainder of the hearing will be under the chairmanship of the gentleman from North Carolina.

Mr. BACHUS. Thank you, Mr. Chairman. Thank you for holding this hearing, and I thank you, Chairman Bernanke, for your testimony. The Federal Reserve, with a trillion-and-a-half dollars of additional liquidity in the system, is faced with a very difficult problem—how to vacuum that money out fast enough to avoid hyperinflation, but to do so without stalling a recovery.

Chairman Frank, an exit strategy is made necessary in the first place due partially to a series of interventions by the Fed and the Treasury that were both unprecedented and highly controversial, the most questionable of which was the use of 13(3) authorities to rescue individual firms and their creditors under the doctrine of "too-big-to-fail." Of course, House Republicans have rejected the concept of "too-big-to-fail" in the long term.

Now is the time for the Federal Government and the Fed to get out of the bailout business. As I have said previously, the term "intervention" implies that the government is interfering with the economy and market forces. An intervention creates an artificial condition in which the system becomes increasingly dependent on government action. You see that with the GSEs. As with any addiction, an altered state is created where the only choices are permanent addiction or somewhat painful withdrawal.

That is why a centerpiece of the Republican regulatory reform solution is not only to end "too-big-to-fail" but to rein in the Fed's 13(3) authorities consistent with that goal. To his credit, Chairman Frank has incorporated several of these ideas in the regulatory reform bill that passed the House in December. While there was much that we disagree with, the need for limitations on the Fed's authority to conduct large-scale bailouts of individual firms was one area in which there was bipartisan consent.

In conclusion, withdrawing excess liquidity and returning the Fed to its more traditional monetary policy role will be difficult. If done incorrectly, it may negatively impact the economic recovery and result in higher borrowing costs for individuals, corporations and the U.S. Government. But this transition must take place.

Thank you, Mr. Chairman.

Mr. WATT. [presiding] The gentleman's time has expired, and I will yield myself—I think the balance of the time is 5 minutes.

In response to the global economic crisis, the Federal Reserve injected over $2 trillion into the economy through various liquidity initiatives, including the Term Asset-Backed Securities Loan Facility, the Commercial Paper Funding Facility, and the Fed's commitment to purchase about $1.25 trillion of mortgage-backed securities.

The immediate result of the Fed's action was to expand this balance sheet dramatically and to put an unprecedented volume of money into the banking system. These steps were designed to unfreeze the domestic credit markets, and many economists credit the decisive steps taken by the Fed with saving the U.S. economy from collapse and staving off an economic downturn that might have equalled or exceeded the Great Depression.

The central issue of today's hearing is how the Fed will decide the proper timing and sequencing of unwinding these emergency liquidity programs. The Fed must withdraw this liquidity while keeping inflation in check and encouraging job growth, all without hurting the fragile economic recovery that is under way. Every analysis I have seen has suggested that this is a delicate balancing act that will have to be done just right to avoid significant damage to the economy. If recent history is any guide, any decisions the Fed makes to carry out this delicate balancing act, regardless of what these decisions are, will be second-guessed by the Congress and the public, and this could also lead to questions about the independence of the Fed.

I'm hopeful that we can use this hearing to understand better the policy options available to the Fed to unwind these programs and the potential policy implications of these various options. At the same time, I think we should be careful not to infringe on the Fed's ability and willingness to exercise its independent judgment about which options will be the most desirable and effective.

So I view this hearing as an effort to educate members of our committee, not as a forum for us to try to intimidate or browbeat the Fed into pursuing specific options. We have asked the witnesses to provide information about specific monetary policy tools and options that are available to the Fed, including paying interest on reserves, entering reverse repurchase agreements, utilizing the recently introduced Term Deposit Facility, conducting direct asset sales of the market-backed securities it has purchased, and any other options that might be appropriate.

We need to understand the projected advantages and disadvantages of each option so we'll understand better what the Fed is doing when it uses particular options, and perhaps even be in a position to explain to our constituents why particular steps are being taken.

I look forward to Chairman Bernanke telling us how the Fed can effectively unwind its emergency liquidity programs while reducing inflationary fears, encouraging job growth, and managing the fragile economic recovery, knowing full well that we all expect him to be the master conductor who will wave the magic wand and lead our economy to play sweet music again.

With that, I will submit the balance of my statement for the record, and I will recognize Mr. Paul of Texas, the ranking member of the Domestic Monetary Policy Subcommittee, for 3 minutes.

Dr. PAUL. I thank you, Mr. Chairman, and welcome, Chairman Bernanke. On February 24th, we had our Humphrey-Hawkins meeting here, and I asked some questions about some of the things the Fed had done in the past, and the comments you made included the fact that you considered this rather bizarre, what I was saying. Chairman Frank followed up with sending a letter and asking to get some clarification for you to look into it, and even suggested that you and I get together so I can present exactly what my concerns are and see if we can resolve it. And I'm certainly open to that, so I hope that we can follow up on that and the suggestions of Chairman Frank.

But I also wanted to make a comment about the March 19th ruling at the U.S. Court of Appeals in Manhattan, because once again, the Federal Reserve lost their case against the—I guess it was Bloomberg filing for a Freedom of Information Act for information dealing with the $2 trillion of loans during the crisis.

Of course, that was ruled in a lower court, and the Court of Appeals has upheld this, and the main argument the Fed uses in the court as well as here in the hearings is that if we knew so much about these banks and where these loans are going, it would stigmatize these companies and banks and do harm to their reputation and make our problems worse. I sort of understand that argument, even though I don't agree with it, because in a way, that challenges the whole notion of what the SEC exists for. They want accounting procedures. They don't want to hide information. And if they do, if it's not out in front, it deceives the investors. So in a way, the SEC is fighting to get information to notify investors, and if they don't do it right, they get charged with fraud. But it seems to be perverse that the Federal Reserve takes a different position that if a company is in trouble or a bank is in trouble, what we don't want to do is let the customers know. So I find that rather challenging, because I think revelation of what's going on, and what's going on especially now with the financial crisis, is what the American people want.

I'm also interested in finding out someday whether or not you will appeal this case that was ruled on March 19th, and I think the taxpayers would like to know how much does the Federal Reserve really spend on their legal counsels? I'm sure there are a lot of lawyers, and I know you don't have to come to the Congress to get an appropriation for this. So I would like to know how you pay these bills and how much you pay.

So these are the things that we need to talk about, but also in the question-and-answer session, I do want to bring up some specifics about the challenges that you have for someday maybe shrinking the balance sheet, but I will pursue that in the question-and-answer period. Thank you.

Mr. WATT. The gentleman's time has expired. The gentleman from Texas, Mr. Hensarling, is recognized for 1½ minutes.

Mr. HENSARLING. Thank you, Mr. Chairman. On Sunday night, the Nation's fiscal future went from grim to grimmer. If one takes out the Bernie Madoff accounting gimmicks like the timing shift, the unpaid-for doc fix, the raid on Social Security, and the double accounting for the half a trillion dollars of Medicare cuts, the true cost of the government health care takeover bill is $2.3 trillion, or another $20,000 per American family.

This is on top of the fact that our deficit has increased tenfold in the last 2 years. The President has submitted a budget that will triple the national debt over the next 10 years, a budget that even his own OMB Director says is unsustainable. Spending as a percentage of the economy is 24.7 percent of GDP, the highest since World War II. This has caused CBO Director Doug Elmendorf to say, "The outlook for the Federal budget is bleak. U.S. fiscal policy is on an unsustainable path."

Economist Robert Samuelson has said about our spending patterns, "It could trigger an economic and political death spiral." Unless the Congress and the President have a sudden epiphany of fiscal sanity, this story does not have a happy ending. It ends in either job-crushing, family-budget-crushing tax increases, or skyrocketing interest rates as we beg the Chinese to buy more of our debt. Our level of inflation will make us look longingly and nostalgically upon the Carter era. Clearly, the actions of the President, the Congress, and the blurring of the lines with the Federal Reserve between fiscal and monetary policy will have much to do with the future, and I look forward to the chairman's testimony.

Mr. WATT. The gentleman's time has expired. The gentleman from New Jersey, Mr. Garrett, is recognized for 1½ minutes.

Mr. GARRETT. Thanks, Mr. Chairman. Today, obviously we're going to be discussing the Fed's exit strategy from the unprecedented propping up of the economy due to the financial crisis.

Back on February 10th, you were here, and you talked about one of the tools that you now have, and that's paying interest on reserves held at the Fed. I would think, and experts seem to tell me that trying to use this and other tools is going to be a real challenge for the Fed in order just to get it all right. And that's not just me saying that. Renowned Fed historian Alan Meltzer said, for instance, that he believes that the Fed's anti-inflationary exit strategy will fail. He asserts that the efforts to reduce inflation back during the 1970's failed because, as the chairman points out, if you do it prematurely, if it ends prematurely. And if it ends prematurely, it's because of public pressure, pressure from the public, pressure from Congress, from the Administration, and they complain loudly because, well, these things affect the employment rate or the unemployment rate.

We're sort of in the same situation today with high current and prospective unemployment, and so you may be facing, as you realize, a similar dilemma. So, here you have these political obstacles, and I'm wondering if the Chairman and others at the Fed have concerns about the political ramifications if the Fed were to, say, hold reserves on the balance sheet of around a trillion dollars, interest rates go up to say around 5 percent that you're paying out on those, and in effect, the Fed will be paying out, at that rate, $50 billion every year with that balance sheet and the interest rates stayed at that level. Some might say, then, well, the Fed would be paying $50 billion to banks not to lend. So I'll be curious to see how the Fed will be able to deal with that political ramifications.

Mr. WATT. The gentleman's time has expired. We are pleased today to have again the Chairman of the Federal Reserve, Chairman Bernanke, and we will now recognize the Chairman for his statement.

STATEMENT OF THE HONORABLE BEN S. BERNANKE, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

Mr. BERNANKE. Thank you, Chairmen Frank and Watt, Ranking Members Bachus and Paul, and other members of the committee and subcommittee. I appreciate the opportunity to discuss the Federal Reserve's exit strategy from the extraordinary lending and monetary policies that it implemented to combat the financial crisis and support economic activity.

As you know, I previously submitted prepared testimony for a hearing on this topic that was canceled because of weather conditions. I requested that testimony be included in the record of this hearing. This morning, in lieu of repeating my previous prepared statement, I would like to summarize some key points from the earlier testimony and update the committee on recent developments.

Broadly speaking, the Federal Reserve's response to the crisis and the recession can be divided into two parts. First, our financial system during the past 2½ years experienced periods of intense panic and dysfunction during which private short-term funding became difficult or impossible to obtain from any borrowers. The pulling back of private liquidity at times threatened the stability of financial institutions and markets and severely disrupted normal channels of credit.

In its role as the liquidity provider of last resort, the Federal Reserve developed a number of programs to provide well-secured, mostly short-term credit to the financial system. These programs, which imposed no cost on taxpayers, were a critical part of the government's efforts to stabilize the financial system and restart the flow of credit to American families and businesses. Besides ensuring that a range of financial institutions, including depository institutions, primary dealers, and money market mutual funds had access to adequate liquidity in an extremely stressed environment, the Federal Reserve's lending helped to restore normal functioning and support credit extension in a number of key financial markets, including the interbank lending market, the commercial paper market, and the market for asset-backed securities.

As financial conditions have improved, the Federal Reserve has substantially phased out these lending programs. Some facilities were closed over the course of 2009, and most others expired on February 1st. The Term Auction Facility under which fixed amounts of discount window credit were auctioned to depository institutions, was discontinued in the past few weeks. As of today, the only facility still in operation that offers credit to multiple institutions, other than the regular discount window, is the Term Asset-Backed Securities Loan Facility or TALF, which has supported the market for asset-backed securities, such as those backed by auto loans, credit card loans, small business loans, and student loans.

Reflecting notably better conditions in many markets for asset-backed securities, the TALF is scheduled to close on March 31st for loans backed by all types of collateral except newly issued commercial mortgage-backed securities or CMBS, and on June 30th for loans backed by newly issued CMBS.

In addition, the Federal Reserve has been normalizing the terms of regular discount window loans. We have reduced the maximum maturity of discount window loans from 90 days to overnight for nearly all loans, restoring the pre-crisis practice. In mid-February, the Federal Reserve also increased the spread between the discount rate and the upper limit of our target range for the Federal funds rate from 25 basis points to 50 basis points.

We have emphasized that both the closure of our emergency lending facilities and the adjustments to the terms of discount window loans are responses to the improving conditions in financial markets. They are not expected to lead to tighter financial conditions for households and businesses, and hence do not constitute a tightening of monetary policy, nor should they be interpreted as signaling any change in the outlook for monetary policy.

The second part of the Federal Reserve's response to the crisis and recession, besides the provision of liquidity to the financial system, involves both standard and less conventional forms of monetary policy. After reducing short-term interest rates nearly to zero, the Federal Open Market Committee provided additional monetary policy stimulus through large-scale purchases of Treasury securities, agency mortgage-backed securities, and agency debt. All told, the Federal Reserve purchased $300 billion of Treasury securities and will conclude purchases of $1.25 trillion of agency MBS and about $175 billion of agency debt at the end of this month.

The Federal Reserve's purchases have had the effect of leaving the banking system highly liquid, with U.S. banks now holding more than $1.1 trillion of reserves with Federal Reserve banks. A range of evidence suggests that these purchases and the associated creation of bank reserves have helped improve conditions in mortgage markets and other private credit markets and put downward pressure on longer-term, private borrowing rates and spreads.

At its meeting last week, the FOMC maintained its target range for the Federal Funds Rate at zero to one-fourth percent, and indicated that it continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations are likely to warrant exceptionally low levels of the Federal Funds Rate for an extended period.

In due course, however, as the expansion matures, the Federal Reserve will need to begin to tighten monetary conditions to prevent the development of inflationary pressures. The Federal Reserve has a number of tools that will enable it to firm the stance of policy at the appropriate time.

Most importantly, in October 2008, the Congress gave the Federal Reserve statutory authority to pay interest on balances that banks hold at the Federal Reserve banks. By increasing the interest rate on banks' reserves, the Federal Reserve will be able to put significant upward pressure on all short-term interest rates, as banks will not supply short-term funds to the money markets at rates significantly below what they can earn by holding reserves at the Federal Reserve banks. Actual and prospective increases in short-term interest rates will be reflected in turn in higher long-term interest rates and in tighter financial conditions more generally.

The Federal Reserve has also been developing a number of additional tools it will be able to use to reduce the large quantity of reserves currently held by the banking system. Reducing the quantity of reserves will lower the net supply of funds to the money markets, which will improve the Federal Reserve's control of financial conditions by leading to a tighter relationship between the interest rate paid on reserves and other short-term interest rates.

Notably, to build the capability to drain large quantities of reserves, the Federal Reserve has been working to expand its range of counterparties for reverse repurchase operations beyond the primary dealers and to develop the infrastructure necessary to use agency MBS as collateral in such transactions. In this regard, the Federal Reserve recently announced the criteria that it will be applying in determining the eligibility of money market mutual funds to serve as counterparties in reverse repurchase agreements.

As an additional means of draining reserves, the Federal Reserve is also developing plans to offer to depository institutions term deposits which are roughly analogous to certificates of deposit that the institutions offer to their own customers. A proposal describing a Term Deposit Facility was recently published in the Federal Register, and the Federal Reserve is finalizing a revised proposal in light of the public comments that have been received. After a revised proposal is reviewed by the Board, we expect to be able to conduct test transactions this spring and to have the facility available if necessary thereafter.

The use of reverse repos and the deposit facility would together allow the Federal Reserve to drain hundreds of billions of dollars of reserves from the banking system quite quickly should it choose to do so.

When these tools are used to drain reserves from the banking system, they do so by replacing bank reserves with other liabilities. The asset side and the overall size of the Federal Reserve's balance sheet remain unchanged. If necessary, as a means of applying monetary restraint, the Federal Reserve also has the option of redeeming or selling securities. The redemption or sale of securities would have the effect of reducing the size of the Federal Reserve's balance sheet as well as further reducing the quantity of reserves in the banking system. Restoring the size and composition of the balance sheet to a more normal configuration is a longer-term objective of our policies.

In any case, the sequencing of steps and the combination of tools that the Federal Reserve uses as it exits from its currently very accommodative policy stance will depend on economic and financial developments and our best judgments about how to meet the Federal Reserve's dual mandate of maximum employment and price stability.

In sum, in response to severe threats to our economy, the Federal Reserve created a series of special lending facilities to stabilize the financial system and encourage the resumption of private credit flows to American families and businesses. As market conditions and the economic outlook have improved, these programs have been terminated or are being phased out.

The Federal Reserve also promoted economic recovery through sharp reductions in its target for the Federal Funds Rate and through large-scale purchases of securities. The economy continues to require the support of accommodative monetary policies. However, we have been working to ensure that we have the tools to reverse at the appropriate time the currently very high degree of monetary stimulus. We have full confidence that when the time comes, we will be ready to do so.

Thank you, Mr. Chairman.

[The prepared statement of Chairman Bernanke can be found on page 69 of the appendix.]

Mr. WATT. I thank the Chairman for his statement, and we will now recognize members for 5 minutes each. I will recognize myself initially for 5 minutes.

Chairman Bernanke, I guess one thing I usually am pretty aggressive about is the balance between unemployment and inflation or an emphasis on unemployment, and again there seems to be more emphasis in your statement about making sure we counter inflation than on the employment side. So I guess my first question would be, how should the high unemployment rate factor into the Fed's timing and sequencing decisions? And if you could elaborate on that a little bit more.

Mr. BERNANKE. Certainly. Of course, as you know, we have a dual mandate from the Congress to pursue both maximum employment and price stability, and we intend to do that. The two are mutually reinforcing, in particular maintaining stable inflation over the longer term increases economic growth and improves employment potential in that respect. So it's very important that we pay attention to both sides of the dual mandate, and we will do so.

Currently, the employment situation is very weak, as you know. The unemployment rate is close to 10 percent, and about 40 percent of the unemployed have been unemployed for a long term. In response to that, the Federal Reserve has been maintaining extremely accommodative policies. We have lowered the interest rate almost to zero. We have increased the size of our balance sheet, as I described, to $2.3 trillion, 2½ times what it was before the crisis. So, we are producing some very substantial support for the economy. And as we have indicated in our statements, we believe that the overall configuration of resource utilization and inflation will be such that accommodative policy will be justified for an extended period. And so we are certainly not ignoring that side of our mandate.

Mr. WATT. I'm sure my ranking member may think that I'm throwing you a softball when I ask this question, but I seem to detect in your statement a greater emphasis on transparency at the Fed, particularly on page 4 where you say that the Federal Reserve recently announced the criteria that it will apply to determine the eligibility of money market mutual funds to serve as counterparties. That's something that you are announcing pretty far in advance. And then a proposal describing a Term Deposit Facility was recently published in the Federal Register, and the Federal Reserve is finalizing a revised proposal. Am I misreading that you all seem to be putting a greater emphasis on providing more transparency to the public and to the people that you deal with about how the Fed is going to play this out?

Mr. BERNANKE. We have been very much committed to maintaining high transparency. We will continue to explain and communicate as clearly as possible our criteria and how we're going to forward with withdrawing stimulus. And we'll be providing information, as we already are, for example, on the specifics of our asset purchases and what we hold.

As I mentioned in my testimony, we have just recently phased out, and with the TALF in June we will have phased out all of our 13(3) facilities that we created to support troubled financial markets. And as I mentioned in my Humphrey-Hawkins testimony before this committee, we are quite open to a very full auditing of those facilities by the GAO, including with an appropriate delay the names of all the firms to which we made loans. So we understand the importance of transparency, and I promise you that we will continue to do that.

Mr. WATT. And you have announced closing dates for a couple—at least one of the facilities—March 31st and June 30th. Are there potential specific impacts that we could see from closing those facilities? Could you elaborate on whether there may be specific impacts in doing that?

Mr. BERNANKE. Mr. Chairman, these facilities were created under the 13(3) emergency authority because conditions were unusual and exigent. The markets were highly disrupted, and highly dysfunctional. In substantial part because of our interventions, those markets are now working quite normally. So there's no longer a justification for holding those facilities open. And as I mentioned, we had closed most of them as of February 1st, and so far we have seen no adverse circumstances.

In the case of the asset-backed securities market, which is the one remaining area where we are providing support, while that market has not completely returned to normal, we have seen considerable improvement. For example, the spreads between the ABS yields and the Treasury yields have come in considerably. Those markets are now exhibiting issuances without any kind of Fed support. And so, you know, we believe that it's appropriate as those markets are returning to a more normal condition that we withdraw that support.

Mr. WATT. Thank you. My time has expired and I'll recognize the gentleman from Alabama, Mr. Bachus.

Mr. BACHUS. Thank you. Chairman Bernanke, I want to acknowledge that you have been talking about transparency for several years, and you have been an advocate on the Board, and I appreciate that. I think there are distinctions we draw between transparency when it comes to the 13(3) actions and monetary policy, and I think there's a consensus on the 13(3) programs, and some of the extraordinary things, and I think that we can get there on the monetary policy.

As part of your quantitative easing strategy, you're going to stop purchasing mortgage-backed securities at the end of this month.

Does that indicate that you believe that maybe housing has reached a sustainable level?

Mr. BERNANKE. Well, the housing market, Congressman, as we all know, is still quite weak, and we have just seen some very weak sales numbers in the last few days. But we do believe that the mortgage markets are performing better and mortgage rates are quite low from a historical perspective, and moreover, our purchases of mortgage-backed securities were also intended to create better conditions in private credit markets more broadly. And we're seeing, for example, record issuance in the corporate bond market. So we think that our program has been effective.

We announced quite a while ago that we were going to stop those purchases, taper off those purchases at the end of this quarter. When we did that, we of course were concerned that when we stopped that, mortgage rates might pop back up or we might see some fallback in financial conditions. We'll of course continue to watch that situation, but so far, there seems to be very little negative reaction, which is encouraging, and that would allow us to stop our purchases without concerns about the implications for the economy.

Mr. BACHUS. I guess that is some indication that you believe we may have reached sustainable prices in housing or at least the short-term prospects for housing are more stable?

Mr. BERNANKE. As I have said in the past, knowing the correct value for any asset is a difficult challenge, but many economists have pointed out that the ratio of house prices to rents, for example, is very much in a normal range, and between low mortgage rates and the decline in house prices, affordability of housing for people who want to buy homes is now at a very good level.

Mr. BACHUS. All right. Thank you. I appreciate that some of the actions that were taken in the financial markets by the Fed were a result of an economy that was under extreme stress. I'm not sure the American people realize the challenges, and they were somewhat unprecedented. And so I think some of the actions that were taken were, because of financial markets, in what I have said was a heart attack or a stroke condition almost.

Having said that, we want to avoid that in the future. And my concern as we're talking about regulation, we're talking about tools to deal with this, but—and I would like your thoughts on this. I don't believe that even with all the tools and all the regulations, if we don't get our fiscal house in order, the Congress, you're not going to be successful. I think reining in the growth of debt is simply going to be impossible for you to do your job if we don't do ours. And I have listed budget reform, entitlement reform, tax reform.

I think—do you agree that those—it's critical for Congress to take action and do that now to avoid another catastrophic event, whether it's 2 years, 5 years or 10 years from now?

Mr. BERNANKE. Congressman, we have very high deficits this year and next year, and given the severity of the recession, it's unlikely we could get a balanced budget in the next year or two. And I think we all understand that.

But my concern is that our projections, whether they come from the Administration or from Congress or from outside analysts, still show deficits between say 2013 and 2020 of between 4, 5, 6, and

7 percent of GDP, which, if that happens, would cause the ratio of debt outstanding to our GDP to rise to very high levels. I think while that's still sometime in the future, the risk exists that even today investors, creditors might become concerned about our ability to maintain a sustainable fiscal position.

So I think it is very important that the Congress try to develop a plan, a program, an exit that will be a credible plan for returning to a sustainable fiscal situation over the next few years.

Mr. BACHUS. Thank you.

Mr. WATT. The gentleman's time has expired. The gentlelady from California, Ms. Waters, is recognized for 5 minutes.

Ms. WATERS. Thank you very much, Mr. Chairman. I would like to thank Mr. Bernanke for being here today. The last time he was here, we had a limited discussion about the Federal funds rate. There's going to be some testimony here today by Dr. Ball of Johns Hopkins, where he says the Fed should not raise the Federal funds rate in the near term. His exact quote is, "Someday the economy will recover and the Fed should raise the Federal funds rate, not soon but someday." Would you agree with this assessment? How long would unemployment have to go in order for you to think it was appropriate to raise the Federal funds rate? Do you agree with Dr. Ball's assessment that the Fed should give greater weight than usual to unemployment when deciding how to set rates?

I raise this question because, as you know, the National Urban League released its State of Black America report for 2009 yesterday. We know that last month, Blacks were unemployed at nearly twice the rate of Whites, 15.9 percent to 8.8 percent. The gap since 1974 is just barely closing. In considering the question on the Federal funds rate, do you consider this wealth and employment gap to be a serious problem? Do you think that a rising tide for the overall economy will actually reduce the gap? Based on your experience as an economist, should we be targeting stimulus to the communities with the greatest needs? On and on and on. I guess I have been talking to you and others about the unemployment rate among African Americans, Latinos, and the rural poor for a long time. I hear nothing about what we can do in terms of targeting. I hear no plan coming forth about how we can involve these communities in opportunities that would reduce the unemployment. Can you help me out with this in some way today, in talking about the Federal funds rate or any other aspect of your responsibility to help us understand what we can do?

Mr. BERNANKE. Certainly. First, we are in complete agreement that the high unemployment rate is a tremendous social and economic problem in the United States today, and just a quick look at the figures verifies that minority immigrant populations suffer from much higher unemployment rates than the average.

And that's bad for social integration, it's bad for progress in the communities, so I absolutely agree with you that's a very severe problem, particularly when you have as you have today a lot of long-term unemployment. Because it's one thing to be out of work for a month or two, but if you're out of work for 6 months or a year, then you begin to lose your skills, you begin to become very unattractive to employers, and it's clearly a long-term negative and not just a short-term negative.

As I have said to Chairman Watt, the Federal Reserve takes very seriously its responsibility to try to induce maximum employment, and that's precisely why we have done these extraordinary things to go beyond zero interest policy to expanding our balance sheet and providing as much stimulus as we can to get the economy moving again, and we consider that to be very important.

As we exit at some point, of course, we'll try to pay attention—we will pay attention to employment and how that's evolving. We will not be able to wait until things are completely back to normal, because monetary policy takes some time to operate, and given those lags, we're going to have to anticipate to some extent the return of the economy back to normal conditions. But we certainly want to be sure that the economy is on a sustainable growth path and that jobs are being created as we begin to withdraw some of the—

Ms. WATERS. Excuse me, Mr. Chairman, I don't want to interrupt you. Do you have any ideas about what we could do about the extreme unemployment in these communities, rural poor, African Americans, Latinos?

Mr. BERNANKE. Sure.

Ms. WATERS. I understand what you're saying, and you correctly described the problem, reiterating what we all know, but what plans, what ideas do you have about how we can target these communities to get rid of this unemployment?

Mr. BERNANKE. Well, I was talking about the Federal Reserve's role, but there are certainly a number of things that Congress can consider.

Ms. WATERS. Well, now I really do want to know the Federal Reserve's role. Is there anything that you can recommend?

Mr. BERNANKE. I can recommend things. For example, I met yesterday with Community Development Financial Institutions, CDFIs—I'm sure you're familiar with those—who are taking funding and bringing it to underserved communities to try to create economic opportunities. I think that's a very valuable direction.

I know Congress is looking at education and training issues, and I think given the long-term unemployment issues, trying to make sure people can either retain their skills or get new skills is going to be very, very important. There are a number of proposals out there for job creation through fiscal measures. I think it's really up to Congress to decide what combination of actions to take, but certainly there are things that you can do through the States, for example, to try to increase employment. But many of those programs are fiscal, and therefore are the appropriate province of the Congress.

We at the Federal Reserve have a lot of economic analytical capability, and as you know, we are always willing and interested to provide technical assistance to any Congressperson working on a program. We have worked with Treasury on their employment programs, and we stand ready to provide any kind of help we can, and if you have some specific things you would like us to work with you on.

Mr. WATT. That might be one of those issues that we want to pursue outside the context of this hearing. The gentlelady's time has expired, and the gentleman from Texas, Mr. Paul, is recognized.

Dr. PAUL. I thank the gentleman for yielding. I imagine everybody agrees that the increase in the monetary base in this last year-and-a-half is probably historic. I don't think we have much in our history to look back at as a precedent. So I would assume that we can't look back too easily and look at trying to solve a problem like this and what we have to do and how much the monetary base has to shrink.

As we talk about this, I think most people assume that they're waiting for a signal from you when the balance sheet might shrink. But even in the Depression, when it shrunk 16 percent, it wasn't done purposely; it was the way the system was working back then. Can you give me a rather quick answer on this? Do you have any idea what percentage the base should shrink or might shrink, or is that something that you don't even want to address?

Mr. BERNANKE. No. I think we would like to bring the balance sheet back to something consistent with where it was before the crisis, which means enough to accommodate Americans' demand for currency plus a modest amount of reserves in the banking system, and that would suggest something under a trillion dollars I think would be—

Dr. PAUL. A trillion dollars?

Mr. BERNANKE. Or less, yes.

Dr. PAUL. Okay. Of course, that would be very unprecedented. During the crisis that Paul Volcker had to deal with from 1979 to 1982, it was considered a major problem. The inflation got out of hand at 15 percent and he had to come in and do something. And I guess the question is, how much did he have to shrink the balance sheet during those 3 years?

Mr. BERNANKE. Well, not very much. He was focused on money growth in particular. So he wasn't clearly in a situation where we are now where there are these large, unused balances. I would point out that he was focused on M1 and M2 growth. M1 and M2 are not doing anything now. They're very flat. It's just the base, as you point out.

Dr. PAUL. Excuse me, but the truth is, is during that time, which was considered very tight money, the monetary base was still growing, during those 3 years, the monetary base grew 31 percent. So my suggestion is, it might not be so easy to cut back, because even in the midst of an inflationary crisis like that, because maybe in 6 months or a year from now when you decide to do something, maybe there will be an increase in M1 and M2, and then it will be a different ball game when you're dealing with this.

But I have another question dealing with something you said on page 4 when you talked about one tool that you will have. Because quite frankly, I think if we get into a situation where this housing crisis reemerges, which I believe it is, it is going to be difficult for you to do what you say, because that's why you have been obviously hesitant to do anything.

But you said one of your tools will be to pay interest on the balances, and that will cause banks to do different things and borrowers to do different things. And of course, I see that as a method of price fixing. In the early part of the last century, the free market economists said that socialism couldn't work. It wouldn't work. It would fail. And socialism and communism would fail because of pricing. And I assume that you would endorse this principle that wage and price controls aren't necessarily the best way to handle rising prices. Is that a safe assumption?

Mr. BERNANKE. Absolutely.

Dr. PAUL. Okay. My question and concern in economic policy is, isn't fixing interest rates in order to get the economy to do something a form of price fixing? The importance of prices in a free market is to tell the businessman and the consumer what to do. If the price is too high, they don't buy, and the businessman responds to supply and demand. Why is that not true in money? Money is one-half of every transaction. So if we're working on this false assumption that you're exempt from the market forces and you have some type of unique ability to say, ah, interest rates are different. I know what is best. I know what they should be. They should be zero percent for 15 months instead of 16 months. Why does that logic not apply to fixing interest rates?

Mr. BERNANKE. Because if you believe that wages and prices are not perfectly flexible, and there are many that are not, then the economy can get pushed away from full employment, as it obviously is today. And economists of all stripes, including Milton Friedman and others, agree that using monetary policy, monetary policy can be a useful tool to try to create growth and stability. In this particular case, low interest rates create more demand and can help bring the economy back to full employment.

Now obviously there are limits to that, and we recognize those limits, but changing the interest rate is really just the other side of changing the quantity. Quantity and price are two sides of the same equation, as you know. So we can either change the quantity or we can change the price. By changing the price, we affect economic activity and try and achieve the objectives that the Congress has given us.

Dr. PAUL. Well, my fear is—

Mr. WATT. The gentleman's time has—

Dr. PAUL. —that your results will be the same as wage and price controls.

Mr. WATT. The gentleman's time has expired. The gentlelady from New York, Ms. Velazquez.

Ms. VELAZQUEZ. Thank you, Mr. Chairman. Good morning, Chairman Bernanke.

Mr. BERNANKE. Good morning.

Ms. VELAZQUEZ. The Central Bank is currently in the process of winding down the TALF facility which provided vital liquidity for commercial real estate and small business lending. Many experts have expressed concern that these lending sectors remain vulnerable to further losses. Without the TALF, what will the Fed do in the event that instability returns in the CRE or small business lending markets?

Mr. BERNANKE. Let me put aside just for a moment the CRE. In the other categories, credit cards and auto loans and student loans and small business loans, we have seen the secondary market, asset-backed securities market, coming back pretty well, and we have been seeing spreads that are normal. We have been seeing issuance outside the Fed's facility. So it's not 100 percent normal, but we have seen considerable improvement in those asset-backed securities markets.

Now CRE is a difficult problem, as you know, and the basic reason at this point is that the prices of commercial real estate across the country have dropped, in many areas 40 percent or more, which obviously makes the creditworthiness or their credit risks much greater, and has made it much more difficult to obtain credit.

We have been attacking that issue from a number of fronts at the Federal Reserve. The TALF is just one dimension. The commercial mortgage-backed securities market is not completely normalized, but it has improved, and those spreads have come in. And we believe that it's getting more and more difficult for us to justify our unusual and exigent emergency powers in the context of a market that is improving.

But we recognize there are a lot of issues still, and that's why we have, for example, issued guidance to the banks about how to manage their CRE portfolios, and in particular how to make sure that they provide credit where the borrowers are creditworthy, and try to help them work out loans that are troubled and find ways to solve that problem.

So we're working more through the banks now at this point than through the MBS market or CMBS market. But that is a troubled, certainly one of the most difficult areas right now.

Ms. VELAZQUEZ. Mr. Chairman, we continue to hear that small businesses are facing a problem of accessing credit. In your view, is the lack of liquidity the root cause of credit for small businesses? What is it?

Mr. BERNANKE. Well, there are a lot of reasons. There has certainly been a big drop in the demand for credit from small businesses because of weakness of the economy. And in some cases, small businesses have had financial reverses, which make it much more difficult to lend to them. But all that being said, there certainly are creditworthy small businesses that cannot obtain credit, and again, that has been an important priority of the Federal Reserve, and we have worked with the Congress and the Treasury as well to try to support small business lending.

Once again, we have issued guidance to the banks about encouraging lending to small businesses and have trained our own examiners to take a balanced perspective, that they not over-penalize loans to small businesses. We are trying to get as much feedback as we can. For example, we have inserted questions in the NFIB survey to get back more information from small businesses about their credit experience. And currently, our reserve banks around the country are holding meetings with small businesses, banks, and community development groups to try to understand better what the issues are and how we can improve small business lending.

So it's a tough problem. I think there are some proposals from Treasury that I think are worth looking at, but we are certainly working with the banks on this issue.

Ms. VELAZQUEZ. Can we talk about the $30 billion proposal from Treasury for a moment? Should regulators be concerned that the banks who participate in this program may stretch to make imprudent loans in an effort to reach lending levels that deliver higher interest rate incentives?

Mr. BERNANKE. There are various ways to structure the program, but all the ones that I understand basically make the bank have some skin in the game. That is, they share in the loan, and if the loan goes bad, then they'll lose at least part of the loss. And I think that's the reason to try to use the small banks in particular to make these loans, because they have the information and the expertise to make them. So as long as the banks have sufficient incentive to make good loans because they'll lose money if they don't, then I think that will reduce that risk considerably.

Ms. VELAZQUEZ. And do you think that without any strings attached to the $30 billion that the banks will make small business loans?

Mr. BERNANKE. There should be strings attached in terms of being able to report that they increased their lending by a certain percentage.

Mr. WATT. The gentlelady's time has expired.

Ms. VELAZQUEZ. Thank you.

Mr. WATT. The gentleman from California, Mr. Royce.

Mr. ROYCE. Chairman Bernanke, I think most economists believe that creating a massive new entitlement, the health care entitlement bill that we passed, is going to add to our deficit. I do not think anyone in here believes that we are going to cut half a trillion dollars out of Medicare, as we say we are in the bill, in order to help pay for it. So, Congress is adding to the deficit. And on that note, in recent weeks, Brookshire-Hathaway and Proctor and Gamble, and Lowes, and Johnson and Johnson's debt traded at lower levels, lower yields, than Treasuries of similar maturity.

And essentially, the market is saying it is now safer to loan to Warren Buffet than it is to the United States Government. Now, Mr. Geithner disagreed with that conclusion or that assessment. I would just ask you your view, because I do not know what else it could mean, and I would also ask if you have ever seen this in the bond market? What does this say about our fiscal outlook?

Mr. BERNANKE. It is very unusual, certainly. There are a number of possibilities. The one you raised, I guess, is one possibility, although if the U.S. Government is not paying off, then there's going to be a huge amount of economic dislocation that would affect everybody.

I think one of the issues recently has been, and this would be consistent with what you are saying, that the U.S. Government's very large debt issuances have been very big auctions with lots of borrowing going on, has put some pressure on the normal purchasers of that debt and they have had a preference for diversifying into corporate debt, as you described. So—

Mr. ROYCE. But, let me ask you about that because the Federal Reserve in one analysis I saw purchased a staggering 80 percent of the $1.5 trillion of debt issued by the Federal Government last year. If we run a trillion and a half deficit here, somebody has to buy it. And I think it was the PIMCO analysis that said that 80 percent of that was bought by the Federal Government.

I know there was some opposition from some people within the Fed in terms of doing that, but you have pundits quipping that, in essence, this is like a Ponzi scheme. So, with yesterday being the worst day since last July for 10-year U.S. Treasuries, is the Federal Reserve considering getting back into the business of buying U.S. Treasuries or are we laying off of that approach for awhile?

Mr. BERNANKE. Well, Congressman, that number is not correct. We purchased last year $300 billion in Treasuries, which was much less than 80 percent and that total number brought us back to $790 billion which is about where we were before the crisis. So, at this point, the Fed owns the smallest share of U.S. Government debt as it had for many, many years. We are not monetizing the debt and we have no immediate plans to do so in the future.

Mr. ROYCE. Let me ask you another question. I appreciate your analysis on that, and I was struck when I read the analysis from PIMCO and I do not know how they perceived the amount of government intervention into the market here, but let me ask you one last question. The Dallas Fed president, Richard Fisher, said of the easy money policy during the most recent housing boom, rates held too low for too long during the previous Fed regime were an accomplice to the reckless behavior.

Now, I remember The Economist, the British magazine, arguing at the time when we lowered the Fed funds rate to what effectively was below inflation, that we were going to face a boom, a bubble in the housing market. And they also argued that because Europe would have to follow suit to be competitive, it was going to cause a bubble there, as well.

And year after year after year that rate was held that low. I would just ask you, given the Fed's track record, what assurances do we have that the Fed will be any more vigilant when the next bubble begins to form? Is it even possible to take away the punch bowl, as they say, just as the party is getting started?

Mr. BERNANKE. I do not want to rehash history, but I think there is a lot of conventional wisdom out there about the earlier episode, and we have published a paper looking at the evidence, and I think it is much less clear than some people would make it.

But, putting that aside, we recognize that the very low interest rates we have today, that a number of people have been concerned about the possibility of creating a bubble in some asset class, I am not clear which one, and all I can say is that we agree that it is important to monitor what is happening in financial markets. We are doing that and although it is very difficult to know whether an asset is appropriately priced or not, we do not see at this point any major mispricing in important asset classes right now.

Mr. ROYCE. Thank you, Chairman Bernanke.

Mr. WATT. The gentleman's time has expired. The gentleman from California has deferred until later in the process, so the gentleman from New York, Mr. Meeks, is recognized for 5 minutes.

Mr. MEEKS. Thank you, Mr. Chairman. Chairman Bernanke, it is good to see you again. I just want to make sure that first, let me get an understanding with the talks in reference to interest rates. I know that at the last FMOC meeting, the President of the Federal Reserve Bank of Kansas City, Tom Hoenig, dissented in regards to the use of language about low rates for an extended period of time. He basically made the argument that does not give the Fed the flexibility that it would need in case the recovery happens at a quicker pace and that people are starting to build on expectations into the market place because of the low interest rates.

So, do you, I am just asking you, first of all, can you have the flexibility that you need and then if the economy improves at a quicker rate, can you be flexible without shocking markets that are building in the expectations about the low interest rates?

Mr. BERNANKE. Yes, we can. Mr. Hoenig's specific concern was the same one I talked to Mr. Royce about, which was about bubbles and asset imbalances, and as I say, we are looking at that issue. But, I think it is very important to keep in mind that when we talk about an extended period, we are not saying a fixed period of time, we are saying a period of time which depends on how the economy evolves. And our statement very specifically says it depends on the level of resource utilization or unemployment, it depends on what inflation is doing, and it depends on inflation expectations.

So, if those things begin to move, then obviously that is going to lead us to respond appropriately.

Mr. MEEKS. I'll tell you what my concerns are just in the housing market, for example, in that regard. What takes place, or what is taking place in America in a lot of communities, is a lot of people are underwater right now with their mortgages. And some are okay, they are making their payments if they have these adjustable rates because the interest rates are low. And so, they are not concerned because they are making it now, but if those interest rates suddenly jump up, then they are going to have a problem paying their mortgage, you know, that shock and where we go.

Now, Bank of America has recently, I just want to ask this question, has said that they are going to, as opposed to just reducing interest rates, they are going to reduce principal by as much as 30 percent. So, I would like to know: (a) do you think that would have a significant impact on reducing foreclosures in the future, because I'm concerned about foreclosures going up in the future; and (b) what is the Fed doing, if anything, to encourage other banks to lower the principal as opposed to just reducing interest rates?

Mr. BERNANKE. Well, I think one thing we are learning is that when it comes to addressing foreclosures, one size does not fit all. There are people with different types of problems. There are people who have a payment which they cannot afford and a lot of the programs we have seen so far, like the HAMP program, are about getting the payment down.

Then, you have people who are unemployed for a period of time. Maybe they can afford their house in a longer term, but for a period of time, they do not have the income and they need temporary help.

Then, you have a lot of people around the country who are underwater, as you say, and the Federal Reserve has argued for several years that one strategy is to help people who are underwater to build up equity again so that they will have an incentive to stay in the home and continue to make the payments.

Going forward, I think it is useful to have all these different strategies, because each different type applies to a different group of people. I don't know that much about Bank of America's specific approach. A lot depends on the details. But, I am glad to see that they are including this strategy. The industry was very reluctant to use principal reduction for a long time. And I am glad to see that they are opening up now the idea of using that as one tool to address foreclosures.

The Federal Reserve, as a bank regulator, we put out guidance in November of 2008, and we are certainly strongly urging banks to be responsible in restructuring of their mortgages where necessary, and in particular, in participating in the Administration's and Congress' plans to help underwater borrowers.

Mr. MEEKS. Do you see or do you have the concerns that I have, that we could have another foreclosure crisis, though, given the way that the markets are and the interest rates right now, especially those that are still in adjustable rates, especially those who are underwater, because they cannot refinance their mortgage to get a fixed rate and thereby—

Mr. WATT. The gentleman's time has expired, so the Chairman will perhaps answer that question.

Mr. BERNANKE. Later?

Mr. WATT. Later or briefly.

Mr. BERNANKE. Okay. We control the very short-term rates. There are very many fewer adjustable rate mortgages out there now than there were a few years ago. Most people have fixed-rate mortgages, and so they would not be affected very much by our policy.

Mr. WATT. The gentleman's time has expired. The gentleman from Texas, Mr. Hensarling.

Mr. HENSARLING. Thank you, Mr. Chairman. Good morning, Chairman Bernanke. Yesterday, we had a hearing, yesterday or the day before, with Secretary Geithner regarding the GSEs. In a line of questioning from my colleague from New Jersey, Mr. Garrett here, the Secretary first said that the debt of the GSEs was, "as I said, it is not sovereign debt." And he also said, "we are going to make sure that these institutions have the resources they need to meet their commitments past and future," which may be a distinction without a difference on whether or not the GSE debt is sovereign debt.

Clearly, as your balance sheet has inflated, a lot of this is agency MBS, a lot of it is clearly GSE paper. As I understand your current strategy, the program to purchase the agency MBS is about to wind down, or has wound down. Is that correct?

Mr. BERNANKE. At the end of March, yes.

Mr. HENSARLING. At the end of March? So, literally in a matter of days. But, you still have a lot of this on your balance sheet. As I understand it, your strategy is to retain most of it, although you, to hold to maturity, although you hold open the option of perhaps selling it when market conditions improve. Do I understand the strategy of the Fed correctly?

Mr. BERNANKE. We would like to get back to an all-Treasury portfolio within a reasonable amount of time. So, we are currently letting GSE paper that redeems, that matures, we're letting it roll off. And I anticipate that at some point we will, in fact, have a gradual sales process so that we can begin to move our balance sheet back to its pre-crisis condition.

Mr. HENSARLING. There was an article in The American Banker yesterday concerning your strategy. I will read from a portion of it.

It talks about when you announced that you would slow your MBS purchases, cease them by the end of the first quarter, that mortgage bankers winced.

"They fear that without the Fed to prop up such, securities would sink causing their yields relative to benchmarks like Treasury bonds to soar. Such an increase would, in turn, cause mortgage rates to jump, sapping demand for home loans in an already weak market, but it appears that the industry's worst fears were unfounded. Market participants point to several reasons for the relative stability. For one, their traditional MBS buyers that were pushed to the sidelines when the Fed came in are ready and waiting for their chance to get back into the market."

Would you agree with the assessment of that American Banker article?

Mr. BERNANKE. Broadly speaking, yes.

Mr. HENSARLING. Let me ask you this, Mr. Chairman, then. As you are aware, the Administration has not put forth a plan in dealing with the long-term future of the GSEs. Neither has Congress heretofore. I personally have introduced my own bill to deal with the GSEs that, over a 5-year period, would essentially send them back to a competitive marketplace by slowly ratcheting down their portfolio holdings, their conforming loan limits, raising their capital standards to that of insured depository institutions. You know, it's at last a plan.

I guess my question for you, Mr. Chairman, is, I do not believe anybody believes that we can do without the GSEs in the short term, but as you have said in earlier testimony, it is important for us to show a sustainable fiscal path for the future. How important is it that the future of the GSEs be included in that sustainable fiscal path, and if we do not do it, what are the implications for you unwinding your balance sheet?

Mr. BERNANKE. Well, I think, as I said last time, if we can begin to map out a future for the GSEs sooner rather than later, even if we do not execute that immediately, it will remove some uncertainty from the mortgage market and it will also help give confidence about the future of the Federal budget because it will give clarity about what obligations, implicit or explicit, the Federal Government is taking on.

Mr. HENSARLING. Mr. Chairman, if I could, I hate to be rude, but I see my time is winding down. I am going to attempt to slip in one more question. In the next panel, we are going to be hearing from economist Dr. Taylor. I read part of his testimony and if I could quote from it:

"Whether one believes that these programs worked or not, alluding to the Federal Reserve programs, there are reasons to believe their consequence going forward are negative. First, they raise questions about Fed independence. The programs are not monetary policy as conventionally defined, but rather fiscal policy or credit allocation policy or mundustrial policy, a word that has not been previously in my vocabulary, because they try to help some firms or sectors and not others and are funded through money creation rather than taxes or borrowing."

Perhaps you could comment upon that in writing, on whether or not you agree with that assessment. Thank you.

Mr. WATT. The gentleman's time has expired and we will allow subsequent written responses. The gentleman from Kansas, Mr. Moore, is recognized for 5 minutes.

Mr. MOORE OF KANSAS. Thank you, Mr. Chairman. Chairman Bernanke, looking at how debt and leverage have been used in the past decade by financial firms, non-financial businesses, consumers, and the government, we seem to have developed an unhealthy dependence on the use of credit cards, overleveraged balance sheets, and massive deficits to seek economic growth and prosperity.

Analysis by Morgan Stanley shows total credit outstanding, including households, financial firms, businesses, and government, amounted to roughly 350 percent of GDP at the end of 2008. Clearly, this is unsustainable. And the McKinsey Global Institute noted that the leveraging can last a painful 6 to 7 years after a financial crisis.

Do you believe that we are too dependent on debt and leverage, Mr. Chairman? And if so, how should we encourage and restore fiscal responsibility and restraint in the use of credit and debt across-the-board? And most importantly, for the financial sector but also for government, for businesses, and for individuals and families?

Mr. BERNANKE. I think there are debt concerns and they affect different sectors differently. For the banking sector, for example, there was too much leverage and that is part of the reason why we had the financial crisis. The Federal Reserve and other agencies are working internationally to try to develop higher, more rigorous capital standards, which we will try to phase in slowly so as not to disrupt the recovery too much. But, going forward, there needs to be higher capital, and lower leverage in the financial system.

More generally, we need to have a better balanced economy. We need more saving by consumers and we need a better fiscal situation, as we have discussed already several times. And that, in both cases, that would involve less debt by the public and private sectors. On the other hand, we need to make sure that there are sources of growth going forward. And if it is not going to be consumer spending, then what is it going to be?

One area certainly is capital investment, which increases productivity and leads to long-term growth. And another is net exports. We have a current account deficit, a trade deficit, and we are borrowing to finance that. That is another form of debt. We would like to have an economy that has a better balance in our trade so that exports would be a source of demand, a source of growth for our economy.

So, yes, debt and lack of saving is an important issue. It is a somewhat different issue for the financial sector, private sector, government, and the trade sector, but in each of those areas, I think we need to work to a more balanced situation.

Mr. MOORE OF KANSAS. Thank you. Mr. Chairman, I am interested in learning more about the repurchase agreements, or repos and reverse repos that the Fed is utilizing to safely unwind the emergency programs set up to deal with the crisis. In particular, I feel like we have not given enough attention to the short-term financing market that Wall Street firms and others have depended on for their financing. In addition to the repo market, I am thinking about the commercial paper and money markets, as well.

When we learned about Lehman using repo 105 to conceal its leverage, I wonder if this short-term financing market is another shadow market where there is not a lot of transparency by its very nature. It provides an opportunity for more shady financial activity in the future.

Would you explain, Mr. Chairman, how the Fed itself uses these repos and then share any thoughts you have on improving financial stability in terms of how the short-term debt and liquidity markets function, especially in a crisis?

Mr. BERNANKE. Well, I would like particularly to address the functioning of that tripartite repo market, which is a short-term market that allows money market mutual funds, pension funds, and others to park their money for short periods. It is a huge market, it is two and a half trillion dollars, or so. And the Federal Reserve has been very much engaged in trying to make that market stronger, more resilient.

We were very concerned back in the crisis, one of the reasons we were so worried about the failures of Bear Sterns and Lehman Brothers was that we thought it might lead to a collapse of this critical market and so, in recent quarters, the Fed, the private sector, and others have been working together to try to improve how those markets function, and in particular, that we would have a set of protocols that we could have used in case a major player failed, a major firm were to fail.

So, we want to make those markets stronger. That, indirectly, helps with the "too-big-to-fail" problem because if we feel that the system is strong enough, there is less need or danger in allowing a firm to fail.

So, we are very much interested in strengthening those markets. The Fed is very active in the repo market now, but in order to help reduce reserves in the system, we are looking to broaden the people we trade with to include not just the primary dealers whom we deal with on a daily basis, but also a wide range of other short-term money providers like money market mutual funds, that we have already worked with.

We are expanding that so that we will be able to drain reserves effectively as we come to the point where we need to tighten monetary policy.

Mr. Moore of Kansas. Thank you, Chairman Bernanke. And Mr. Chairman, I yield back my time.

Mr. WATT. The gentleman's time has expired. The gentleman from New Jersey, Mr. Garrett, is recognized for 5 minutes.

Mr. GARRETT. Thanks, Mr. Chairman. Chairman Bernanke, you made the comment, and you said it here as well, and everybody agrees, that you want to try to shrink back the balance sheet to just the prior date, which is, everybody here agrees, a good thing. But, the economy was really big then, too, and since that time, things have changed. You have lost, sort of, the shadow banking system that is really not there anymore. The huge multiplier effect that is out there, the money supply, that is not there anymore, the leverage ratios that we have had in the past, they are not there anymore.

So, with all that gone, which was really making the economy grow at a good pace, with those things gone now, and if you do the good thing and go back to the smaller balance sheet, would that not have a negative impact or see the economy shrink because of that, or not shrink, but not grow to the levels that we saw before, and would not that play into your decision-making as far as how soon you want to shrink your balance sheet? And is there some sort of, I guess, metrics, that you are going to have to use in that sense of setting the timeline or establishing your balance sheet shrinkage?

Mr. BERNANKE. I think that you are right, that shrinking the balance sheet is akin to a monetary tightening. You sell mortgages on the market, you are going to tend to raise mortgage rates, for example, and that will tend to tighten the housing market and slow the economy—

Mr. GARRETT. Plus, you have all this other tightening going on, too.

Mr. BERNANKE. And others, as well. You are absolutely right. We should not even want to hold this stuff 30 years, so the key here I think is to, when we do come to the point we want to sell assets, is to do it in a gradual and predictable way so it has minimal impact.

Even when we get back to the pre-crisis balance sheet, we will still be able to manage the short-term interest rate, the Federal funds rate, much as we have in the past, so if the economy needs stimulus, we will still be able to do that. But, we just would not be doing it through the—

Mr. GARRETT. So do you target the size of the balance sheets sort of the same way you target the funds rates now?

Mr. BERNANKE. You could think about it as a two-step procedure. First, we bring the funds rate down as far as it can go, then we cannot do that anymore, that is as far as it can go, and then the balance sheet is a secondary tool. When we get back to normal, we hope the balance sheet will be back to normal, and we will be going back to where we were before, which is just using the short-term interest rate as our basic tool.

Mr. GARRETT. And you will be back to where you were before the economy just cannot be back there because of those multiplier effects.

Mr. BERNANKE. I think that the economy will be able to recover as long as we make these adjustments in a gradual way.

Mr. GARRETT. Okay. Second question. Walk me through. I threw out some numbers before. If you try to pay the interest on reserves here, and I threw out the number, if you had a trillion dollars set on reserves and if the interest rates go up, because a lot of people expect them to, to say, 5 percent, to use round numbers in my head, that is $50 billion that you will be paying out. That is, in essence, a capital version of how it works, right?

Mr. BERNANKE. Yes.

Mr. GARRETT. Okay. So then, if you did that, starting tomorrow, let us say, how long can the Fed do that? How long can the Fed hold a trillion dollars here on your books, pay out $50 billion in interest payments, can you do that this year, and the next year, and the next year? How does that work?

Mr. BERNANKE. We can, for the following reason, that there are two sides to our balance sheet. The reverse repos, reserves, whatever, are financing. On the other side, agency MBS, which pay about 4½ percent. So, from the point of view of the seignorage, or the revenue we give to the Treasury, the money we're paying to banks from say, interest on reserves, is more than compensated by the income received from the mortgage-backed securities.

And so, in fact, for the next few years, we anticipate and we already have seen this, that the Fed will be sending to the Treasury an unusually large amount of money because the returns on the mortgages so much exceed the cost of funds to the Fed. So, because of the two sides of the balance sheet, it will not be costing the taxpayer any money.

Mr. GARRETT. Okay, and it is not just the cost to the taxpayer, but it could go on into, I do not want to use the word in perpetuity, but you can do it indefinitely, is what you are saying?

Mr. BERNANKE. Well, because half of our balance sheet is, we are paying right now 12 basis points and the other half we are paying zero because it is just cash, so we have very little cost of funds and so obviously we can go a long time.

Mr. GARRETT. And with just a short time left, what is the technical term, what are technical indicators you look to with regard to inflationary rates or otherwise, as far as your tightening policy?

Mr. BERNANKE. Well, we look obviously, at current inflation numbers including a variety of indicators like trim means, and core measures, and overall measures and so on, but we also look at things like the break-even rate in the inflation protected securities market, survey numbers, because expectations are as important as the level of inflation, itself. Because if people think inflation is going to be high, then they are going to demand higher wages, and prices, and that will create an inflation spiral. So, we look both at expectations and at current prices.

Mr. GARRETT. Okay. And there is the red light, so thank you, Mr. Chairman.

Mr. WATT. The gentleman's time has expired. The gentleman from California, Mr. Sherman, is recognized for 5 minutes.

Mr. SHERMAN. Yes. To the ranking member's opening statement, indeed there has been an enormous and controversial multi-trillion dollar expansion of the Fed balance sheet and this has been part of an overall process called bailouts. As lawmakers, we would ask, well, under what law was this done? And the answer is, 13(3) of the Federal Reserve Act which gives the Federal Reserve Board unlimited authority which they have used to the tune of trillions of dollars, and I remember last year asking Chairman Bernanke whether he would accept a $12 trillion limit. Being a man of modesty, he agreed to that, and then this committee adopted on voice vote a $4 trillion limit and no other limit was proposed, though I proposed a $4 trillion limit, nobody else said, well, why not three or two or six?

And I would like the acting ranking member to indicate whether he thinks it is better that we have a $4 trillion limit on section 13(3) or no limit at all? I yield to the gentleman. But I realize there are other—

Mr. WATT. If the gentleman is yielding, and my choices are $4 trillion or indefinite, I prefer $4 trillion.

Mr. SHERMAN. Thank you. I would hope that the senior leadership on the Republican side would correct some of the misleading press releases that have gone out from some Republican members attacking those who voted for a $4 trillion limit and implying that a $4 trillion limit was a grant of $4 trillion of power to the ever-modest Chairman Bernanke, when in fact, that was indeed our choice—$4 trillion is what was in my amendment. The alternative is to stick with the present statute, which is absolutely unlimited.

Those who propose limits should not be attacked as those who are calling for the removal of limits.

With that in mind, we have a little problem in the 10 biggest real estate markets in the country, including especially Los Angeles. Right now, the conforming loan limit and the FHA limit is $729,750. End of this year, it drops, the GSE limit drops in L.A., and most of these other markets to $417,000, a precipitous drop. This country is still dependent for its wealth, its consumer confidence, on home prices and is still dependent on the GSEs for supporting the mortgage market.

Chairman Bernanke, do you think it would have a bad effect on home prices in those 10 markets and the national economy if we were to see a sudden, precipitous, and massive drop in the GSE limit?

Mr. BERNANKE. At this point, there is really no private label mortgage market around and the availability of credit for so-called jumbo loans and so on is very restricted, so it would certainly reduce availability of mortgages and increase the rate paid for mortgages above that new limit. Now, I think people should be concerned and make sure they are comfortable with any costs that might imply for the GSEs, given the money that the government is using to support the GSEs right now. But, I think it is certainly clear that if that happens, it will raise interest costs and reduce prices in those areas.

Mr. SHERMAN. And I would point out for the record that the GSEs actually make a profit on those loans between $417,000 and $729,000, and I'll move on to my next question.

It is often said that you are supposed to take away the punch bowl when the party gets going. This is the dullest party I have ever been to and I am an accountant. Thus, you do not need to be talking about how to make this party more dull or to keep it from getting going, at least in the foreseeable future.

We do, however, need to focus on what flavor of punch. You have mentioned that you have lowered the interest rates. You have expanded your balance sheet, not so much by buying Treasuries, as buying private sector debt. The question is, why should taxpayers, assuming you should have the expanded balance sheet and I think that is a good assumption for the present, why should we expose taxpayers to the relatively small risks of the high quality private sector debt you have purchased? Why is your balance sheet not all Treasuries, rather than the various other investments you have made?

Mr. BERNANKE. At this point, about $100 billion out of $2.3 trillion is related to bailouts. And given AIG's recent sales, we hope that would soon be down to $50 billion. We are moving down on that. So, this is not really about bailouts. It is about buying primarily mortgage-backed securities. And from our perspective, the Fed's perspective, these are Fannie Mae, Freddie Mac, and Ginnie Mae MBS, which are explicitly or implicitly guaranteed by the U.S. Government and so we are not adding any credit risk, whether we are holding it or somebody else, it is still a liability of the U.S. Treasury and we are not adding to the taxpayers' risk by buying them.

Mr. WATT. The gentleman's time has expired. The gentleman from Texas, Mr. Marchant.

Mr. MARCHANT. Thank you, Mr. Chairman. Mr. Bernanke, banks are also experiencing an historically low cost of funds, are they not?

Mr. BERNANKE. Yes.

Mr. MARCHANT. And in this recent raise from a 1/4 of a point to a 1/2 point, actually, many banks are, their cost of deposits is much less than that. At what point will the banks decide that they are better off turning back to loans rather than placing their money, keeping their money liquid and placing it, perhaps, in short-term Treasuries, where they are making a very, not risk free, but relatively risk free yield?

At what point does the Fed have a plan or an idea, at what point? Or is it an objective to wean the banks off the lower costs, at least from the Fed, and begin to put that liquidity, which is massive, back into traditional loans and then the economy will come up with it?

Mr. BERNANKE. We are supplying liquidity, we are not blocking its use in any way. Our increase in the discount window rate applies to a very small amount of money, basically the cost of funds in the markets for banks remains very, very low. So, we are not doing anything to prevent them from lending. The reason they are not lending is either they are concerned about their capital, or they do not believe they have good lending opportunities. And our view is that if we provide continued support to the economy with low interest rates, that the economy will begin to grow, will see more strength, and yields remain low, and that, in turn, should make increased opportunities for banks to make profitable loans. And when they see profitable loans to make, they will go ahead and make them.

So again, we are just simply supporting a low cost of funds for banks, which makes, everything else being equal, it easier for them to raise cash to make loans. But there is a little bit of pushing on a string here in that unless banks feel that there are good opportunities out there, and right now we are still recovering from this very deep recession, they are going to be very cautious. And they are very cautious.

But, going forward, I think I am safe to say we are already beginning to see some improvement in banks' outlook and their willingness to make loans and I suspect we will see improvement going forward this year.

Mr. MARCHANT. The other thing that I hear from constituents at town hall meetings, other than health care, there are a few other concerns, is that a large portion of our population depends on their CD rates, or the amount of money that they have been saving all these years, for part of their income. And now that the income is not there, they are not spending. And so, another part of the economic puzzle is that if the rates that they can get for their money come back, they will begin to spend again.

And so, at what point do you feel like the banks will not rely on this increased liquidity that you are providing and they will begin to put the loans out, raise their rates, and put the money back into the economy?

Mr. BERNANKE. You are right that savers are hurt by a situation like this in that the yields they can get are lower and there is no question about it. The reason we have kept yields low is because we are actually trying to encourage investment and spending that will get the economy moving again. And there is a trade-off there, I agree. As I said before, we want the banks to have access to liquidity. We have worked with the banks through our stress test to try to increase the capital they have.

That gives them the raw materials to make loans, so to speak, and when they see opportunities and the economy is strengthening, then they should be willing to make loans. At that point, it will be safe for the Fed to consider raising rates, as the economy strengthens, and we will try to get back to more normal situation.

Mr. MARCHANT. Thank you, Mr. Chairman.

Mr. WATT. The gentleman's time has expired. The gentleman from Massachusetts, Mr. Capuano, is recognized for 5 minutes.

Mr. CAPUANO. Thank you, Mr. Chairman. Chairman Bernanke, you have only said one thing this morning that really gets me concerned and I want to make sure I understand it. You said something about the asset-backed securities market returning to normal. My definition of the word normal is not a good thing in the ABS and I just want to make sure that your definition of normal is the new normal, not the old normal.

Mr. BERNANKE. Yes, it is the new normal, and I am talking about traditional ABS, like credit card securitizations and so on, I am not talking about structured credit products and all the things that got us in trouble.

Mr. CAPUANO. That's what I hoped you meant, but I just needed to hear it. I did not want to get all worked up over nothing. I do want to talk a little bit about the gradual sales process that you have talked about, about the securities that you do hold. And I am just curious, have you started making any decisions as to where you are going to start—are you going to start with Federal agency paper, or are you going to use a light method, are you going to go with whatever ones have the biggest losses, any decisions at all?

Mr. BERNANKE. No, we are continuing to discuss it in the Forum C. We have not come up with a specific plan. The only thing we have done so far is to agree to allow both agency debt and agency MBS that mature to just expire and we are not replacing it. We are not rolling it over. So that, in itself, will actually reduce the portfolio over time.

Mr. CAPUANO. Because, maybe I am wrong, but as I see it, these sales, if and when they start taking place, are really the first time between the whole financial crisis that this country might see, well, realize or recognize, a loss. Up until now, we may have losses on paper that we have not recognized or realized, but this might be the first opportunity, the first situation where we actually experience one. Is that a fair reading of the current situation?

Mr. BERNANKE. That is possible, but on the other hand, as I have discussed earlier, we are making an awful lot of income right now and that should be set against any losses that we might take in the future.

Mr. CAPUANO. Okay, I appreciate that. I mean, obviously, as you go forward, we are all interested in decisions you make.

The last item I want to talk about is actually something that came up when Secretary Geithner was here the other day, and that is Fannie and Freddie. As I read the December report that you have, roughly about $1.8 trillion, give or take, in secured assets, roughly how much of that, and I have the numbers here, I am not playing games. I just want to make sure I am reading it right.

How much of that is Fannie and Freddie assets, roughly? Am I reading it right that it is around $200 billion?

Mr. BERNANKE. I even have the numbers, if you would like.

Mr. CAPUANO. No, I am not trying to get you. I am trying to make sure I am reading it right.

Mr. BERNANKE. We have about $1.3 trillion or so in agency debt and securities, roughly, of which about $175 is debt and the rest is MBS. And I think the biggest chunk is from Fannie and then Freddie and then finally, Ginnie.

Mr. CAPUANO. The reason I ask is obviously because, just to tell you where I come from. I come from the position that Fannie and Freddie might have been engaged in some inappropriate activity over the last several years, but no more so for the most part than private entities. And as I read these sheets and a lot of the stuff that you are dealing with is also, you know, private MBS between this and the PPIP and other things you are doing.

And it just strikes me, is that a fair assessment that Fannie and Freddie, though may be engaged in certain unwise decisions for the last couple of years, was not doing in any more excessive manner than private agencies? The Goldmans and the others?

Mr. BERNANKE. They surely made mistakes and that is why they are losing money, but I do not think their delinquency rate is any higher than the private sector, and I think, I would just add for the record that since most of our purchases are of relatively new MBS, I think the standards have been actually much tighter in the last couple of years.

Mr. CAPUANO. Good. Yes, and the reason I asked that is because there has been a lot of wailing and gnashing of teeth about how terrible Fannie and Freddie are. And I will tell you that historically, not within the last couple of years, historically, I have seen them as a positive thing for this country, creating the middle class by allowing people to buy homes, for the most part.

And I guess, in general, because my time is running out, would you submit, would you suggest that we end Fannie and Freddie and simply go back to private mortgage or do you think that, again, with some of the tweaks that we might have to do and some of the fixes, some of them may be extreme, who knows, but the concept of government involvement in the mortgage industry is a good concept or a bad one?

Mr. BERNANKE. I wouldn't go back to the status quo ante, but I think that, and I gave a speech on this a couple of years ago, where I laid out some alternatives. I do think there are some scenarios where a backstop government guarantee, which is fully paid for, for housing, for mortgages, would be a reasonable strategy.

Mr. CAPUANO. Great. Thank you, Mr. Chairman. Thank you, Chairman Bernanke.

Mr. WATT. The gentleman's time has expired. The gentleman from North Carolina, Mr. McHenry.

Mr. MCHENRY. Thank you, Chairman Watt, and thank you, Chairman Bernanke, for being here today. I certainly appreciate your leadership of the Fed and trying to get our economy back on track. But, as we know, and as you have discussed before, there are two houses: monetary policy, which you and the Fed control; and fiscal policy, which Congress has authority over. And so it is certainly a challenge for you to control your dual mandates, being only able to control half of the quotient of this.

And so with that, you know, the budget deficit. Being over 10 percent last year, 10 percent of GDP, last year, this year, next year, and only subsiding just barely, the following year. Is this price, this high deficit, and the long-term view of where the deficits are going under this President's budget, is that priced into Fed policy and outlook?

Mr. BERNANKE. It affects Fed policy in several ways. In the short term, it affects overall economic activity and that affects our monetary policy strategy to some extent. If there is a loss of confidence about the ability of the government in the medium and longer term to achieve a sustainable fiscal balance, then the risk which we have seen a little bit of, I think, even yesterday, there was just a bit of concern, is that interest rates might rise because of a lack of confidence by creditors in the long-term fiscal stability of the government. And that, in turn, would tend to endanger the recovery because high interest rates tend to slow the economy.

So, it would certainly be good for the Fed and for the country, for the economy. As I said before, it is not a practical goal to achieve a balanced budget this year or next year, but certainly there needs to be some plan for exiting from the current very high deficit prospects to give something that is more sustainable over the medium term. And that would be very helpful, even today, as the Fed tries to plan how we are going to exit our accommodative policies.

Mr. MCHENRY. So, in terms of major legislation that was just signed into law 2 days ago, the health care policy, and the cost of that, was that priced into the Fed's outlook over the medium/long term?

Mr. BERNANKE. I know it is very controversial exactly what the fiscal implications of that are and I am not going to try to second guess the CBO or others who have priced it, but clearly everybody agrees that the overall fiscal outlook for the U.S. Government is somewhat dark over the medium term. And it would be very useful if there could be a bipartisan, concerted effort to explain, demonstrate, and decide, how the government is going to achieve a more sustainable fiscal trajectory.

Mr. McHENRY. Would you say that enacting that bill has negatively or positively changed the Fed's outlook on the economy over the medium and long term?

Mr. BERNANKE. No, I could not say. It depends on your assessment of the fiscal implications and, as I said, the CBO and others have come up with a wide variety of estimates of the possible fiscal implications.

Mr. McHENRY. What about the expiration at the end of this year of a whole variety of tax cutes put in place in 2001 and 2003? Are the expiration of those tax cuts, priced into Fed policy over the short, medium, and long term for the Fed's outlook on the economy?

Mr. BERNANKE. To some extent. I mean, we try to make forecasts and our forecasts are typically 18 months ahead and we try to factor in our expectations of fiscal policy the best we can. But, of course, we recognize that there is a lot of uncertainty about what the implications will be for the economy, where the economy will be a year from now, or 18 months from now. But, we do try to factor in all the aspects of fiscal policy to the extent that we can, you know, ascertain where we think it is going to be.

Mr. McHENRY. So, certainly this adds to the high wire act that you are performing right now, trying to unwind with the fiscal policy, as well?

Mr. BERNANKE. Certainly, a part of the difficulties of forecasting the economy, certainly.

Mr. McHENRY. Thank you.

Mr. WATT. The gentleman's time has expired. The gentleman from Massachusetts, Mr. Lynch, is recognized for 5 minutes.

Mr. LYNCH. Thank you, Mr. Chairman. I certainly appreciate the difficulty we are in. I know a lot of the members have recalled that the Federal balance sheet before the crisis was about $800 billion, and now it is somewhere around $2.1 trillion. I generally agree and understand the idea of the Term Deposit Facility, and also the reverse repurchase agreements to soak up all this liquidity that is sloshing around in the economy in which makes the economy less responsive to your interest rate decisions. As you say, pushing on a string.

Do you think that those two mechanisms will be sufficient to reattach or make the economy more responsive to interest rate controls that are traditionally used?

Mr. BERNANKE. Yes, I think so. We have really a belt and two pairs of suspenders at this point. We have a basic tool which is the interest we pay on reserves to banks, which by itself ought to move the whole complex of interest rates up as we raise that rate. There could be some slippage between that rate and general market rates, and those tools you mentioned will be able to drain reserves and tighten up that relationship and so that will be a second tool that assists us in managing interest rates. But then, if it were absolutely necessary, we could also sell some of our securities and that would certainly tighten up—

Mr. LYNCH. That is what I want to talk about. That part I guess I am less confident in. Do we get into trouble here in selling assets? And I know these are all government issues, so the risk part of this is already there. But for some time now, the whole market has been fed by—the mortgage-backed security market has been fed by the GSEs and I believe the Federal Home Loan Banks, I do not know if you have included that as well, but I am just concerned about selling assets into a very poor economy and a very poor market. And whether we might sustain considerable losses in those sales, and then have the compounding insult of having others who might buy those at distressed rates do very well.

And then we end up with a similar argument we had during the resolution trust corporation sale of assets after the savings and loans bailout where some folks came in afterwards and capitalized greatly on the timing. When I first read your remarks surrounding the purchase of these assets, I thought it was clear that this was going to be passive ownership and investment and long—we are going to hold these long term. And that was only last March, so has there been something that has changed our position on this? Or can you explain that?

Mr. BERNANKE. We have had a good bit of time to discuss all the aspects of this exit strategy, and I think the FOMC is not comfortable withholding all of these securities until they mature, some would be 30 years and we want to move more quickly than that back to the pre-crisis balance sheet. But again, my expectation is that sales would be a slow gradual announcement in advance and would not create undue market impacts. You mentioned adding insult by selling into a weak market, of course in a situation where we would be selling this would be one where we were actually trying to tighten policy because the economy was back on a growth track and we were trying to avoid future inflation risks. So, we wouldn't be doing that in a really weak economy.

Mr. LYNCH. Well, you know, I appreciate that is the only mechanism of the three that actually shrinks the size of the Fed balance sheets, so I know we have to do something. I am just very concerned about the timing of this and what the end result might be, but I appreciate your comments and thank you. Thank you, Mr. Chairman.

Mr. WATT. The gentleman yields back. The gentleman from New Jersey, Mr. Lance, is recognized for 5 minutes.

Mr. LANCE. Thank you very much, Mr. Chairman. Good morning to you, Chairman Bernanke. Thank you as always for being here. My principal concern, as I have indicated on many occasions in this committee, with many different witnesses, continues to be levels of Federal spending and the overall Federal debt now at $12 trillion and rising rapidly.

As I understand it, Mr. Chairman, the ratio of national debt to GDP has shot up from 37 percent before the crisis to approximately 60 percent in Fiscal Year 2010. And the President's budget indicates that it may be headed towards 77 percent of GDP by the end of the decade. As you well know better than almost anyone in America, except for World War II, the debt has never been higher as a percentage of GDP.

Your thoughts, Mr. Chairman, on what the growth rate would have to be here in the United States in order to pay the Federal debt over the course of the next generation, perhaps the next 25 or 30 years?

Mr. BERNANKE. Well, the 77 percent doesn't capture the entire problem in that there is an awful lot of which might call off balance sheet, obligations, future Medicare, and Social Security and so on, and other obligations that are not fully accounted for in our debt. So, in some sense, the burden is greater than what you describe, and I would have to say looking at it from that perspective and recognizing that we are an aging society and those costs are going to be coming down the pike, I don't think there is a realistic growth rate. I don't know what number to tell you, but it would certainly be a very high number, probably not realistic, so I don't think that just growing out of this will be a solution.

Mr. LANCE. Nor do I. And since that is clearly not the solution, your thoughts on what the solution would be. Presumably, it is somehow to rein in levels of Federal spending over time and certainly to get our national expenditures as a percent of GDP back to a historic average as I understand it. Since the end of World War II, the historic average has been roughly 20 percent of GDP, it is now 25 percent.

I personally am one of the co-sponsors of a constitutional amendment sponsored by Mr. Pence and Mr. Hensarling that would address this constitutionally. Your thoughts as to what level you would suggest long term, given the historic average being 20 percent for the last 60 years?

Mr. BERNANKE. There are tradeoffs there that really are up to the elected representatives to make. The only thing I would say is that we need to enforce in some sense a consistent perspective, so those folks who believe that low tax burdens are very important need to also specify how they are going to cut spending, and those who see much benefit in spending need to sort of specify what their revenue source is going to be. So if we can force people to recognize that there are two sides to this, that is the way to ultimately bring down the deficits.

Mr. LANCE. What would you suggest, based upon your obvious extensive knowledge of the area, would be a good range as a percentage of GDP? And based upon your experience as a historian of these subjects, particularly related to the Depression?

Mr. BERNANKE. There is quite a range of debt to GDP and government spending to GDP across the developed world, and a lot of that depends on decisions that are being made about what parts of the economy will function through the government and which parts will be entirely private, decisions about health care for example. So those are very broad decisions about how you want to structure your economy and your society which again, go beyond simple fiscal issues, and I do not feel well-placed to make those decisions for the American people or for the Congress.

With that being said, obviously we are going to have to make some tough decisions. There is this tendency that nobody wants to cut and nobody wants to raise taxes. At some point, we are going to have to make some unattractive and tough decisions, and I don't envy Members of Congress who have to grapple with this problem, but one way or another, there needs to be some greater balance between revenues and expenditures.

Mr. LANCE. Thank you, Mr. Chairman. My own view is that it is the fundamental issue of our time, and whether or not America will continue to be the preeminent society in the world in this century is based upon whether or not we can get our fiscal house in order. Thank you, Mr. Chairman.

Mr. WATT. Gentlemen, as time has expired, the gentleman from North Carolina, Mr. Miller, is recognized for 5 minutes.

Mr. MILLER OF NORTH CAROLINA. Thank you, Mr. Chairman. I am also concerned about the deficit and long-term debt. At the beginning of the decade, your predecessor worried that we might spend the debt down too quickly and it might be disrupting the economy. That proved not to be so much of a problem in the last decade. And it appears that a couple of my best folks here were against Bush tax cuts and against the prescription drug plan that was more of a giveaway to the insurance industry and the pharmaceutical industry than it was for seniors on Medicare, and was not paid for.

What is the kind of distribution of the current deficit? How much of it is structural, the extent to which our revenue and our expenditure simply do not match up and would not match up even if we were growing at 3 or 4 percent a year and had unemployment at 3 or 4 percent, so that the existing program is not anything new? How much is the result of the recession itself, the decline in revenues and the additional expenditures required for unemployment, for Medicaid, for childhood insurance, or any other kind of entitlement program that depends upon income? And to what extent is it because of what we are doing in response to the recession to try to get the economy going? I have heard that it is roughly 50-40-10. But about what is the allocation?

Mr. BERNANKE. Well, the way I would think about it is that again, if you look out from say 3 years from now out to 2020, that longer period where the forecasters are assuming something more normal—a more normal economy—the estimates of deficit to GDP are sort of 4, 5, 6 percent, that kind of range. So, since that would be something where the economy is close to its potential, then that say 5 percent would be the structural component.

Mr. MILLER OF NORTH CAROLINA. I am sorry, say that again?

Mr. BERNANKE. About 5 percent of GDP would be the structural component.

Mr. MILLER OF NORTH CAROLINA. But how much of that, of the deficit is that?

Mr. BERNANKE. Sorry, 5 percent of the deficit. The deficit is 5 percent of GDP. So today, the deficit is 10 percent of GDP, and what I am saying is that looking at the perspective deficit 5 years from now, that suggests that of that 10 percent today 5 percent is related to the recession and the other 5 percent or so is related to structural issues, and that is looking at the next decade or so. It is probably going to get worse after that because of the aging of the population, increased medical costs, and so on. So, we are looking at even in the medium term, I think we need to have a goal of something in the order of 2 or 3 percentage points of GDP improvement in the structural deficit to get to something which is more sustainable, at least over the next decade.

Mr. MILLER OF NORTH CAROLINA. My view is that the most important thing we can do to address the deficit is to get the economy going to put America back to work. Do you agree with that?

Mr. BERNANKE. In the short term, that is absolutely correct. The share of revenue as the share of GDP has fallen from its historical 19 percent down to 15 percent, so just getting tax revenues back up to historical norms would take a good chunk out of the deficit. So that is absolutely correct, but that doesn't solve the very long-term issues, as you know.

Mr. MILLER OF NORTH CAROLINA. Sure. As to mortgages, there has been a good deal of discussion about the conflicts of interests, the various ways in which mortgages were divided into tranches and the tranches' interests were different, and especially the different interest between first and seconds. I understand about two thirds of all servicing mortgages is controlled by the four biggest banks. And those same four banks also hold $477 billion in second mortgages. Do you see a conflict of interest there, and is that something we should allow going forward?

Mr. BERNANKE. There is a problem there which is that under current rules and under current practices, the same bank might hold the second and the first and not be aware that those two go together. So, it is not uncommon for a homeowner to pay their second and be delinquent on their first, and so the bank would therefore count the second as fully current even though the first is delinquent. So, I think we would get, first of all, a better understanding of banks' financial position in their losses in the mortgage space if there were better connections between the first and the second.

But very importantly, efforts to restructure mortgages and keep people out of foreclosure would be facilitated if the first and seconds were linked together and perhaps negotiated jointly rather than separately, so that there could be one solution to the whole problem. And the Treasury is working on that. There is a program called the 2MP Program where a lot of those large banks you referred to have signed up and the basic premise of this program is to try to link up the first and seconds, and when doing mortgage restructuring to do them jointly rather than separately.

Mr. WATT. The gentleman's time has expired. The gentleman from Texas, Mr. Green, is recognized for 5 minutes.

Mr. GREEN. Thank you, Mr. Chairman. Thank you, Mr. Bernanke, for appearing today. I would also like to take a moment if I may and thank Bank of America. If what I am reading in the newspaper is correct, I would like to thank them for producing a principal reduction program. And I am referencing this because we have not yet resolved the question of foreclosures. It is a serious question and it is one that I think we have to get a handle on before we can conclude that we are out of the woods, to borrow a phrase. My question, Mr. Bernanke, is this: how important is it for us to resolve the question of foreclosures that the, just the unusual number that actually have now gone into persons who are not blessed with or cursed with, depending on how you look at it, with adjustable rate mortgages. We have persons now who clearly qualify for the mortgages that they have, but their mortgages are now underwater. So how important is it for us to get a handle on this to avoid a double dip recession?

Mr. BERNANKE. It is certainly a risk to the economy for a number of reasons. One obvious reason is that in recent periods, as much as 30 or 40 percent of the new housing coming on the market is foreclosed housing, so foreclosures generate a supply of housing which dries down prices in the housing market, lowers the wealth of consumers or homeowners, increases the rates of delinquencies in losses in banks, and weakens the incentives to build new homes. So for all of those reasons, foreclosures besides being obviously a tragedy for homeowners who would like to stay in their homes, has negative effects for the economy and the financial system more broadly.

And so, I certainly encourage efforts to avoid preventable foreclosures. Having said that, of course it is a very, very difficult problem, and a lot of people have been working on it, and unfortunately we are still looking for, I think, a significant number of foreclosures in 2010 and probably into 2011 as well.

Mr. GREEN. Mr. Chairman, you said you encourage, and I am going to ask, are you permitted to encourage other institutions comparable to Bank of America to do a similar thing? And I ask because I am not sure what the protocols are with reference to your office. I know that you try as best as you can to make sure that you don't encroach upon the province of Congress and others, but are you permitted to and can you encourage other institutions to take similar action?

Mr. BERNANKE. I think the way to proceed is to try to encourage banks to be in touch with troubled borrowers and to try to work out some solution, whether it is a principal reduction or some other solution; that is something that we do very much encourage.

More specifically, we encourage banks to participate in the government programs like the HAMP and so on. As you know, the HAMP program has been focused on payment, on a monthly payment, as opposed to on principal reduction. I know they are looking at alternative ways of addressing foreclosures through principal reduction, through assisting unemployed homeowners and so on. And as they develop these programs, then we would certainly encourage banks, particularly the large servicing banks, to fully participate in those programs. We can't tell them to participate in something that doesn't quite exist yet, so we are hoping that Congress will develop some viable programs that will be attractive to the servicers to participate in, and we will encourage that.

Mr. GREEN. Well, thank you. And I will say this, that I think we will do what we can and we should, but I would also hope that other institutions will of their own volition decide that they too have a role to play in this. This is why I compliment Bank of America, because they of their own volition it appears, unless there is something going on that I am not privy to, they have decided to engage in principal reduction.

Reducing interest rates, I think that is a great thing to do, and I think that can be helpful, but principal reduction based upon payments made is an inducement to a person to keep your home and also know that you will not be underwater perhaps at some point in the future. Thank you for your comments, and I yield back, Mr. Chairman.

Mr. WATT. Thank you. As time has expired, I would remind them that is the bank that is based in my congressional district.

[laughter]

Mr. WATT. Maybe there is some causal connection.

Mr. GREEN. But Mr. Chairman, I know that good things happen whenever you show up.

Mr. WATT. The gentleman from Missouri, Mr. Cleaver, is recognized for something good to happen.

Mr. CLEAVER. Thank you, Mr. Chairman. I have no questions.

Mr. WATT. Oh, you yielded back already, or are you deferring? The gentleman from Illinois, Mr. Foster, is recognized for 5 minutes.

Mr. FOSTER. I won't deal with that, Ed.

[laughter]

Mr. FOSTER. Let's see, I would like to follow up on Representative Waters' line of questioning having to do with unemployment and your offer of analytic and technical help.

Mr. WATT. Let me apologize to Mr. Perlmutter. I thought we went to the other end.

Mr. FOSTER. I will proceed. There is some discussion in the world of economists about the breaking of Okun's Law that may have happened in 2009. And this is very troubling to us because we had all of these predictions that if we went ahead past the stimulus and so on, all the people who run macro models said that the GDP would recover and that unemployment would recover.

And if you look, roughly speaking, GDP and business profitability and so on, did recover as predicted by all these models; unemployment did not. And it is my impression, though I am not an expert on these models, that basically uses changes in GDP and then back-calculates what the change in unemployment should have been. And if that link broke Okun's Law, broke in the last year, that means that we no longer have a predictive policy tool in these models, and it is a very painful way for it to break since of course having unemployment. So, I was wondering your take on this. It appears in your textbook and I presume I can get some expert advice on how we should go forward from a policy point of view if our model's unemployment are no longer predictive.

Mr. BERNANKE. I think it is too strong to say they are no longer predictable. It is just that given the depth of the recession, the unemployment increase was even worse than you would have anticipated which may be a one time thing we hope, obviously.

There are a number of possible explanations for it. One might be that in fact the GDP numbers were too optimistic. It could be that if you look at alternative measures of output like gross domestic income as opposed to product, that was a deeper recession, maybe that explains it. But the more conventional story is that as the economy dropped very sharply at the end of 2008, beginning of 2009, firms became very—employers became very concerned and they cut very deeply, perhaps more deeply than normal. And that may be why the unemployment rate went up faster. And so going forward the question is, is there enough confidence that employers will now begin to rehire those people that they let go during the depth of the crisis?

One issue, interestingly enough, is productivity. The firms cut very deeply and still managed to maintain production, and as a result, the productivity numbers have been extraordinary.

Mr. FOSTER. And this is the IT theory, that people bought computer systems that allowed them, in principle, to lay off a bunch of workers. They weren't comfortable doing that in the good times and then, but did grow comfortable with the computer systems, and when it was time to cut they were able to keep shipping products—which is a plausible theory. My general question was, do you think that you have to put more effort into modeling the effect on the labor market? That is the approach that you have been, that is taking on the macro models, I am saying is it all about GDP if we get GDP right, the labor market is automatically dealt with correctly? That you need a more sophisticated modeling so that we understand—

Mr. BERNANKE. Certainly, absolutely. And we do look at the labor market separately and in great detail.

Mr. FOSTER. Did you see this coming? The break in the Okun's Law?

Mr. BERNANKE. No, no we did not.

Mr. FOSTER. Does the modeling reproduce the breaking in Okun's Law?

Mr. BERNANKE. Well, again, as I said there, we sort of have two explanations. One is that maybe the recession was deeper than we thought. The other is that the productivity gains were greater than we thought they would be when firms were able to cut their work forces and still maintain output. All that being said, I think that as the economy comes back and as we see job creation, I see no reason to think that we won't see declines in unemployment on the way up just as we saw increases on the way down.

Mr. FOSTER. So you would view this as a one-time occurrence and we should stay back—we should return to the—

Mr. BERNANKE. It is too strong to say that we just have to throw out everything we know, that is certainly not the case. But it is an episode that we economists in general are going to want to understand better and look at for a long time. A related issue is participation rates, which have moved around a lot. A number of people who are looking for work and are in the labor force—that has been going down for a while because of an aging society, but we saw it rise for a period perhaps because people when they saw their 401(k)s, you know, being hit by the stock market decline, said look, we have to work harder, and work longer. So, there were a number of factors, a number of issues that were unexpected and we need to understand better, certainly. Thank you and I yield back.

Mr. WATT. The gentleman from Colorado, Mr. Perlmutter.

Mr. PERLMUTTER. Thank you, and just following up really on Mr. Foster's questions, and I'm looking at pages 20 and 21 of your monetary report. There are three very interesting charts there, and the first one is your chart 27, which shows net change in private payroll, and from the beginning of 2008 to the beginning of 2009, that's about as close to falling off a cliff in terms of employment as you can have.

Now you used, when Mr. McHenry was asking you questions, you used going forward the situation is somewhat dark. Those were your words, somewhat dark. How would describe what happened from the beginning of 2008 to the end of 2008? Would you say absolutely black?

Mr. BERNANKE. I was talking about a different set of issues. But certainly, the recession in the latter part of 2008/beginning of 2009, not only in the United States but around the world, was extraordinarily sharp. Absolutely.

Mr. PERLMUTTER. And this drop in employment reflects that.

Mr. BERNANKE. Certainly.

Mr. PERLMUTTER. And then, since the beginning of 2009, we are almost back to zero in terms of job losses.

Mr. BERNANKE. In terms of job losses.

Mr. PERLMUTTER. Okay. And we have another chart. This one is not from your monetary report, but it is the Bureau of Labor Statistics, sort of the job losses that occurred in 2008 and the job losses as they sort of shrunk in 2009.

But it relates to about 8 million jobs, if I am correct. So we still—even though things—the rate of job losses is pretty much stopped, we still have 8 million people who lost their jobs between 2008 and through 2009.

So, you know, then you have another very interesting—and you were talking about productivity, your chart No. 30 in your report. I mean, this one basically shows America to be the most productive it has been per person in 60 years.

So, I mean, there are—looking at it in that light, that is great news, except that we have 8 million people who are unemployed. So in this process of—you know, Mr. Lance, I agree with him. We have to deal with the debt. But we also have to get 8 million people, in my opinion, back to work.

So it is, step one, get people back to work. Step two, grapple with this debt that exists. By getting people back to work, you help the revenue side of the balance sheet; dealing with the debt, you take care of the expense.

Where are you in terms of the Federal Reserve in terms of sort of your ideas as to getting people back to work? If you start tightening the money supply, what do you expect to happen to our effort to get people back to work?

Mr. BERNANKE. Well, first, on the fiscal side, just to make sure you understand my position, you have to look at two different periods of time. In the very near term, there is a reason for the big deficit, and I don't think it is either desirable or possible to get rid of it in the next year or two.

Down the road, when the economy is operating more normally, then if we can convince creditors that, in fact, we will have a more stable, sustainable situation, that will actually improve interest rates today and support the growth process today.

From the Federal Reserve's perspective, we are recovering from a very deep recession, and monetary policy is just about as supportive and accommodative as it has ever been. Interest rates are close to zero, and we have more than doubled our balance sheet and used all these other policies to try to get markets working again and try to increase capital in the banking system.

So we are taking very seriously the unemployment situation, and we take seriously that part of our mandate, for maximum employment.

Mr. PERLMUTTER. And I would just say, in looking back at this unemployment chart, that the coupling of the monetary policy with the fiscal policy that began in early 2009 reversed what was freefall in this economy.

So, personally, we have to deal with the first thing, employment. Then we deal with the second thing, debt. To the degree we can deal with them together, wonderful.

I think the other chart that is really interesting on page 20 is the savings chart, that people in this country who had not been saving now are saving at a pretty good clip. The Federal Government is not saving, but they are having to deal with a lot of folks who have needs because they have been laid off, they needed insurance, whatever it might be.

But, you know, Mr. Chairman, again, we have been visiting a lot over the last 2 years, and I just thank you for your service.

Mr. BERNANKE. Thank you.

Mr. WATT. The gentleman's time has expired and—oh, Mr. Adler—he is hiding down there—is recognized for 5 minutes.

Mr. ADLER. Mr. Chairman, thank you.

Chairman Bernanke, I want to follow up on Mr. Perlmutter's comments. I also want to thank you in a broad sense, but actually in a narrow sense as well. The first time I spoke to you a year ago, I asked you to consider including in TALF auto fleet leasing.

You weren't sure whether it was in it or was going to be in it. You said you would get back to me in a couple of days. And 2 days later, you publicly announced that auto fleet leasing would be included in TALF.

For my district, which has two of the four or five biggest auto fleet leasing services in the country, it saved hundreds and hundreds of jobs, great private sector companies that couldn't get liquidity. You did a good thing for them. So you used your head with a great heart, and it really did help people; the sort of things Mr. Perlmutter is talking about, employment, you saved lots of jobs. That was a great thing.

Following up on Mr. Perlmutter's comments, I heard Mr. Lance and you in a dialogue regarding deficits some minutes ago. And I sort of share the view that we have to deal with deficits some time soon, not some time in the distant future.

And I am wondering what sort of hope you can think in terms of, within a certain period of time, we could realistically start grappling with deficits because while I recognize that we don't have inflation now, I worry that big deficits with rising inflation could be very, very expensive for the American taxpaying public.

Mr. BERNANKE. Well, it is never too soon to start planning. We have—we know pretty much what is going to happen to our population, and we know what has been happening to costs, both health care costs, defense costs, and a whole variety of things.

I know that the President created this commission, and both parties have nominated people to be part of that. I hope that is an effective way of putting out some options that Congress will consider seriously.

But anything we can do to, at the same time that we are all very concerned about the current situation and looking at how to get the economy moving again, you know, with one eye, we should be also looking at the next 5 years, the next 10 years, and using whatever methods we can to try to develop a plan that we can all agree on to restore greater balance in our fiscal situation.

So it is a difficult problem, but I don't think there is any reason why we can't start working on that more or less immediately.

Mr. ADLER. Thank you. I know on the Senate side, while they are voting on health care right now, I suspect very, very soon they will take up a bill or a series of bills on regulatory reform to try to get our financial house in order.

I wonder if you could comment a little bit on the sense that I have, and that maybe other people have, that the business community, the lending community, is sort of frozen right now, waiting to invest but not certain what the ground rules are going to be going forward.

So at least I am hearing from business people in my district, from around the country, that they really want a new structure in place so that they know what the rules are going to be, so they can have some predictability, some certainty, almost, where possible before they can really move forward and help us recover as a private sector economy.

Mr. BERNANKE. And we hear exactly the same thing, that policy uncertainty, economic uncertainty, is a real drag because, you know, you are trying to make a decision about where to locate your plant or hire a bunch of parallel or undertake a new line of business, and you don't know what the economic environment, the policy environment, is going to be. It makes it much more difficult.

So from the perspective of financial firms in particular, even though they may be concerned or oppose certain elements of the reform bill, I think, all else being equal, they would like to see—whatever happens, they would like to see it get done because then they would at least have—you know, have some certainty about what the environment is going to be, and they could plan better and be more willing to make investments and loans, I hope.

Mr. ADLER. I thank you. I yield back the balance of my time.

Mr. WATT. It appears that all of the members who might second-guess you in the future about how you withdraw from this liquidity situation have not shown up. So we thank you so much for your testimony and, as I say, we consider you the master conductor, so we know that you will deal very well with the decisions going forward, with the brain trust you have behind you, of course.

So we thank you, and we will consider this part of the hearing completed, and call up the second panel of witnesses so that we can start the second panel.

Mr. BERNANKE. Thank you.

Mr. WATT. There may be follow-up questions in writing from some of the members. And of course, we will accommodate that at the end of the hearing.

Has anybody seen Mr. Goodfriend? He was here earlier. So we will search for him just for a second, and then we will try to figure out—

[pause]

Mr. WATT. We presume he will show up shortly, so let's convene the second panel so as not to back ourselves into a time conflict with votes.

We are pleased today to have four distinguished members—three of whom are present—on this panel: Mr. Larry Meyer, vice chair of Macroeconomic Advisors; Mr. John B. Taylor, Mary and Robert

Raymond professor of economics at Stanford University; Mr. Marvin Goodfriend, professor of economics, and chairman of the Gailliot Center for Public Policy, Tepper School of Business, Carnegie Mellon University—your timing is exquisite; and Mr. Laurence Ball, professor of economics at Johns Hopkins University.

Each of you will be recognized for 5 minutes and, of course, the full content of your written statements will be made a part of the record. We would ask you to summarize your statements in the 5-minute window.

The lighting system there will alert you. The green light will be on for 4 minutes, a yellow light will be on for 1 minute, and then we would ask you to wrap up. We obviously won't cut you off in mid-sentence, but we do try to stick to that timeframe as closely as we can.

So with that, Mr. Larry Meyer, vice chair of Macroeconomic Advisors?

STATEMENT OF LAURENCE H. MEYER, VICE CHAIR, MACROECONOMIC ADVISORS

Mr. MEYER. Chairman Watt, Acting Ranking Member Paul, and the other members of this committee who have decided to stay for this panel, I am particularly grateful to you—

Mr. WATT. I suspect other members will wander in and out during the course of it. Make sure your microphone is on.

Mr. MEYER. Yes, it is. Thank you for giving me this opportunity to discuss questions about the Fed's exits from its emergency liquidity facilities and from its extraordinary accommodative monetary policy.

As the chairman explained to you today, but really more in his earlier testimony, the Fed has already closed its emergency liquidity facilities. They were no longer needed. These facilities basically closed on their own. Borrowing declined and virtually stopped as markets healed. Then the Fed just closed the door.

The increase in the discount rate was just the last step in liquidity normalization. In executing aggressive easing, the Fed raised the level of reserves by $1 trillion, lowered the fund's rate to near zero, and doubled the size of its balance sheet to about $2 trillion.

Exit from the Fed's extraordinarily accommodative monetary policy involves actively withdrawing reserves, raising the policy rate, and shrinking the balance sheet. Each step has one or more tools designed explicitly for it.

The Fed will withdraw reserves by executing reverse repos and offering term deposits to depository institutions. It will raise the policy rate by increasing the interest rate on reserves. And the balance sheet will passively shrink by runoff, and the Fed appears to intend eventually to sell MBS.

Sequence is about the order in which these steps will be taken. In his earlier testimony, the Chairman provided you with an outline of the likely order. The Fed in this case would likely withdraw reserves first, later—but not much later—raise rates, and still later sell MBS.

Reducing reserves first will help the next step, raising interest rates, reinforcing the role of interest on reserves. While the Fed is operating in uncharted waters so there is a lot of uncertainty about this exit, I believe that the tools are sufficient to accomplish each step, and the sequence is very well designed.

The Fed can avoid unwanted inflation by exiting at the right time. The right time depends in part on the evolving outlook and forecasts, and in part on the strategy that links the forecast to appropriate monetary policy. I think that strategy is also well thought out.

And given both our and the FOMC's expectation that the unemployment rate will remain quite elevated for some time, and that inflation will remain subdued, there is no reason to begin to raise the policy rate any time soon. I expect the first increase will not come until mid-2011.

There is very little chance that the Fed's policies could lead to unwanted inflation over the next few years. Now, it is interesting nevertheless that some worry that inflation will be very high over the medium term, and some even believe we are headed to hyperinflation.

There are only two ways that this can happen: a colossal and almost inconceivable policy error by the Fed; and your taking away the Fed's independence. In my judgment, the risk of very high inflation comes from you, not the Fed.

Inflation and long-term inflation expectations would soar if you forced the Fed to monetize deficits to avoid the very sharp rise in interest rates that would otherwise occur at some point from continued unsustainable deficits. This won't happen if you take steps to put the deficit on a sustainable course, and it cannot happen if you respect the independence of the Fed.

Now, the FOMC is at a zero rate only because it cannot lower the rate further into negative territory. If they could, they would. In this case, the Fed has done as much as it can with conventional policy. The only option at this point was to implement unconventional policies, and in this case credit-easing policies.

The Fed was by far the most aggressive central bank in pursuing these policies, and as a result, we will have the most challenging exit. Credit-easing policies involve buying longer-term illiquid assets in markets where the flow of credit is impaired as a result of the financial crisis, or buying long-term Treasuries to lower long-term rates relative to this near-zero funds rate.

The effectiveness of these credit-easing policies is controversial. I agree qualitatively with a recent New York Fed staff study that estimates that purchases of long-term Treasuries in MBS had important effects, lowering long-term rates, and especially mortgage rates, although I don't think the effects were as large as they estimate. Nevertheless, I am skeptical that the Fed can do much more, for example, if the economy slips into a double dip recession.

Once the Fed is driven to near zero rate, the burden of further stabilization shifts to you. Sizable and timely fiscal stimulus was both needed and now viewed quite effective. The desirability of further stimulus, however, is understandably limited by concern about current and prospective deficits.

The severe limits on monetary policy and fiscal policies in the case of an even weaker-than-expected economy is a further reason for keeping the policy rate extraordinarily low for an extended period. Thank you.

[The prepared statement of Mr. Meyer can be found on page 82 of the appendix.]

Mr. WATT. Thank you so much.

Next, Mr. Taylor, Mary and Robert Raymond Professor of Economics, Stanford University.

STATEMENT OF JOHN B. TAYLOR, MARY AND ROBERT RAYMOND PROFESSOR OF ECONOMICS, STANFORD UNIVERSITY

Mr. TAYLOR. Thank you very much, Mr. Chairman, and Ranking Member Paul. I am going to address my comments to the things that were requested in the letter of invitation which is, first, an assessment briefly of the extraordinary measures the Fed has taken, and second, an exit strategy from those.

I have been studying these extraordinary measures for several years now using empirical methods and looking at the data, trying to think of counterfactual hypotheses. I think it is most useful to divide this period of the financial crisis into three parts to answer the questions: the first is, if you like, the pre-panic period from August 2007 until the panic in the fall of 2008; the second is the panic period itself, which is the fall of 2008; and the third, I call the post-panic period, since then.

It seems to me, if you look at the extraordinary actions taken in the pre-panic period, they did not work very well and were harmful in certain cases. The term "auction facility" did little to reduce tension in the interbank markets during this period. And as I testified in this committee 2 years ago, based on my research, it had very little effect—in fact, I think drew attention away from—the counterparty risks in the banking sector, which were apparent way back then.

Most important, I think, was the extraordinary bailout measures, which began with Bear Stearns. They were most harmful, in my view. The Fed's justification for the use of Section 13(3) of the Federal Reserve Act in the case of Bear Stearns led many to believe that the Fed's balance sheet would again be available in case of another similar institution, such as Lehman Brothers, failing.

But when the Fed was unsuccessful in getting private firms to help rescue Lehman over the weekend of September 13–14, 2008, it surprisingly cut off access to its balance sheet. Then, the next day, it reopened its balance sheet to make loans to rescue the creditors of AIG. Then, it was turned off again, and the balance sheet was not able to make loans in the next event.

It seems to me that this on again/off again bailout measures were an integral part of the generally unpredictable and confusing government response to the crisis which, in my view, led to the panic.

What about action taken during the panic itself? It seems to me this is the most difficult period to analyze because so many other things were taking place, so many other government actions. But I believe, based on conversations with traders and market participants, that the actions taken in the commercial paper market and the actions taken with respect to the money market mutual funds were helpful in rebuilding confidence during this difficult period.

Finally, the post-panic actions. It seems to me that, of course, the biggest measure taken in this period was the MBS program. We also had the TALF as well, which has not really amounted to very much.

But my assessment of the MBS program, again based on empirical work looking carefully at these data, is that once one controls for prepayment risk and default risk, they had very little impacts on mortgage interest rates. I emphasize these estimates are uncertain.

Now, what about exiting from these strategies? The chairman has listed the tools that are available. I think it is important to exit as soon as is practically possible. What I would emphasize is, in addition to the tools that he has listed, that there be some emphasis on a strategy for using the tools.

In other words, an exit strategy is more than just simply a list of instruments. It is a policy describing how the instruments will be adjusted over time until the monetary framework which we are looking for is reached.

In my testimony, the written version, I have outlined a possible strategy. I call it an exit rule. It is one in which the Federal Open Market Committee's decisions about the interest rate increases, which will come at some point, are linked to decisions to reduce the level of reserves.

In other words, when the FOMC decides to start increasing the Federal funds rate target, it would also reduce reserve balances. It seems to me such an exit rule or exit strategy could be announced to the markets with whatever degree of precision the FOMC thinks is appropriate.

The biggest advantage of such an exit strategy like that is it is predictable. It would reduce considerable uncertainty about the Fed's unwinding of these huge programs while providing, in my view, enough flexibility to adjust if the exit appears to be too rapid or too small.

Thank you very much.

[The prepared statement of Professor Taylor can be found on page 90 of the appendix.]

Mr. WATT. Thank you very much, Professor Taylor.

Next, Professor Marvin Goodfriend of the Tepper School of Business, Carnegie Mellon University.

STATEMENT OF MARVIN GOODFRIEND, PROFESSOR OF ECONOMICS, AND CHAIRMAN OF THE GAILLIOT CENTER FOR PUBLIC POLICY, TEPPER SCHOOL OF BUSINESS, CARNEGIE MELLON UNIVERSITY

Mr. GOODFRIEND. Thank you, Mr. Chairman. I am especially gratified to be invited to testify before the House Financial Services Committee today because I have spent 25 years at the Federal Reserve Bank of Richmond working on monetary policy, thinking about other aspects of the Federal Reserve's operations.

The recessions and credit turmoil led the Fed into uncharted waters. While pushing short-term interest rates nearly to zero, the Fed more than doubled the size of its balance sheet and created roughly a trillion dollars of bank reserves, which it used to finance the purchase of a variety of non-Treasury securities to fund loans to financial institutions through a variety of liquidity facilities.

In my view, the economy is likely to recover slowly, and it may be some time before it is appropriate for the Fed to raise short-term rates or shrink its balance sheet. But the point is, in the meantime, I think the Fed ought to position itself to deal flexibly and credibly with whatever comes by doing two things: one, taking the opportunity to improve its actual and perceived independence on monetary policy; and two, taking actions to strengthen the mechanical capability to raise interest rates in case it cannot first shrink its balance sheet.

In my testimony, I suggest how the Fed can do these things by talking in terms of three distinct aspects of central banking: monetary policy; credit policy; and interest on reserves policy.

In my classification, monetary policy involves open-market operations that expand or contract high-powered money, that is, bank reserves or currency, by buying and selling only Treasury securities, U.S. Treasury securities. Until the recent credit turmoil, the Fed satisfied virtually all of its asset acquisition needs in support of monetary policy by purchasing Treasury securities, a policy known as "Treasuries only."

By adhering to Treasuries only, the Fed passes all the revenue from money creation back to the Treasury and leaves all the decisions regarding the use of that revenue to the fiscal authorities. Hence, and this is the first point of my testimony, returning to Treasuries only would strengthen the Fed's independence on monetary policy by narrowing the potential for conflict with the Treasury and Congress on fiscal policy.

In my terminology, credit policy undoes Treasuries only. Credit policy uses the proceeds from selling Treasury securities to finance discount window loans and the purchase of non-Treasury assets by the central bank. Credit policy has no effect on the Federal funds rate because it doesn't change bank reserves.

Credit policy works by interposing the government's creditworthiness between private borrowers and lenders, and exploiting the government's creditworthiness to lower private borrowing costs. All central bank credit policy initiatives carry some risk and involve the central bank, and ultimately taxpayers, in potentially costly and controversial disputes regarding credit allocation.

Hence, when a central bank extends its credit policy reach in scale, maturity, collateral to unsupervised nondepository institutions, and the purchase of non-Treasury securities, that central bank policy infringes increasingly on the fiscal policy prerogatives of the fiscal authorities and properly draws Congress to scrutinize the Fed.

In so doing, expansive credit initiatives undermine the central bank's independence. And here is the second point of my testimony. In order to preserve its independence on monetary policy and credit policy, too, the Fed should confine its credit initiatives to conventional last resort lending, that is, lending to illiquid but solvent depositories. Temporary lending to supervised solvent depositories on a short-term basis against good collateral has multiple layers of protection against loss, with minimal allocative effects.

Last resort lending narrows the scope for conflict between the central bank and the fiscal authorities sufficiently, in my opinion, to be compatible with independence.

Moving on, Chairman Bernanke, in his written testimony for the July 2009 report to Congress, expressed the view that the power of interest on reserves to put a floor under the Federal funds rate is perhaps the most important tool, enabling the Fed to raise the Federal funds rate without shrinking its balance sheet. I agree.

However, the Federal funds rate slipped below interest on reserves in the fall of 2008 because large lenders—Fannie Mae, Freddie Mac, and the Federal Home Loan Banks—are legally ineligible to receive interest on balances that they hold at the Fed.

And here is my third point. I believe that the Treasury and Congress should help the Fed to secure the interest on reserves floor by modifying regulations for the Federal funds market so as to exclude all but depository institutions from lending in that market, or by allowing all institutions eligible to lend to earn interest on deposits at the Fed.

I say this because I believe the alternative options to raise the Federal funds rate by draining or immobilizing excess reserves have serious drawbacks.

First, the Fed would likely have to drain hundreds of billions of dollars of reserves over a span of time to have much effect on the Federal funds rate at all.

Second, the use of large-scale reverse repurchases to drain reserves would expose the Fed to substantial counterparty risk. My opinion is that the Fed should not be exposed to counterparty risk on private arrangements, should not be dependent on that sort of counterparty risk to do its job.

And third, term deposits issued by the Fed to drain reserves would compete with Treasury bills, and again create friction with the fiscal authorities.

And my very last point is this: More generally, the use of what I would call managed liabilities by our central bank would turn the Federal Reserve into a financial intermediary and potentially jeopardize its independence by facilitating the perpetual funding of credit policy independently of monetary policy. Thank you.

[The prepared statement of Professor Goodfriend can be found on page 76 of the appendix.]

Mr. WATT. Thank you so much for your testimony.

Next, Professor Laurence Ball of the Johns Hopkins University.

STATEMENT OF LAURENCE BALL, PROFESSOR OF ECONOMICS, JOHNS HOPKINS UNIVERSITY

Mr. BALL. Chairman Watt, Ranking Member—

Mr. WATT. Your microphone may not be on.

Mr. BALL. Is it on now? All right. So I will get it right.

Chairman Watt, Ranking Member Paul, I am very grateful for the chance to participate in this hearing.

The eventual unwinding of the Fed's emergency policies raises many issues. I am going to focus on the set of issues that I believe are most important, which is the prospect of an eventual increase in the Fed's target for the Federal funds rate.

This issue has two parts. One is a technical question of how the Fed will be able to raise the Federal funds rate when it decides it is the right time to do so. And the other is the policy question of when will be the right time for the Fed to raise interest rates.

The technical question, I think, is actually quite easy, and Chairman Bernanke has explained it very well. The Fed has several tools, including interest on reserves. And to make a long story short, I am very confident that the Fed has the capability to raise interest rates whenever it decides the time is right.

So let me concentrate on the harder question of when the time will be right. When will we know that the Fed should be raising interest rates again?

The first thing I want to say about that is that a lot of the debate about when the Fed should raise interest rates is about how long it should be in time. Some people say it should be 6 months. Some people say it should be 2 years. I think that is a little bit misplaced because the right time to raise interest rates is defined by economic circumstances. We should raise rates when there is a sufficient economic recovery.

And there is enough uncertainty about the course of the economy over the next few years that it is very hard to know in what month or year it is going to be time. We have to just wait and see when the circumstances are right for the interest rate to rise.

So what are the right circumstances? This, I believe, has a fairly simple answer. Interest rates should start rising at some point when there is substantial progress in reducing unemployment.

I think everybody in the room would agree that the current 10 percent unemployment rate is a terrible problem for the United States. And I believe policy should remain very accommodative and do everything it can to help with reducing unemployment until it is clear that unemployment is falling and is on a path towards something much closer to what we used to consider normal unemployment of 5 percent or so.

Now, probably the most important point I want to make is that in my view, as long as unemployment remains high, the Fed should not start increasing interest rates because it is concerned about inflation.

A number of people, including a number of presidents at Federal Reserve banks, have suggested that there may be a risk of inflation, that maybe the Fed needs to raise interest rates sooner rather than later to head off the risk of inflation. And in my personal view, I strongly disagree with this, for two reasons.

First, I think there is very little risk of inflation in the near future. Second, even if eventually there is a moderate increase of inflation, let's say to 3 percent or 4 percent, that is probably, on balance, a good thing, not something to be feared. So let me address those two points.

Why is there little risk of inflation? If one notices that the Federal funds rate is zero, and the monetary base has risen at tremendous rates, that gives one a reason to fear inflation. But the reason that such accommodative monetary policy causes inflation is that usually it sparks an economic boom.

Super-easy monetary policy causes the economy to overheat and grow too quickly, and that is what causes inflation. And having the economy overheat and grow too quickly is the last thing we have to worry about right now. So inflation is not a serious danger, in my opinion.

Now, eventually the economy will recover, and eventually there may be some increase in inflation along the way. But again, if we have a moderate increase in inflation, let's say to 3 percent or 4 percent rather than the implicit target of 1 to 2 percent over the last decade or so, that would probably be a good thing.

The reasons are somewhat complex and discussed in my testimony. But briefly, somewhat higher inflation will imply somewhat higher nominal interest rates, which is a good thing because it gives the Fed more room to cut interest rates the next time there is a recession and we are less likely to hit the zero bound problem we hit in this recession.

And then also, briefly, in my view there is no evidence whatsoever that 3 or 4 percent inflation causes serious damage to the economy. When Paul Volcker conquered inflation, that meant reducing inflation to 3 or 4 percent. That was considered perfectly acceptable at the time, and no evidence since then has contradicted that. Thank you.

[The prepared statement of Professor Ball can be found on page 63 of the appendix.]

Mr. WATT. I thank all of you gentlemen for your outstanding testimony. We will now go to member questions, and reward Mr. Perlmutter for skipping over him earlier by recognizing him first.

Mr. PERLMUTTER. Thank you, Mr. Chairman, and thank you, gentlemen, for your testimony.

I just want to follow up with Professor Ball. Based on your experience and your research and your analysis of all this, when do we want to start tightening up?

And Mr. Meyer, I thought you were saying, well, we are not in a position of inflation or hyperinflation right now. But just from your background, talking to me as a policymaker, as a layman, what should I be looking for just in terms of when are we going to start tightening things up?

You heard me on the unemployment piece. That is where I am. I have a lot of people I have to put back to work. So if each of you would respond?

Mr. MEYER. Okay. Well, I am going to answer that in terms of the spirit of the "Taylor Rule" that John has done. I don't use exactly that one. But we know the Fed has two objectives, full employment and price stability. Okay? So the question is: How much does the unemployment rate have to fall, and where should inflation be?

I believe the unemployment rate is going to be above 9 percent at the end of this year, 1 percent, and likely to be 1 percent for the next couple of years. You can't convince me that it is time for the Fed to begin to tighten.

So we can talk about how low the unemployment rate should be. Certainly, inflation has to stabilize, from 1 percent probably has to begin to turn up. And the unemployment rate has to get down to—you know, it is hard to judge this, but in our case, close to 8½ percent.

Even then, it is hard to make a really strong case for tightening under those circumstances because the unemployment rate will be higher than the Fed has ever tightened that, and the inflation rate will be lower than the Fed has ever tightened that. So I will say the middle of 2011 or later.

Mr. PERLMUTTER. And Mr. Taylor? Professor?

Mr. TAYLOR. I agree that it depends on what happens with inflation and GDP growth and employment. I do think that the Fed has to be ready in case we get a surprise, an unfortunate increase in inflation. It has to also be ready if we are more pleasantly surprised with a stronger recovery. And in both cases, some interest rate increases will be required. I think it depends on when they occur.

But I would just say briefly, remember, one of the theories—which has been discussed a lot, one I advocate—is that the reasons we got into this crisis and the reasons we have, therefore, this high unemployment rate was the Fed held interest rates too low for too long for several years.

So don't think that it is an automatic help for unemployment to delay the interest rate increases. It could very well help prevent another downturn later.

Mr. PERLMUTTER. You heard it, and I would like Mr. Goodfriend, or Professor, to answer on this—but you heard Mr. Foster's question about this Okun's Law. And, I mean, productivity is really something that is at historic highs, which is wonderful.

But people don't get back to work because you are getting it all done and you are making a lot of money and you are doing it with a lot fewer people. Does that factor into anything? Do you believe this Okun's Law, whatever the heck he was talking about, is broken?

Mr. GOODFRIEND. Well, part of the productivity is cyclical. This happens when people's employment—you know, it goes down and the economy starts to recover. It is very typical. So I don't think that is a permanent thing.

Mr. PERLMUTTER. This seems to be double pretty much anything in the last 60 years. And I was only going to ask one question, and I am sorry, Mr. Chairman. But Mr. Goodfriend?

Mr. WATT. You have a minute and 20 seconds to go.

Mr. GOODFRIEND. Yes. Where I come out on this comes from the lessons that I have learned studying the Volcker disinflation and the period of the Great Inflation before that. And the first thing that occurs to me to say is that the Fed, the government, is not in control of the public's beliefs. The public's beliefs are out there, and you have to stay ahead of those.

I don't like to start talking about these issues in terms of what we think about the unemployment rate or the natural rate of unemployment. I was at the Fed for 25 years, and I learned this, if nothing else, that in environments like we have, the public could get very nervous and raise inflation expectations in long-term bond rates, if we wait too long on this. And if that happens, interest rates go in the wrong direction, we go into a double dip.

So in the limited time that I have to talk about this, I would urge everyone here to do what I have been saying in my testimony. Do whatever you can to create confidence in the public's mind about the fiscal authorities and the central bank being on the same page so we can anchor those beliefs. And that gives us a little more time to think about how to do these things with respect to the unemployment rate.

Mr. PERLMUTTER. Thank you. Professor, anything else?

Mr. BALL. Yes. My basic answer is that it is time to ease when unemployment is substantially lower. Chairman Bernanke talked about the Fed's dual mandate. Professor Taylor, if I understood, talked about there are inflation risks. There are unemployment risks. That sounds very reasonable and balanced.

I think in current circumstances, we have to be somewhat unbalanced. The economy has a crisis in unemployment, and it is essential to do something about that. Relative to that, whether inflation is 1 percent or 2 percent or 3 percent or 4 percent is really a minor issue, in my opinion.

Mr. PERLMUTTER. Thank you very much.

Mr. WATT. The gentleman's time has expired.

The gentleman from Texas, Mr. Paul, is recognized for 5 minutes.

Dr. PAUL. I thank the chairman for yielding.

I have a comment for Professor Ball first because you made the statement that it would be a good thing to get at a 4 percent inflation rate. That type of language happens to scare me a whole lot because I think it is so detrimental, and in many ways immoral.

Because what you are saying is the purpose of the government is to depreciate the currency, depreciate the value of the money. And who suffers the most from that? Well, the poor people do because their prices go up. And the older people who are on retirement, they suffer a lot as well. The wealthy people seem to be able to handle inflationary problems a lot better than the average person.

And a characteristic of inflation is that you eventually wipe out the middle class. And, quite frankly, we do have a lot of inflation right now because there is an inflationary factor in medical care. That is the main complaint.

Could you give me a brief answer on that, if you would like? Because I want to ask Mr. Taylor a question as well.

Mr. BALL. Well, those are complicated issues. Briefly and very respectfully, I disagree with what you are saying. Research suggests that the effects of inflation are distributed fairly evenly across different income groups, whereas the effects of unemployment are very heavily concentrated on lower-income people.

And more generally, I think, just the costs to anybody of 3 or 4 percent inflation, there has just been no documentation that they are important; whereas it is pretty obvious how costly unemployment it.

Dr. PAUL. Okay. Thank you.

For Professor Taylor, you have this exit rule. If the economy doesn't get back to growth, as a matter of fact stays where it is or starts down again sharply like it might—some people suspect that the housing market is still in a major crisis—does your rule just not happen? Does it not kick in? You don't worry about reducing the balance sheet if the economy suddenly takes a downturn?

Mr. TAYLOR. What I like about this proposal that I made is that it is very similar to the decision about increasing or not increasing the interest rate. So if the economy languishes, the interest rate will not increase, just as we discussed. If the economy picks up, then it will increase the interest rate.

My proposal on reserves, it is very much like that. It is tied into it, so that as the Federal funds rate is increased, if it is, reserves will come down at a similar pace. And the idea is by the time the Federal funds rate reaches 2 percent, then reserves will be roughly at the level where the interest rate can be—

Dr. PAUL. So it is on automatic. I get you.

Professor Meyer suggested that there is not much left for the Fed to do. You can't lower interest rates much lower. So we get into trouble. And the suggestion is that we just need more fiscal stimulation. And I think that is correct.

Well, anyway, there is a lot of desire for more fiscal stimulation. We have had a lot. And even today Chairman Bernanke said, "We are not in the business of monetizing debt." Of course, they just bought $300 billion worth of debt, and if push comes to shove, they do monetize debt.

But wouldn't it be safe to say that if a bank can get cheap money—you know, 1 percent, 0 percent—and take it, because it is available through the Federal Reserve system, and they buy Treasury bills, even though that might not go on the balance sheet, isn't that indirectly monetizing debt?

Mr. TAYLOR. I think the thing to look for in terms of monetizing the debt is how much the Fed—

Dr. PAUL. Actually buys?

Mr. TAYLOR. —purchases. Yes. I think—and also, it is not an easy thing. Remember, we think about the monetization that occurred in the great inflation; it occurred gradually in the late 1960's and 1970's. There was a lot of support for that inflation.

Dr. PAUL. Did Professor Meyer have a comment on that?

Mr. MEYER. Well, I have a comment on a lot of things you said.

Just with respect to fiscal policy, I don't think that—I doubt anybody in Congress, or there certainly would be a majority, who would want to have a significant fiscal stimulus today when there is uncertainty about, one, whether the economy needs it, and when the budget is in such terrible shape going forward.

With respect to a rule, yes. I mean, I use a rule to sort of follow what policy does. And, you know, the Fed is going to reduce reserves as it raises the funds rate. And that is what Chairman Bernanke sort of emphasized, when as you raise the interest on reserves, you could have managed reserves very carefully, withdraw them to keep the funds rate close to the interest on reserves. So that is inevitable, and that is really in the game plan.

Mr. WATT. The gentleman's time has expired. I will recognize myself, unless somebody else comes in, as the last questioner.

It seems to me that the bulk of the conversation in this panel and in the questions that have come up to this point have kind of gone beyond the 13(3) authority, and assumed that we are back into a situation where we can deal with monetary policy. We are speculating about when monetary policy ought to be changed, the interest rates adjusted.

And I am more interested in the 13(3) steps that the Fed has taken, and the withdrawal from them. Do you get to—well, let me frame this a little bit further.

One of the witnesses on the panel that was originally scheduled, who got snowed out, took the position that the United States was currently in a balance sheet recession, and that we ought to be very careful in withdrawing these emergency steps lest we get to the point that Japan ended up in.

Now, what I am interested in is the intersection between—not so much when you raise the interest rates; I think that is way out there, I believe. Is that beyond getting out of all of this 13(3) steps, or can we even get to the discussion about raising interest rates without going through the discussion about how you withdraw the 13(3) authority? I guess that is the question I want comments on.

Mr. MEYER. Okay. So first of all, you have three things going there. One is the 13(3). One is rates. And the first one was what do you do with sort of liquidity programs. These are completely separate.

The liquidity programs were put into place when there was a panic. Okay? The panic is over. Nobody was using those facilities. They closed on their own. Gone. History. Okay?

With respect to 13(3), it is a very different animal. And the Federal Reserve Act says that they could only be used when there are unusual and exigent circumstances. Now, that is a very high hurdle. I believe it existed when the Fed put these into place. I think it clearly doesn't exist today. And the Fed—this is not its choice. The Fed has no choice here. It must close those facilities.

Mr. WATT. So you are just assuming that all of this discussion is taking place post-13(3). Now, Mr. Taylor said we are beyond the panic. One of the questions I wrote down is, "Are we there yet?" I am not sure. I am not sure we are there yet, but I would like your opinion on that.

Mr. TAYLOR. Yes. Well, first of all, I think the use of 13(3) actually caused some damage the way it was used. Remember, it was used even before the panic with respect to Bear Stearns. And I think that caused a lot of confusion, and I have written about it extensively.

So I would like to see a return to a monetary policy, which 13(3) is almost never used. And I think that would be a much better sort of standard monetary policy. I also think that it is very important to be more transparent about 13(3).

Mr. WATT. But let's—maybe I need a better understanding of what 13(3) is. You put it into three different categories.

Mr. MEYER. Well, the 13(3) was used for the funds to bail out Bear Stearns.

Mr. WATT. So none of the other two options, the liquidity options or the interest rate options, should be employed at all until the 13(3) steps have been completely terminated? Is that what you are saying?

Mr. MEYER. Well, I just would—I would just add one thing. Some of those emergency liquidity authorities were put in place using 13(3).

Mr. WATT. All right. But then I don't have the capacity to distinguish those. If they were put in place under 13(3) authority, then I have to treat them as part of the 13(3).

Mr. MEYER. No. They are very different.

Mr. WATT. You know, maybe we are being semantic here. But the question—and that was what was confusing me because you all had gone on to talking about only interest rates. That is monetary policy. That is not 13(3) authority. Can you even get there, is my question, before you deal with the 13(3) withdrawal?

Mr. GOODFRIEND. Could I just—I want to say something.

Mr. WATT. Mr. Goodfriend?

Mr. GOODFRIEND. I talked extensively about something I called credit policy, which is very distinct from monetary policy. Monetary policy was reserves, buying Treasuries only. Credit policy undoes Treasuries only. Credit policy is 13(3).

Mr. WATT. But if credit policy was implemented under 13(3)—

Mr. GOODFRIEND. That's right. But the two are distinct.

Mr. MEYER. Could I just make a point? Regular reform bills all make a distinction between two parts of 13(3). One is bailouts of individual institutions, and the other are broad-based policies like the primary deal at credit facility that was just about injecting liquidity into the system, but injecting it through a wider base.

These are very separate, and I understand that legislation will take 13(3) authority away from the Fed with respect to individual institutions, but leave it with respect to these broad-based.

Mr. WATT. Go ahead, Professor.

Mr. GOODFRIEND. I was going to say, for me, I have a particular take on these questions. There is the mechanical question of what you want to do in terms of sequencing the withdrawal of different 13(3) programs, and how that will affect the unemployment rate, and what is your view about how soon to do that sort of thing.

But to me, I always think that there is a signaling effect of these kinds of withdrawals that has to do largely with the potential beliefs of the public as to what the long-term prospects are for inflation expectations.

And I think it is very important to kind of get 13(3) behind us; if not in fact, at least create a roadmap or rule, like John is saying, so the public sees that the Federal Reserve is regaining its independence from the fiscal authority, and also that the fiscal authority is working well with the Federal Reserve, that the government works.

I mean, we had a huge panic in the fall of 2008, I believe, because the public thought that the government wasn't working.

Mr. WATT. But necessarily get 13(3) credit authority behind us before we go to the interest rate thing, or—

Mr. GOODFRIEND. No. No, I think the discussion should be had so that there is a sense in the public mind of what the intentions are as to how to move forward to get out of 13(3).

The point being is the public, I think, is going to be naturally nervous about the Federal Reserve's independence and commitment to stabilize the inflation rate. And that has to be job one. If we don't stabilize the inflation rate, the long-term interest rate will spike up and we'll get—that, to my mind, is the greatest risk of a double-dip recession, a loss of credibility, so to speak, on inflation expectations.

And so I believe this discussion you are having is central, but I think it is central for a slightly different reason, that to have this discussion about 13(3) openly that clarifies the Fed's independence vis-a-vis the fiscal authorities in Congress is a way of signaling to the public: The government is serious about doing the right thing about inflation, and that will keep long-term rates low.

Mr. WATT. Okay. The only person I haven't heard from on this issue is Mr. Ball, and then we will close.

Mr. BALL. Okay. Well, if I understand the question, I think one can view interest rate policy and the unwinding of the other programs as separate issues. And the reason they can be separated is that the Fed has the tool of interest on reserves to manipulate market interest rates regardless of what is happening to the balance sheet.

So I think we can separate those issues. I think probably the Fed will and should be unwinding the various programs slowly because we will want to unwind them eventually, but we don't want to take the risk of jarring markets by dumping a lot of securities at one time or anything like that.

So I think the Fed is on a proper course of gradually unwinding the unorthodox policies. And then there is the separate issue of when interest rates should be increased.

Mr. WATT. I am not sure I am clear on it, but I probably won't ever be clear because this is complex territory. I am sure you all understand it better, and that is why we have these hearings, for us to try to understand it better so we can make better decisions.

We are extremely appreciative of your patience and your presence and your testimony. Let me do a couple of housekeeping things here.

I ask unanimous consent to insert in the record a statement from Janis Eberly entitled, "Unwinding Emergency Federal Reserve Liquidity Programs, and Implications for Economic Recovery."

Your entire statements will be made a part of the record. The Chair notes that some members may have additional questions for this panel, or for Chairman Bernanke, which they may wish to submit in writing. Without objection, the hearing record will remain open for 30 days for members to submit written questions to these witnesses and to place their responses in the record.

I think that completes all of our business, with our thanks, and the hearing is adjourned.

[Whereupon, at 1:10 p.m., the hearing was adjourned.]

A P P E N D I X

March 25, 2010

U.S. House of Representatives
Committee on Financial Services
Hearing on Monetary Policy and the State of the Economy
March 25, 2010

Statement for the Record
Congressman Ron Paul

Mr. Chairman, today the Federal Reserve finds itself in an unprecedented and unenviable position. It has boosted the monetary base by nearly $1.5 trillion since September of 2008. Excess bank reserves remain at historically high levels, and the Fed's balance sheet has ballooned to over $2 trillion. If the Fed pulls this excess liquidity out of the system, it risks collapsing banks who rely on this newly created money to boost their balance sheets. However if the Fed fails to pull this excess liquidity out of the system we risk hyperinflation.

The Federal Reserve has never had such an inflated balance sheet, nor has it ever pumped up the monetary base by such a large amount. During the belt-tightening years of the late 1970s and early 1980s, both the balance sheet and the monetary base continued to expand during a severe recession. We have to look back to the 1920s and 1930s before we see the Fed lowering the monetary base, and even then the Fed lowered the base only by 16%. What we are talking about now is a 60% lowering of the monetary base in order to return to pre-crisis levels. That is a major decrease in the monetary base and, if it is undertaken once these excess reserves have begun to enter the system, it could undermine the viability of banks and lead to the collapse of the financial system that the Fed sought to avoid.

What the Federal Reserve still fails to realize is that intervention in the economy is always harmful. Unlike the late French economist, Frederic Bastiat, the Fed only sees what is seen, the superficial results of its policies, and not what is unseen, the effects of its monetary intervention throughout the economy. Monetary inflation leads to malinvestment and causes the boom phase of the business cycle. Once the malinvestment is realized the bust phase occurs, and these malinvested resources need to be liquidated in order for the economy to recover. But the Fed actively works to prevent this liquidation and does everything in its power to continue inflating in order to prolong the boom. The first act of intervention begets the second and subsequent interventions, each bigger than the first, as each economic bust gets larger and more severe.

The idea that a handful of brilliant minds can somehow steer the economy is fatal to economic growth and stability. The Soviet Union's economy failed because of its central planning, and the United States economy will suffer the same fate if we continue down the path toward more centralized control. We need to return to sound money, bring back free markets, and rein in the Fed.

OPENING STATEMENT OF REP. MELVIN WATT

Hearing Entitled, "Unwinding Emergency Federal Reserve Liquidity Programs and Implications for Economic Recovery"

Thursday, March 25, 2010

Today's hearing is another in a series of steps in Congress' ongoing effort to examine the consequences of the global economic crisis. Today, we focus on how the Federal Reserve must now unwind its responses to the domestic part of the crisis in ways that minimize the future impacts of the responses so they don't have a deleterious impact on our economy.

In response to the global economic crisis, the Federal Reserve injected over $2 trillion into the economy through various liquidity initiatives, including the Term-Asset Backed Securities Loan Facility (TALF), the Commercial Paper Funding Facility and the Fed's commitment to purchase about $1.25 trillion of mortgage-backed securities. The immediate result of the Fed's actions was to expand its balance sheet dramatically and to put an unprecedented volume of reserves into the banking system. These steps were designed to unfreeze the domestic credit markets. Many economists and commentators credit the decisive steps taken by the Fed with saving the

U.S. economy from collapse and staving off an economic downturn that might have equaled or exceeded the Great Depression.

The central issue of today's hearing is how the Fed will decide the proper timing and sequencing of unwinding these emergency liquidity programs. The Fed must withdraw this liquidity while keeping inflation in check and encouraging job growth, all without hurting the fragile economic recovery that is underway. Every analysis I have seen has suggested that this will be a delicate balancing act that will have to be done just right to avoid significant damage to the economy. If recent history is any guide, the decisions the Fed makes to carry out this delicate balancing act, regardless of what these decisions are, will be second-guessed by the Congress and the public and this could call into question the independence of the Fed.

I am hopeful that we can use this hearing to understand better the policy options available to the Fed to unwind these programs and the potential policy implications of the various options. At the same time, I think we should be careful not to infringe on the Fed's ability and willingness to exercise its independent judgment about which options will be the most desirable and effective. So I view this hearing as an effort to educate members of our Committee, not as a forum for us to try to intimidate or browbeat the Fed into pursuing specific options.

We have asked the witnesses to provide information about specific monetary policy tools and options that are available to the Fed, including paying interest on reserves, entering reverse repurchase agreements, utilizing the recently introduced Term Deposit facility, conducting direct asset sales of the mortgage-backed securities it has purchased and any other options that might be appropriate. We need to understand the projected advantages and disadvantages of each option so we'll understand better what the Fed is doing when it uses particular options and, perhaps, even be in a position to explain to our constituents why particular steps are being taken.

Some economists have called into question whether traditional monetary policy tools, like lower interest rates, can work. They say that the U.S. could be in a "Balance-Sheet Recession" that occurs when private businesses are so focused on repairing their balance sheets after an asset-price bubble burst that the economy does not respond to normal monetary policy tools. They caution against cutting off emergency economic measures too soon, the mistake made by policymakers in Japan that resulted in a decade-long economic stagnation.

I especially look forward to Chairman Bernanke telling us how the Fed can effectively unwind its emergency liquidity programs while reducing inflationary fears, encouraging job growth and maintaining the fragile economic recovery, knowing full well that we all expect him to be a Master Conductor who will "wave the magic wand" that will lead our economy to play sweet music again.

Laurence Ball
Johns Hopkins University
March 25, 2010

TESTIMONY BEFORE THE HOUSE COMMITTEE ON FINANCIAL SERVICES

Chairman Frank, Chairman Watt, Ranking Member Bachus, and members of the Committee, I am grateful for this chance to share my views about Federal Reserve policy.

I greatly admire the Federal Reserve's response to our nation's financial and economic crisis. The Fed's policymakers and staff have demonstrated a remarkable combination of boldness, creativity, and pragmatism. The unprecedented combination of new lending programs, large asset purchases, and near-zero interest rates has prevented a very painful recession from turning into something even worse. Without the Fed's extraordinary policies, we could be facing a depression on the scale of the 1930s.

It is not yet time to reverse the emergency policies of the last two and a half years. Yet someday monetary policy must return to normal. Currently, the Fed is intensively analyzing its options for a future shift in policy. I am glad that this Committee is also examining the issue.

In these remarks, I will focus on the aspect of Federal Reserve policy that I believe is most important going forward: the Fed's interest rate target. Currently, the Fed is holding the federal funds rate, the rate at which banks lend reserves to one another, below a quarter of a percent. Policymakers face two questions about unwinding this highly unusual policy. First, when is the right time to raise the federal funds rate? Second, when that time comes, how can the Fed ensure that the funds rate rises to the level it desires? I will start with the second question, which is the easier of the two.

How to Raise the Federal Funds Rate

Federal Reserve officials are confident they have the tools to raise the federal funds rate. This confidence is warranted: the funds rate will rise whenever the Fed decides to raise it.

It is likely, however, that raising the funds rate will require non-traditional monetary tools. The textbook approach to raising interest rates is for the Fed to sell assets, which drains reserves from the banking system. The trouble with this approach is that, given the Fed's expanded balance sheet, the necessary asset sales could be very large and therefore might disrupt financial markets. In particular, it could be dangerous for the Fed to sell a significant fraction of the mortgage-backed securities that it currently owns. Such an action could shake confidence and raise mortgage interest rates, reversing the Fed's progress in repairing the mortgage market.

Fortunately, the Fed can easily raise the federal funds rate without selling assets. Indeed, it has several tools for accomplishing this task, including reverse repurchase agreements and term deposits. Fed officials have explained how these tools work on a number of occasions. I will focus here on one tool that is likely to be central to the Fed's tactics: interest on reserves. Even if the Fed had no other way to control the federal funds rate, its authority to pay this interest -- granted by Congress in October 2008 -- would be sufficient.

The explanation is simple. The interest rate on reserves should put a floor on the federal funds rate, because a bank will not lend in the federal funds market if it can earn more from deposits at the Fed. If reserves earn an interest rate of 2%, for example, banks will demand at least 2% when they lend to one another. Therefore, the Fed can raise the federal funds rate simply by raising the interest rate it pays on reserves.

In practice, the link between the interest rate on reserves and the federal funds rate is imperfect. In recent months, the Fed has paid 0.25% on reserves, yet the federal funds rate has averaged around 0.15%. This difference reflects the fact that not all lenders in the federal funds market are banks with deposits at the Fed.

Yet the gap between the two interest rates should not be a cause for concern. The gap is around a tenth of a percentage point, which is too small to matter for the economy. And the gap is unlikely to rise if the Fed raises the interest rate on reserves. If the Fed raises this rate to 2%, the federal funds rate may only rise to 1.9%, but again a tenth of a percent doesn't matter.

The gap between the two interest rates will remain small because a substantial gap would create an arbitrage opportunity -- a chance for banks to make easy money. Bank could borrow in the federal funds market, deposit their borrowings at the Fed, and earn profits. This behavior would quickly push the federal funds rate toward the interest rate on reserves.

So, to reiterate, the Fed clearly has the means to raise the federal funds rate when it decides the time is right.

The Current Economic Crisis

When should the Fed raise the federal funds rate? The first part of the answer is, not any time soon.

In some respects, our country's economic crisis is passing. Stock prices have risen over the last year and banks are returning to profitability. The recession has ended and the rate of economic growth may be returning to normal. In isolation, these developments suggest that the Fed should consider raising interest rates before long.

Yet by one crucial measure, the economy is still in a deep crisis. The unemployment rate in February was 9.7%, and most forecasters predict only a modest decline in this rate over the next two years. This is a disaster for an economy where an unemployment rate below 5% was considered normal and non-inflationary less than three years ago. I'm sure the members of this Committee understand the suffering that unemployment is causing across the country.

It is *not* paradoxical that unemployment is high at the same time economic growth is returning to normal. A normal rate of output growth, around 2% or 3% per year, is needed just to keep the unemployment rate constant. Once unemployment is high, it only falls if growth is well *above* normal for a significant period.

Unfortunately, there is little reason to believe we will soon see above-normal growth. In past recessions, the Federal Reserve has lowered interest rates and kept on lowering them until growth accelerated. That will not happen this time, because the Fed has hit the zero bound on rates. We can hope that the Fed, the Administration, and Congress devise policies to spur growth. But it is not clear what will work.

The key point is that America still faces an unemployment crisis. While it is prudent to plan for a future when expansionary policies are unwound, current circumstances call for more expansion, not less.

Some people argue that the Fed's expansionary policies should be reversed because they threaten to cause inflation. In my view, however, fears of imminent inflation are unwarranted. As measured by either the federal funds rate or the monetary base, current Fed policy is highly expansionary. In normal times, the

Fed's policy stance would indeed produce inflation. But these are not normal times.

We need to remember why expansionary policy normally causes inflation. Businesses around the country do *not* monitor the Fed's balance sheet. They do not base their price increases on the level of bank reserves. Instead, monetary policy influences inflation 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. These conditions encourage firms to raise prices rapidly.

Given this mechanism, inflation is a danger only if the economy is overheated -- regardless of what the Fed is doing. With unemployment near 10%, overheating is one problem we don't need to worry about.

When to Raise the Federal Funds Rate

Some day the economy will recover and the Fed should raise the federal funds rate -- not soon, but some day. Under what conditions should the Fed take this action?

Fed policymakers have signaled their answer to this question. In its statement on January 27, the Federal Open Market Committee lists the conditions that "are likely to warrant exceptionally low levels of the federal funds rate for an extended period." These conditions include "low rates of resource utilization, subdued inflation trends, and stable inflation expectations." Simplified slightly, the Fed says it is keeping the funds rate near zero because unemployment is high and inflation is stable. Turning this around, we can see what might lead the Fed to raise the funds rate: lower unemployment or rising inflation.

This stance is consistent with mainstream thought about monetary policy. Normally, a central bank should consider both unemployment and inflation in setting interest rates. In my view, however, the current crisis warrants a deviation from traditional policy. The Fed should give greater weight than usual to unemployment. In particular, it should not raise interest rates until we see major progress in reducing the unemployment rate. As long as unemployment remains high, the Fed should keep the federal funds rate near zero -- *even if inflation starts to rise.*

Since the double-digit inflation of the 1970s, the Fed has sought to keep inflation low. For most of today's policymakers, "low" means 2% or less. When Ben Bernanke was a Fed Governor in the early 2000s, he said his "comfort zone" for inflation was between 1% and 2%. Since then, the Fed has generally kept inflation in or near Bernanke's range. In 2009, core inflation (inflation excluding food and energy prices) was 1.8%.

In the current crisis, however, the Fed should *not* try to keep inflation below 2%. A moderate rise in inflation -- say to 3% or 4% -- would probably be good for the U.S. economy. This conclusion follows from several related points.

First, as I have previously discussed, we need a period of above-average output growth to reduce unemployment. This rapid growth could have a side effect of higher inflation. If the Fed won't let inflation rise above 2%, it may not be possible to reduce unemployment substantially.

Second, a moderate rise in inflation could help *cause* the growth spurt the economy needs. An increase in growth requires an increase in aggregate spending, and spending depends on the real interest rate -- the nominal rate minus inflation. A lower real rate makes it less costly to borrow, raising investment and consumption. The zero bound is preventing the Fed from reducing the nominal interest rate, but higher inflation can reduce the real rate.

Third, there is no evidence that the economy functions less efficiently at 3% or 4% inflation than at 2%. Paul Volcker is hailed as a hero for conquering the inflation of the 1970s. People forget that Volcker's achievement was to reduce inflation to about 4% per year, its level for most of the 1980s. Volcker evidently did not consider it urgent to reduce inflation further, and it would be no disaster for inflation to creep back to 4%. Any costs to the economy pale in comparison to 10% unemployment.

Finally, a moderate increase in inflation would reduce the danger arising from the zero bound on interest rates. If inflation rises permanently by one percentage point, nominal interest rates rise by the same amount. (This is the "Fisher effect" of basic macroeconomics.) With higher nominal interest rates, the Fed would have more room to cut rates during future recessions. It would be less likely to hit the zero bound before the economy recovers.

<u>Conclusion</u>

To summarize:

- The Fed has the tools to raise the federal funds rate when the time is right. One powerful tool is interest on reserves.

• With an unemployment rate of 9.7%, we are far from the point when the Fed should raise the funds rate.

• With unemployment so high, there is little risk of inflation despite expansionary monetary policy.

• The Fed should not increase the federal funds rate until we see major progress in reducing unemployment. The Fed should keep the funds rate near zero even if inflation starts to rise. A moderate rise in inflation would probably be good for the economy.

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Statement by

Ben S. Bernanke

Chairman

Board of Governors of the Federal Reserve System

before the

Committee on Financial Services

U.S. House of Representatives

March 25, 2010

Chairmen Frank and Watt, Ranking Members Bachus and Paul, and other members of the Committee and Subcommittee, I appreciate the opportunity to discuss the Federal Reserve's strategy for exiting from the extraordinary lending and monetary policies that it implemented to combat the financial crisis and support economic activity. As you know, I previously submitted prepared testimony for a hearing on this topic that was canceled because of weather conditions. I request that that testimony be included in the record of this hearing. This morning, in lieu of repeating my previous prepared statement, I would like to summarize some key points from the earlier testimony and update the Committee on recent developments.

Broadly speaking, the Federal Reserve's response to the crisis and the recession can be divided into two parts. First, our financial system during the past 2-1/2 years experienced periods of intense panic and dysfunction, during which private short-term funding became difficult or impossible to obtain for many borrowers. The pulling back of private liquidity at times threatened the stability of financial institutions and markets and severely disrupted normal channels of credit. In its role as liquidity provider of last resort, the Federal Reserve developed a number of programs to provide well-secured, mostly short-term credit to the financial system. These programs, which imposed no cost on taxpayers, were a critical part of the government's efforts to stabilize the financial system and restart the flow of credit to American families and businesses. Besides ensuring that a range of financial institutions--including depository institutions, primary dealers, and money market mutual funds--had access to adequate liquidity in an extremely stressed environment, the Federal Reserve's lending helped to restore normal functioning and support credit extension in a number of key financial markets, including the interbank lending market, the commercial paper market, and the market for asset-backed securities.

As financial conditions have improved, the Federal Reserve has substantially phased out these lending programs. Some facilities were closed over the course of 2009, and most others expired on February 1.[1] The Term Auction Facility, under which fixed amounts of discount window credit were auctioned to depository institutions, was discontinued in the past few weeks. As of today, the only facility still in operation that offers credit to multiple institutions, other than the regular discount window, is the Term Asset-Backed Securities Loan Facility (TALF), which has supported the market for asset-backed securities, such as those backed by auto loans, credit card loans, small business loans, and student loans. Reflecting notably better conditions in many markets for asset-backed securities, the TALF is scheduled to close on March 31 for loans backed by all types of collateral except newly issued commercial mortgage-backed securities (CMBS) and on June 30 for loans backed by newly issued CMBS.[2]

In addition, the Federal Reserve has been normalizing the terms of regular discount window loans. We have reduced the maximum maturity of discount window loans from 90 days to overnight for nearly all loans, restoring the pre-crisis practice. In mid-February the Federal Reserve also increased the spread between the discount rate and the upper limit of our target range for the federal funds rate from 25 basis points to 50 basis points. We have emphasized that both the closure of our emergency lending facilities and the adjustments to the terms of discount window loans are responses to the improving conditions in financial markets. They are not expected to lead to tighter financial conditions for households and businesses and hence do not

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[1] The exit from these programs is substantially complete: Total credit outstanding under all programs, including the regular discount window, has fallen sharply from a peak of $1-1/2 trillion around year-end 2008 to about $71 billion last week.

[2] The TALF extends three- and five-year loans, which will remain outstanding after the facility closes for new loans. The later scheduled closing of the CMBS portion of the facility reflects the Board's assessment that conditions in that sector remain highly stressed, as well as the fact that CMBS securitizations are more complex and take longer to arrange than other types.

constitute a tightening of monetary policy, nor should they be interpreted as signaling any change in the outlook for monetary policy.

The second part of the Federal Reserve's response to the crisis and recession, besides the provision of liquidity to the financial system, involves both standard and less conventional forms of monetary policy. After reducing short-term interest rates nearly to zero, the Federal Open Market Committee (FOMC) provided additional monetary policy stimulus through large-scale purchases of Treasury securities, agency mortgage-backed securities (MBS), and agency debt. All told, the Federal Reserve purchased $300 billion of Treasury securities and will conclude purchases of $1.25 trillion of agency MBS and about $175 billion of agency debt at the end of this month. The Federal Reserve's purchases have had the effect of leaving the banking system highly liquid, with U.S. banks now holding more than $1.1 trillion of reserves with Federal Reserve Banks. A range of evidence suggests that these purchases and the associated creation of bank reserves have helped improve conditions in mortgage markets and other private credit markets and put downward pressure on longer-term private borrowing rates and spreads.

At its meeting last week, the FOMC maintained its target range for the federal funds rate at 0 to 1/4 percent and indicated that it continues to anticipate that economic conditions, including low rates of resource utilization, subdued inflation trends, and stable inflation expectations, are likely to warrant exceptionally low levels of the federal funds rate for an extended period. In due course, however, as the expansion matures, the Federal Reserve will need to begin to tighten monetary conditions to prevent the development of inflationary pressures. The Federal Reserve has a number of tools that will enable it to firm the stance of policy at the appropriate time.

Most importantly, in October 2008 the Congress gave the Federal Reserve statutory authority to pay interest on balances that banks hold at the Federal Reserve Banks. By increasing the interest rate on banks' reserves, the Federal Reserve will be able to put significant upward pressure on all short-term interest rates, as banks will not supply short-term funds to the money markets at rates significantly below what they can earn by holding reserves at the Federal Reserve Banks. Actual and prospective increases in short-term interest rates will be reflected in turn in higher longer-term interest rates and in tighter financial conditions more generally.

The Federal Reserve has also been developing a number of additional tools it will be able to use to reduce the large quantity of reserves currently held by the banking system. Reducing the quantity of reserves will lower the net supply of funds to the money markets, which will improve the Federal Reserve's control of financial conditions by leading to a tighter relationship between the interest rate paid on reserves and other short-term interest rates. Notably, to build the capability to drain large quantities of reserves, the Federal Reserve has been working to expand its range of counterparties for reverse repurchase operations beyond the primary dealers and to develop the infrastructure necessary to use agency MBS as collateral in such transactions.[3] In this regard, the Federal Reserve recently announced the criteria that it will apply in determining the eligibility of money market mutual funds to serve as counterparties in reverse repurchase agreements.

As an additional means of draining reserves, the Federal Reserve is also developing plans to offer to depository institutions term deposits, which are roughly analogous to certificates of deposit that the institutions offer to their customers. A proposal describing a term deposit facility was recently published in the *Federal Register*, and the Federal Reserve is finalizing a revised

[3] Primary dealers are broker-dealers that trade in U.S. government securities with the Federal Reserve Bank of New York

proposal in light of the public comments that have been received. After a revised proposal is reviewed by the Board, we expect to be able to conduct test transactions this spring and to have the facility available if necessary thereafter. The use of reverse repos and the deposit facility would together allow the Federal Reserve to drain hundreds of billions of dollars of reserves from the banking system quite quickly, should it choose to do so.

When these tools are used to drain reserves from the banking system, they do so by replacing bank reserves with other liabilities; the asset side and the overall size of the Federal Reserve's balance sheet remain unchanged. If necessary, as a means of applying monetary restraint, the Federal Reserve also has the option of redeeming or selling securities. The redemption or sale of securities would have the effect of reducing the size of the Federal Reserve's balance sheet as well as further reducing the quantity of reserves in the banking system. Restoring the size and composition of the balance sheet to a more normal configuration is a longer-term objective of our policies. In any case, the sequencing of steps and the combination of tools that the Federal Reserve uses as it exits from its currently very accommodative policy stance will depend on economic and financial developments and on our best judgments about how to meet the Federal Reserve's dual mandate of maximum employment and price stability.

In sum, in response to severe threats to our economy, the Federal Reserve created a series of special lending facilities to stabilize the financial system and encourage the resumption of private credit flows to American families and businesses. As market conditions and the economic outlook have improved, these programs have been terminated or are being phased out. The Federal Reserve also promoted economic recovery through sharp reductions in its target for the federal funds rate and through large-scale purchases of securities. The economy continues to require the support of accommodative monetary policies. However, we have been working to ensure that we have the tools to reverse, at the appropriate time, the currently very high degree of monetary stimulus. We have full confidence that, when the time comes, we will be ready to do so.

Monetary Policy, Credit Policy, and Interest on Reserves Policy in the Economic Recovery

Testimony before the
Committee on Financial Services
U.S. House of Representatives

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March 25, 2010

[1] Served as Senior Vice President and Policy Advisor at the Federal Reserve Bank of Richmond from 1993 to 2005.

INTRODUCTION

I am pleased to be invited to testify today before the House Financial Services Committee on "Unwinding Emergency Federal Reserve Liquidity Programs and Implications for Economic Recovery." The credit turmoil and recession have led the Fed into uncharted waters. While pushing short term interest rates nearly to zero, the Fed has more than doubled the size of its balance sheet by creating a trillion dollars of bank reserves to finance the purchase of a variety of non-Treasury securities and to fund loans to financial institutions through a variety of liquidity facilities. With the recession apparently ending, the time is right to examine the policy options that would allow the Fed to guide the economy back to a non-inflationary balanced-growth path.

Decisions that govern economic activity are forward looking. Hence, to facilitate a recovery from the recession the Fed needs to make the public confident of the soundness of its strategy for normalizing both short term interest rates and the size and composition of its balance sheet. The aggressive expansion of the Fed's balance sheet was decisive in stabilizing employment, inflation, and inflation expectations against the disinflationary potential inherent in the large output gap and declining unit labor costs that characterize this recession. The economy is likely to recover slowly. It may be some time before it is appropriate for the Fed to raise short term interest rates or shrink its balance sheet. In the meantime, the Fed should position itself to deal flexibly and credibly with whatever comes, by improving its actual and perceived independence, its commitment to low inflation, and its mechanical capability to raise interest rates and shrink its balance sheet when the time comes.

To improve the effectiveness of its exit strategy, and in keeping with the Fed's longstanding intention to increase transparency, I believe that the Fed should recognize and describe the initiatives that it undertook in the credit turmoil in terms of three fundamental components: monetary policy, credit policy, and interest on reserves policy. In the balance of my testimony I distinguish between the three fundamental components, and then present recommendations for the Fed's exit strategy using my three-way classification of central bank policies.

MONETARY POLICY, CREDIT POLICY, AND INTEREST ON RESERVES POLICY

According to my classification, pure ***monetary policy*** consists of open market operations that expand or contract high-powered money (bank reserves plus currency) by buying or selling United States Treasury securities. Until the recent credit turmoil the Fed satisfied virtually all its asset acquisition needs in support of monetary policy by purchasing Treasury securities, a policy known as "Treasuries only." This was done to avoid carrying credit risk on the Fed's balance sheet. The main exception was occasional, limited, temporary discount window lending to depository institutions. Importantly, the Fed returns to the Treasury all the interest (net of operating expenses) on the Treasuries that it holds. Hence, by adhering to a "Treasuries only" asset acquisition policy the Fed passes nearly all the revenue from monetary policy back to the Treasury and leaves all the decisions regarding the use of that revenue to the fiscal authorities. The Fed delivered a powerful monetary stimulus to the economy in the fall of 2008 by creating hundreds of billions of dollars of bank reserves that satiated the market and drove the federal funds rate nearly to zero.

Second, pure ***credit policy*** involves changing the composition of the Fed's asset portfolio between Treasury securities, on one hand, and credit to the private sector and non-Treasury government entities on the other hand, holding high-powered money fixed. For instance, hundreds of billions of dollars of TAF discount window credit auctioned to depositories from the fall of 2007 through the summer of 2008 was pure credit policy financed with funds obtained from the Fed's sale of Treasury securities. One can also imagine a combination credit and monetary policy in which newly created bank reserves are used to fund discount window lending, or to purchase non-Treasury securities. The trillion dollars of bank reserves that currently finances a like volume of mortgage-backed securities on the Fed's balance sheet represents a combination credit and monetary policy.

Pure credit policy by itself has basically no effect on the federal funds rate because it does not change aggregate bank reserves or interest paid on reserves. In my classification, the correct way to think of pure credit policy is as debt-financed fiscal policy. Why? Well, at the margin, the Fed returns to the Treasury the interest earned on Treasury securities that it holds; so when the Fed sells Treasuries to finance the acquisition of non-Treasury assets such as discount window loans or mortgage-backed securities, the result is just as if the Treasury financed this purchase by borrowing from the public.

Fed credit policy works by interposing the government between private borrowers and lenders, and exploiting the government's creditworthiness to lower private borrowing costs and facilitate credit flows. For example, when interbank rates spiked in the credit turmoil, TAF credit provided some relief from elevated borrowing costs for depository institutions then dependant on interbank funding. Likewise, Fed purchases of mortgage-backed securities facilitated the flow of mortgage credit. And Fed loans to three Maiden Lane special purpose entities facilitated the acquisition of Bear Stearns by JPMC and the rescue of AIG.

In contrast to holding United States Treasury securities, all Fed lending carries some credit risk and exposes the Fed, and ultimately taxpayers, to potentially costly and controversial disputes regarding credit allocation. This is true even though the Fed protects itself with good collateral. For instance, if Fed credit finances the exit of uninsured depositors or creditors of an institution that fails subsequently, then the Fed would strip that failed institution of collateral that would be available otherwise to cover the cost of deposit insurance or other government guarantees.

It is important to distinguish between ordinary "last resort lending" and "expansive credit policies" in light of the reasoning above. Last resort lending to temporarily illiquid but solvent depositories has long been a component of independent central banking. Last resort lending to supervised, solvent depositories, on a short-term basis, against good collateral is well protected against loss and strictly confined, so its implications for fiscal policy are relatively minor. Hence, last resort lending is compatible with independent central banking.

Expansive credit initiatives are another matter. By extending the central bank's credit reach in scale, maturity, collateral, to unsupervised non-depository institutions, and the purchase of non-Treasury securities, expansive credit initiatives have significant allocative consequences and carry substantial credit risk. In so doing expansive credit initiatives infringe significantly on the fiscal policy prerogatives of the Treasury and Congress and properly draw the scrutiny of the fiscal authorities. Thus, expansive credit initiatives undermine central bank independence.

Finally, ***interest on reserves policy*** consists of varying the interest rate that the Fed pays on bank reserves, while holding monetary and credit policy fixed. The Financial Services Regulatory Relief Act of 2006 gave the Fed the authority starting in 2011 to pay interest on reserves for the first time in its history. In May 2008 the Fed asked Congress for immediate authority to pay interest on reserves, and the Fed began to pay interest on reserves in October 2008 to help put a floor under the federal funds rate. Interest on reserves works in that regard because depository institutions will not lend in the interbank market at interest below the rate they can earn on reserves held at the Fed. By winter 2008 the Fed cut its intended federal funds rate nearly to zero, and the authority to pay interest on reserves hasn't mattered much since then. Nevertheless, the Fed's request to expedite its power to pay interest on reserves was farsighted. Interest on reserves should provide the Fed with the mechanical capability to exit the zero bound on interest rate policy regardless of the size of its balance sheet. I have more to say about that below.

RECOMMENDATIONS FOR THE EXIT STRATEGY

CREDIT POLICY AND FEDERAL RESERVE INDEPENDENCE

Congress bestows Fed independence only because it is necessary for the Fed to do its job effectively. Hence, the Fed should perform only those functions that must be carried out by an independent central bank. The idea is to preserve the Fed's independence to act credibly, flexibly and aggressively with monetary policy, limited credit policy, and interest on reserves policy to achieve a non-inflationary recovery.

Since expansive credit initiatives are fiscal policy, they require thorough congressional oversight. However, the presence of expansive credit policy assets on the Fed's balance sheet should not be allowed to threaten the Fed's actual or perceived political independence and the credibility of its exit strategy. To preserve the Fed's independence, the Treasury and Congress should work to remove problematic credit assets from the Fed's balance sheet in exchange for Treasury securities, so the problematic credit assets can be monitored and managed elsewhere in the government. Then, there would be little need for Congress to scrutinize Fed actions beyond oversight hearings to hold the Fed accountable for stabilizing employment and inflation. And the Fed could manage interest rate policy independently as it has for decades.

INTEREST ON RESERVES POLICY

Chairman Bernanke in his written testimony for the July 2009 *Monetary Policy Report to the Congress* expressed the view that the authority to pay interest on reserves is perhaps the most important tool enabling the Fed to raise the federal funds rate without first shrinking its balance sheet. I agree. However, in his July *Wall Street Journal* op-ed, Chairman Bernanke noted that the federal funds rate slipped below interest paid on reserves in the fall of 2008, evidently because some large lenders in the federal funds market, such as government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac, and Federal Home Loan Banks (FHLBs), are legally ineligible to receive interest on balances that they hold at the Fed.

Thus, it is reasonable to worry that lending by the GSEs, the FHLBs, and others in the federal funds market could impair the power of interest on reserves to put a floor under the federal funds rate again when the Fed tries to exit the near-zero federal funds rate setting. The *WSJ* op-ed suggests that if this difficulty arises, the Fed has at its disposal other options by which it could immobilize reserves to help raise the federal funds rate. As I see it, however, these other options are not without problems of their own.

Instead, I think that the Fed should work with the Treasury and Congress to secure the power of interest on reserves to put a floor under the federal funds rate. After all, the Fed's July 2009 *Monetary Policy Report to the Congress* pointed out on page 37 that interest paid on bank reserves worked successfully for other central banks to put a floor under interbank rates in their economies even as aggregate bank reserves expanded aggressively.

Given the demonstrated power of interest on reserves abroad, the Treasury and Congress should help the Fed to secure the interest on reserves floor in the United States by modifying regulations for the federal funds market to exclude all but depository institutions from lending in that market, or alternatively by allowing those institutions eligible to lend in the federal funds market to earn interest on balances at the Fed. So strengthened, interest on reserves policy would provide the Fed with a precise, flexible, and reliable means of raising interest rates as the economy recovers, regardless of the size of the Fed's balance sheet.

It is true that even without such modifications, depository institutions eligible to receive interest on reserves have an incentive to attract federal funds from the GSEs and the FHLBs, and to deposit those funds at the Fed. Such arbitrage would tend to keep the federal funds rate from falling far below interest on reserves. Nevertheless, such arbitrage cannot be counted upon to stabilize the federal funds rate close to interest on reserves. The point is that allowing the federal funds rate to fluctuate below interest on reserves would complicate interest rate policy needlessly by creating doubt about whether short-term market interest rates that matter for borrowing and lending will follow interest on reserves or the federal funds rate. Securing the interest on reserves floor for the federal funds rate would eliminate the problem.

MONETARY POLICY

According to my classification, the Fed's remaining options to raise the federal funds rate (without raising interest on reserves) all involve monetary policy in the sense that they work by reducing or immobilizing aggregate bank reserves. One problem with these options is that, as a technical matter, in order to raise the federal funds rate significantly by means of pure monetary policy, the Fed would have to drain hundreds of billions of dollars of reserves and return the stock of reserves to a level near to those prior to the credit turmoil. Large-scale operations would have to be undertaken in advance over a span of time to pre-position monetary policy to take the modest operations needed to adjust the federal funds rate precisely and flexibly when the time comes.

The Fed contemplates publicly four options for draining reserves. The Fed itself acknowledges that the first two have serious drawbacks, and I agree. First, the Fed could reduce reserves by selling some of its holdings of Treasury securities. The Fed recognizes that this option is limited by the stock of Treasuries currently available in its portfolio. Second, the Treasury could sell securities and deposit the proceeds with the Fed. But the Fed rightly does not want to rely on the Treasury to achieve its policy objectives.

Evidently, the Fed is more favorably disposed to the third option. The Fed could drain bank reserves and absorb federal funds otherwise lent by GSEs, FHLBs and other institutions by arranging large-scale reverse repurchase agreements. Such reverses would involve the sale by the Fed of securities from its portfolio with an agreement to buy the securities back at a slightly higher price. I see problems with this approach. Large-scale reverses would expose the Fed to substantial counterparty risk. This could complicate the Fed's management of financial markets, especially in times of financial turmoil. Simply put, I don't think the Fed should put itself in the position of having to depend to such a large extent on contractual arrangements with the private sector.

Fourth, the Fed could drain bank reserves by offering interest-earning term deposits to banks, analogous to certificates of deposits that banks offer their customers. The Fed is favorably disposed to this option, too. But, again, this option is not without problems. Fed term deposits would compete with Treasury bills and potentially create friction with the Treasury. And term deposits would be close substitutes for bank reserves. Hence, the introduction and management of interest on term deposits could destabilize the interest elasticity of demand for reserves and complicate federal funds rate targeting with monetary policy as contemplated.

More generally, I believe it is inadvisable for the Fed to utilize non-monetary "managed liabilities" on a large scale because they would turn the Fed into a "financial intermediary" and jeopardize its independence by facilitating the perpetual funding of credit policy independently of monetary policy. Moreover, there is no reason for the Fed to issue managed liabilities if the regulation of the federal funds market is modified to secure the potential for interest on reserves to put a floor under the federal funds rate.

CONCLUSION

My proposed classification of central bank policies could be utilized productively in the Fed's internal deliberations and in its external communications to improve the transparency of the Fed's operations for purposes of accountability and credibility, to distinguish the fiscal aspects of Fed policies for the purpose of clarifying the boundary of its independent responsibilities, to help secure the Fed's operational capability to raise interest rates precisely and flexibly to sustain a non-inflationary recovery, and to reinforce the sense that the Fed has the political independence and the determination to unwind its emergency liquidity measures while limiting their inflationary potential.

Unwinding Emergency Federal Reserve Liquidity Programs and the Federal Reserve's

Extraordinarily Accommodative Monetary Policy: Implications for Economic Recovery

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before the

Committee on Financial Services

U.S. House of Representatives

March 25, 2010

*This testimony represents my views, and not necessarily the views of Macroeconomic Advisers or my colleagues at Macroeconomic Advisers.

Chairman Frank, Ranking Member Bachus, and other members of the Committee. Thank you for giving me this opportunity to discuss questions related to the already completed exit from the Fed's emergency liquidity facilities and plans to exit from its extraordinarily accommodative monetary policy.

When and Why Did the Federal Reserve Close its Emergency Liquidity Facilities?

As Chairman Bernanke explained to you in his earlier testimony[1], the Fed has already closed virtually all its emergency liquidity facilities.[2] How did the Fed do this? It's important to know that these facilities basically closed on their own, as was always the plan. Requests for funding declined and then virtually stopped as markets healed. In essence, all that was left for the Fed to do was just to close the door and terminate the facilities. They are already history.

When the history is written, it will surely conclude that these programs proved to be extremely effective. They prevented an even worse financial collapse than would otherwise have occurred, and hence an even deeper recession.

At the outset of the financial panic, there was an unprecedented liquidity squeeze. Financial institutions that always fund themselves in short-term money markets and invest in illiquid longer-term assets found that they could no longer do so because of perceived insolvency risk and uncertainty about where the risks were located or concentrated. The Fed and other central banks, often in cooperation, acted, as is their role, as liquidity providers of last resort. Their swift, creative, aggressive, and sometimes coordinated actions clearly prevented a fire sale of illiquid assets. Failing to provide this liquidity would have immediately pushed the financial system to at least closer to the edge of an abyss.

The last step in the process of liquidity normalization, and one that was not well understood by the markets, was an increase in the discount rate, specifically an increase in the spread of the discount rate over the funds rate. This spread had been 100 basis points before the crisis, and was shrunk to 25 basis points as part of the Fed's efforts to inject a massive amount of liquidity. The Fed in this case sought to further encourage banks to access the discount window, its traditional vehicle for meeting emergency needs of depository institutions, and counter the perceived stigma associated with doing so. The spread has now been increased by 25 basis points to 50 basis points. Further increases are likely, and we expect the Fed to move the spread back further in the direction of its pre-crisis level.

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[1] Ben Bernanke, "Federal Reserve's Exit Strategy," Testimony before the Committee on Financial Services, U.S. House of Representatives, February 10, 2010. The hearing was cancelled because of snow, but the Fed released the testimony on the day of the planned testimony.

[2] These include the Term Auction Facility (TAF), the Primary Dealer Credit Facility (PDCF), the Term Securities Lending Facility (TSLF), the Term Securities Lending Facility Options Program (TOP), the Commercial Paper Funding Facility (CPFF), the Asset-Backed Commercial Paper (ABCP) Money Market Mutual Fund Liquidity Facility (AMLF), the Money Market Investor Funding Facility (MMIFF), as well as the currency swap arrangements with foreign central banks.

What is the relationship between closing the emergency liquidity programs and monetary policy exit, specifically the first hike in the funds rate?

None. Chairman Bernanke fully explained this distinction to you in his testimony.

Raising the discount rate was entirely part of the process to normalize liquidity arrangements, specifically to close emergency liquidity facilities that were no longer needed. Chairman Bernanke emphasized, as clearly as he possibly could, that this increase in the discount rate had absolutely nothing to do with the timing of exit from the near-zero funds rate, and was not therefore a signal about that timing.

This was the one of the early tests of Fed communication. This was also a test of how well the market listens to and understands that communication. In any case, Chairman Bernanke did very well, the markets did not.

What are the tools the Fed will use to unwind its extraordinarily accommodative monetary policy?

There are three actions that define the Fed's exit from its extraordinarily accommodative policy: actively withdrawing reserves, raising the policy rate, and shrinking the Fed's balance sheet.

The Fed will withdraw reserves by executing reverse repos involving Treasury and agency securities and by offering term deposits to depository institutions. It will raise the policy rate by increasing the interest rate paid on reserves (IOR), and it will shrink the balance sheet passively through redemptions and prepayments (runoff), and perhaps actively by selling securities, with an emphasis on MBS.

What will be the sequence of steps the Federal Reserve will take to unwind its extraordinarily accommodative policy?

The first step is preparation, and this is already well under way, but not yet complete. The preparatory steps under way include the NY Fed's small-scale operations with reverse repos to test the plumbing, the infrastructure for its ultimate use of reverse repos to drain reserves. So far, it has conducted such operations only with Treasury and agency debt as collateral. It will soon do so for MBS. The Fed has also expanded the counterparties who can participate in reverse repos with it, and will likely expand this list further, to help the market absorb the large amount of reverse repos that it wants to be prepared to do. The Board also requested comments for a proposal to establish a term deposit facility, another way the Fed will ultimately drain reserves. It is now revising that proposal in light of the comments received. The Fed should be in a position to use these tools to begin to drain reserves by the second half of this year.[3] The NY Fed has clearly communicated to the markets that it believes that it is prudent to ensure that this infrastructure is in place so

[3] This was reported in a talk by Brian Sack, Executive Vice President of the Federal Reserve Bank of New York and head of its Markets Group. See Brian Sack, "Preparing for a Smooth (Eventual) Exit," March 8, 2010.

that the FOMC can exit whenever appropriate, but that this preparation has no implications for the timing of the first increase in the policy rate.

The second step is to revise the policy guidance contained in the FOMC statement. That guidance is intended to give markets advance notice that the time is approaching for an increase in the policy rate. A change in the guidance will be the first definitive signal that an increase in the funds rate may come sooner rather than later. Today the key phrases in that guidance are that economic conditions will likely warrant an "exceptionally low" funds rate for an "extended period." "Exceptionally low" means an unchanged near-zero funds rate. "Extended period" is vaguer and means different things to different members of the Committee. But it is generally interpreted to mean six months or longer, a period explicitly indicated by a few members of the Committee. Chairman Bernanke will not be pinned down so precisely. In any case, these are the two phrases that will have to be adjusted—presumably in two stages—as the FOMC gets closer to raising the funds rate.

The last three steps in the Fed's exit, as they were explained to you in Chairman Bernanke's testimony, are: draining reserves to move away from today's super-abundant level, raising the policy rate to withdraw the extraordinary degree of monetary accommodation today, and shrinking the balance sheet which, during the crisis period, more than doubled in size. Chairman Bernanke also presented you with an outline of the likely exit strategy, including the tools to be used, and the sequence in which the three steps could be taken: first, start to drain reserves, next, raise the policy rate (but not much later than the beginning of the reserve draining), and still later, if at all necessary, sell MBS to shrink its balance sheet.

The FOMC generally believes that reserve management is a very important complement to the direct role of IOR in raising market rates. In principle, raising the IOR rate allows the Fed to raise short-term interest rates, including the funds rate, independent of how large reserves are at the time. This is the case because no bank should be willing to lend at a funds rate lower than the rate it can earn by depositing the funds at a Reserve Bank. The IOR rate should therefore be a tight floor for the funds rate.

However, in practice, the funds rate has consistently traded soft to the IOR rate.[4] The Fed believes it can tighten this relationship by reserve management, that is, by reducing reserves, to shrink and stabilize, and hopefully ultimately close, the gap between the funds rate and the IOR rate. This is viewed as desirable, in part because it will allow the Fed to target the funds rate, much in the same way it had done in the past.

Because it would like to tighten the relationship between these rates before it begins to raise rates, the Fed prefers to start removing reserves before it hikes the IOR rate. However, even beginning to actively withdraw reserves will be taken as a definitive signal of an impending increase in the IOR rate, no matter what guidance the Fed offers at the time. So the FOMC plans to start this draining only when it is pretty sure that an

[4] It is now well understood why this is the case. The GSEs traditionally are lenders in the federal funds market, but are not allowed to hold interest-earning deposits at the Fed. As a result, they put downward pressure on the funds rate relative to the IOR rate.

increase in the funds rate is around the corner. So the first part of the sequence is to drain reserves first, and only slightly later, to raise rates.

The final step may be to sell MBS. This is the most controversial of the steps. Several on the FOMC do not see the urgency in shrinking the balance sheet faster than would happen passively through runoff. They prefer not to risk a very adverse market response that many in the markets expect in this case. This is where my sympathies lie. However, if the FOMC does sell MBS back to the market, Chairman Bernanke told you that this would take place relatively late, only when the economy is in a sustainable recovery and once markets are back closer to normal. This would also likely take place well after the FOMC begins to raise rates, and will almost certainly be gradual and very well communicated in advance to the markets. Under these circumstances, the possibility of a very adverse market response will be significantly diminished. Still, the majority appears to believe that just allowing the balance sheet to shrink passively and slowly by runoff alone will take longer than they prefer, a minimum of five to seven years, and to get it fully done, it could take a couple of decades.[5] On the other hand, most market participants believe that there would be absolutely no adverse response to taking such a long time. In this case, I believe that relying on runoff alone is the most sensible direction.

Can the unwinding efforts be carried out without unwanted inflationary effects and, if so, how can this be accomplished?

Yes, by exiting at the right time. I cannot and neither can the FOMC guarantee that the Fed will exit at the right time. This is its biggest challenge. The Fed is operating in unchartered waters: It has never had such a challenging exit. Don't expect the Fed to be perfect. Nobody is perfect. However, we are fortunate to have Chairman Bernanke navigating the ship. Nobody could do a better job of getting the timing right. But there will still be a debate that will linger virtually forever about whether the Fed did in fact exit at just the right time.

The right time, of course, means not too early, so as not to the stunt the nascent recovery and when inflation is still "too low" (and expected to remain so for some time), and not too late, resulting in unwanted inflation.

I will focus on the inflation risk, as this is what you asked about. Let's start by highlighting three different forecasts: my firm's, the consensus, and the FOMC's. Ours is the most optimistic about growth, but all three share one property: The unemployment rate will remain very elevated for a very long time. It is likely to be above 9% at the end of this year and perhaps 8% - 8½% at the end of next year. That is relative to a full employment level that we and the FOMC place at 5% or slightly higher. Core inflation is already below 1½% and appears to still be falling. We expect it to be 1% this year and slightly lower next year. The last FOMC forecast showed inflation just below 1½% for the same period. Let's assume that the FOMC tightened at the end of this year. What

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[5] Gagnon et. al., "Large-Scale Asset Purchases by the Federal Reserve: Did They Work?" Federal Reserve Bank of New York Staff Report No. 441, March 2010.

would you be asking Chairman Bernanke at the Monetary Policy Testimony in mid-February 2011? Would you be asking why the Fed waited so long, until the unemployment rate was already close to 9% and core inflation had already stabilized near 1%, before you tightened? I doubt it. So I hope you can understand why the majority of members of the FOMC are not worried about inflation today and won't be for some time. As a result, we don't expect the FOMC to raise the policy rate until mid-2011, and, if the pessimists are right about growth, it could be much later.[6]

It is interesting, nevertheless, that some, including a few very well respected economists, worry that inflation will be very high over the medium term. Some even believe that we are headed to hyperinflation. There is no chance that either outcome could happen as long as the Fed remains independent. So let's be clear where the risk of very high inflation comes from. It is not the Fed. It is you.

We could get to very high inflation in one of two ways: a major and dramatic but almost inconceivable policy error by the Fed, essentially a total disregard for its price stability mandate, or action by the Congress to force the Fed to monetize deficits to avoid soaring interest rates that would otherwise occur. The former simply could never happen. But the latter is entirely up to you. It is precisely to avoid such an outcome that governments around the world have delegated monetary policy decisions to independent central banks. Given this concern, Congress should be careful to avoid doing anything that even gives the appearance of infringing on the independence of the Fed, including authorizing the GAO to audit monetary policy.

Have the Fed's extraordinary monetary policy actions worked?

The Fed's extraordinary policies include first pushing the funds rate to a near-zero level and then keeping it there for an extended period, along with turning to nonconventional policies once it faced the zero nominal bound, specifically "credit-easing" policies to provide further stimulus.

The FOMC has had a near-zero rate policy only because it cannot lower short-term interest rates into negative territory. If it could, it would have. In the absence of that option, monetary policy should be understood as being dramatically restrictive, even at the near-zero rate. We estimate that the Fed would have to lower the funds rate to -4%

[6] The risk of inflation is an issue that almost always separates the hawks from the doves in the FOMC; in this case, the hawks versus the coalition of the center and doves. This has, in part, to do with the relative weights each assigns to each of the two mandates—promoting full employment and promoting price stability—although everyone agrees that there is no conflict between these objectives in the longer term, and nobody on the Committee would tolerate unwanted inflation for long. The other principal factor that distinguishes doves' and hawks' views on inflation, and the more important one today, is what model best explains inflation in the short and medium term. I won't go into the details, but this issue comes down to whether you favor a monetarist model or a Phillips curve model in the short run, and whether you believe the Fed is going to set the funds rate over time to ensure that inflation converges to its target (as work on policy rules suggest has been the case over the past two decades). I am, as Chairman Frank no doubt well remembers, in the Phillips curve camp, along with the majority of the FOMC.

today to align it with the appropriate degree of stimulus. Absent being able to do this, the only option was to implement unconventional policies, despite the great uncertainty of how well these would work. The major form of nonconventional policy is "credit-easing" policies. Credit-easing policies specifically involve intervening in and buying assets, especially those with longer maturities, in markets where the flow of credit is impaired as a result of the financial crisis, with the hope of both increasing the flow of credit and improving the terms on which credit is offered, or otherwise moving to lower longer-term rates relative to the near zero funds rate. In this episode, the Fed refers to these policies as Long Term Asset Purchases, and these include both the purchase of longer-term Treasury securities to push down long-term rates relative to short-term rates, and MBS purchases to lower the spread between mortgage rates and longer-term Treasuries. The Fed has already ended its Treasury securities purchase program and will end its MBS program next week. The decision to end programs that were providing additional stimulus mainly reflected concern that further expanding the balance sheet would make exit even more challenging and increase the risk of a policy error, and therefore unwanted inflation.

Lowering the funds rate to near zero certainly helped lean against the recession and then support recovery. The Fed did as much as it could possibly do with its conventional instruments. The effectiveness of credit easing policies is more controversial and different economists reach different conclusions. Qualitatively, we agree with the NY Fed's recent study which estimates that the purchase of Treasury and agency securities had important effects, lowering longer-term interest rates and narrowing mortgage spreads.[7]

Nevertheless, there is considerable skepticism, including some inside the FOMC, that renewed purchases of longer term Treasuries and MBS would be successful in providing further stimulus. This assessment is relevant to how much additional stimulus the Fed could achieve by, for example, renewing its asset purchase program, if the economy were to slip into a double dip recession. The realistic answer is not much.

If monetary policy is not sufficient to spur economic growth, what options are available?

Here the answer is obvious. Once the Fed is driven to a near-zero funds rate, what we call the "zero nominal bound", the burden of stabilization policy shifts to you. This is very challenging given the difficulty of Congress delivering action in a timely manner. This is why the conventional wisdom has been to encourage Congress not to try to engage in short-run stabilization policy, and leave that entirely to the Fed. But given the Fed is at the zero nominal bound, the only option for significant further stimulus is fiscal stimulus. Fortunately, in the current episode, Congress did pass a timely and sizeable fiscal stimulus. One can argue about the size and composition, but one cannot argue that fiscal stimulus was not needed. Most economists, as reported by the CBO, believe that the fiscal stimulus was effective. Our estimate, and this is close to the consensus view, is that

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[7] Gagnon et. al., "Large-Scale Asset Purchases by the Federal Reserve: Did They Work?" Federal Reserve Bank of New York Staff Report No. 441, March 2010.

it raised growth by 1½ percentage points from the third quarter of last year through (prospectively) the second quarter of this year.

However, the stimulus is almost completely temporary, as was appropriately the intention. As a result, the positive effect will reverse and the effect will turn negative, even by the end of this year. This swing is one reason why forecasters generally see as the real test of the recovery the performance of the economy after the middle of the year when fiscal stimulus first diminishes and then reverses. To be sure, while a permanent stimulus would have been more effective, it would have been irresponsible to do so, given that the budget deficit is already on an unsustainable course, as everyone knows.

It is nevertheless true that the view that the stimulus package was effective is not universally held among economists: One uses different models and gets different results. I should point out, though, that many of the contrarian views that are politically driven don't really hold up to even a very modest degree of scrutiny.

An Exit Rule for Monetary Policy

John B. Taylor*

Testimony before the
Committee on Financial Services
U.S. House of Representatives

March 25, 2010

Thank you Chairman Frank, Ranking Member Bachus, and other members of the House Committee on Financial Services for inviting me to testify on "Unwinding Emergency Federal Reserve Liquidity Programs and Implications for Economic Recovery" As you requested I will give my assessment of whether these extraordinary measures have worked and then consider an appropriate policy for unwinding them.

Assessment of the Extraordinary Measures

Table 1 summarizes the Fed's extraordinary measures—mostly special loan and securities purchase programs—going back to 2007 when the financial crisis first flared up in the money markets. Figures 1 through 5 show how these programs have changed the *size* and the *composition* of the Fed's balance sheet during this period.

Review of Recent Developments

The Fed has financed these programs mostly by creating money—crediting banks with reserve balances at the Fed—or by selling other items in its portfolio. From December 2007 until September 2008 it sold other items in its portfolio. Since September 2008 it has added significantly to reserve balances, as shown in Figure 1. During the past year, reserve balances have continued to rise as expanding programs have more than kept pace with contracting programs and Treasury has withdrawn deposits from the Fed. For the week ending March 17, 2010, reserve balances were $1,125 billion, up substantially from $778 billion during the same period in March 2009. These reserves are still far in excess of normal levels and will eventually have to be wound down to prevent a significant rise in inflation. By way of comparison, reserve balances were only $16 billion during the same period in March 2008.

Some of the programs, such as the Mortgage Backed Securities (MBS) purchase program and the Term Asset Backed Securities Loan Facility (TALF), have expanded [Figure 5], while others, such as the Term Auction Facility (TAF) or the SWAP facility with foreign central banks, have contracted [Figures 2 and 3]. Some programs have been closed down, including the Primary

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Dealers Credit Facility (PDCF), the Commercial Paper Funding Facility (CPFF), and the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF). But the loans and other vehicles used to bailout the creditors of Bear Stearns and AIG are still on the Federal Reserve balance sheet and are about the same size they were a year ago [Figure 4].

Assessing the Impact

Determining whether or not these programs have worked is difficult. First, there are many programs, and they interact with each other. In addition to the Fed's actions, other U.S. government agencies undertook extraordinary interventions, including the takeover of Fannie Mae and Freddie Mac, the FDIC Temporary Liquidity Guarantee Program, the Troubled Asset Relief Program (TARP) and the guarantee of money market portfolios. Moreover, many of the programs were significantly reworked after they were implemented—the switch of the TARP from a program to purchase toxic assets to one of injecting capital into banks was perhaps the biggest reworking. Second, financial conditions and the entire global economy were changing rapidly around the time of these interventions, and markets were dynamically reacting and adjusting to the changes. Third, developing a counterfactual to describe what would have happened in the absence of the programs requires analyzing large quantities of data, and using, when possible, economic models and statistical techniques.

Perhaps for these reasons, there has been surprisingly little empirical work on this important question. Recent papers by Peter Fisher (2009) and James Hamilton (2009b) stress the difficulty of the task. In this paper I make use of empirical research at Stanford University and the Hoover Institution (Taylor 2007, 2008b, 2009a, 2009b, 2009e), (Taylor and Williams 2008), (Stroebel and Taylor 2009), which has focused on several of the programs including the TAF, the PDCF, the MBS purchase program, and the bailouts, all in the context of overall monetary policy, including its possible role as one of the causes of the crisis.

Three Phases of the Crisis

It is useful to divide an assessment of the programs into three periods. The first period runs from the flare-up in August 2007 until the severe financial panic in late September 2008. The second period is the panic itself; based on equity prices and interbank borrowing rates, the panic period was concentrated in late September through October 2008 as it spread rapidly around the world, turning the recession into a great recession. The third period occurs after the panic. Thus the financial crisis and the Fed's actions are naturally divided into three periods: pre-panic, panic, and post-panic.

Before the Panic My assessment is that the extraordinary measures taken in the period leading up to the panic did not work, and that some were harmful. The TAF did little to reduce tension in the interbank markets during this period, as I testified to the House Committee on Financial Services in February 2008 (Taylor 2008a) based on research reported in Taylor and Williams (2008), and it drew attention away from counterparty risks in the banking system. The extraordinary bailout measures, which began with Bear Stearns, were the most harmful in my view. The Fed's justification for the use of Section 13(3) of the Federal Reserve Act in the case of Bear Sterns led many to believe that the Fed's balance sheet would again be available in the case that another similar institution, such as Lehman Brothers, failed. But when the Fed was unsuccessful in getting private firms to help rescue Lehman over the weekend of September 13-14, 2008, it surprising cut off access to its balance sheet. Then, the next day, it reopened its balance sheet to make loans to rescue the creditors of AIG. It was then turned off again, and a new program, the TARP, was proposed. Event studies of the interbank market or equity markets show that the chaotic roll out of the TARP coincided with the severe panic in the following weeks (Taylor 2008b). The Fed's on-again off-again bailout measures were thus an integral part of a generally unpredictable and confusing government response to the crisis which, in my view, led to panic. These bailout problems and suggestions for reform are discussed in Scott, Shultz and Taylor (2010).

During the Panic This is the most complex period to analyze because the Fed's main measures during this period—the AMLF and the CPFF—were intertwined with the FDIC bank debt guarantees and the clarification on October 13, after three weeks of uncertainty, that the TARP would be used for equity injections. This clarification was a major reason for the halt in the panic in my view (Taylor 2008b). Based on conversations with traders and other market participants the Fed's actions taken during the panic, especially the AMLF and the CPFF, were helpful in rebuilding confidence in money market mutual funds and stabilizing the commercial paper market. The Federal Reserve should also be given credit for rebuilding confidence by quickly starting up these complex programs from scratch in a turbulent period and for working closely with central banks abroad in setting up swap lines (Fisher 2009). However, most of the evidence is anecdotal, and it would be useful if the Federal Reserve Board, with its inside information about day to day events and data, examined the programs empirically and reported the results. For example, statistical evidence (Taylor 2009a) indicates that the PDCF was effective in reducing risk (measured by rates on credit default swaps) at Merrill Lynch and Goldman Sachs in October 2009.

After the Panic The two measures introduced by the Fed following the severe panic period were the MBS program and the TALF. Of these two, the MBS has turned out to be much larger as shown in Figure 5, and it will soon reach $1.25 trillion. As with the other Fed programs there has been little empirical work assessing the impact of the MBS program on mortgage interest rates. My assessment, based on research with Johannes Stroebel, is that it has had a rather small effect on mortgage rates once one controls for prepayment risk and default risk, but the estimates are uncertain. I have not studied the impacts of the TALF; it has been very slow to start and it is still quite small. As shown in Figure 5, in the absence of the MBS program, reserve balances and the size of the Fed's balance sheet would already be back to normal levels before the crisis. If it were not for this program, the Fed would have already exited from its emergency measures removing considerable uncertainty about its exit strategy going forward.

Longer Term Implications

Whether one believes that these programs worked or not, there are reasons to believe that their consequences going forward are negative. First, they raise questions about Fed independence. The programs are not monetary policy as conventionally defined, but rather fiscal policy or credit allocation policy (Goodfriend 2009) or mondustrial policy (Taylor 2009b) because they try to help some firms or sectors and not others and are financed through money creation rather than taxes or public borrowing. Unlike monetary policy, there is no established rationale that such policies should be run by an independent agency of government (Thornton 2009). This is likely why many members of Congress are calling for a complete audit of the Fed. Even though monetary policy does not warrant such an audit, many of these extraordinary measures do. By taking these extraordinary measures, the Fed has risked losing its independence over monetary policy (Shultz 2009).

A second negative consequence of the programs is that unwinding them involves considerable risks. In order to unwind the programs in the current situation, for example, the Fed must reduce the size of its MBS portfolio and reduce reserve balances. But there is uncertainty about how much impact the purchases have had on mortgage interest rates, and thus there is uncertainty about how much mortgage interest rates will rise as the MBS are sold. There is also uncertainty and disagreement about why banks are holding so many excess reserves now (Kiester and McAndrews 2009). If the current level of reserves represents the amount banks desire to hold, then reducing reserves could cause a further reduction in bank lending.

A third negative consequence is the risk of inflation (Hamilton 2009a). If the Fed finds it politically difficult to reduce the size of the balance sheet as the economy recovers and as public debt increases, then inflationary pressures will undoubtedly increase.

The Need for a Clear and Credible Exit Strategy

For these reasons, it is important that the Federal Reserve return, as soon as possible, to a monetary policy framework of the kind that worked well for over twenty years in the 1980s and 1990s when recessions were short and infrequent, expansions were long, and inflation was low.

A Monetary Policy Framework That Worked and Will Work Again

What are the key characteristics of such a framework? First, the short term interest rate (the federal funds rate) is determined by the forces of supply and demand in the money market. Second, the Fed adjusts the supply of money or reserves to bring about a desired target for the short term interest rate; there is thus a link between the quantity of money or reserves and the interest rate. Third, the Fed adjusts the interest rate depending on economic conditions: The interest rate rises by a certain amount when inflation increases above its target and the interest rate falls when by a certain amount when the economy goes into a recession. Fourth, to maintain its independence and focus on its main objectives of inflation control and macroeconomic stability, the Fed does not allocate credit or engage in fiscal policy by adjusting the composition of its portfolio toward or away from certain firms or sectors.

Exit Strategy versus Exit Instruments

An exit strategy to take the Fed to this monetary framework must focus on three things: (1) the federal funds rate, (2) the level of reserve balances (or the size of the Fed's balance sheet), and (3) the composition of the Fed's portfolio of assets. In order to achieve this goal the direction of change of all three is clear: The interest rate must rise above its current abnormally low level of zero, the amount of reserves must decline, and the proportion of the Fed's assets dedicated to the extraordinary programs such as TALF, MBS, and the Bear-Stearns-AIG facilities must be reduced. The timing and the amount by which these changes are made should depend on economic conditions. In particular the interest rate should be increased as the economy recovers. If the economy weakens, the tightening should be postponed. If inflation picks up, tightening should be accelerated.

Federal Reserve Board Chair Ben Bernanke (2009) has clearly described the instruments that are available to the Fed during an exit strategy, including paying interest on reserve balances, borrowing by the Fed to finance its extraordinary measures, and reducing reserve balances further by unwinding the extraordinary measures. Borrowing could be through bank term deposits at the Fed, longer-term reverse repurchase agreements, or issuing Federal Reserve securities. In my view, Fed borrowing instruments should be avoided as much as possible because they delay essential adjustments in reserves and create precedents which make it easier to deviate from the monetary framework in the future. Similarly, the instrument of paying interest on reserves to achieve the short term interest rate target should be used only during a well defined transition period.

An exit strategy, however, is more than a list of instruments. It is a policy describing how the instruments will be adjusted over time until the monetary framework is reached. It is analogous to a policy rule for the interest rate in a monetary framework except that it also describes the level of reserves and the composition of the balance sheet. Hence, an exit strategy for monetary policy is essentially an *exit rule.*

An Exit Rule

How would such an exit rule work? One possible rule would link the FOMC's decisions about the interest rate with its decisions about the level of reserves. In other words, when the FOMC decides to start increasing the federal funds rate target, it would also reduce reserve balances. One reasonable exit rule would reduce reserve balances by \$100 billion for each 25 basis point increase in the federal funds rate. By the time the funds rate hits 2 percent, the level of reserves would be reduced by \$800 billion and would likely be near the range needed for supply and demand equilibrium in the money market. The Trading Desk at the New York Fed would then be in a position to carry out the interest rate decisions of the FOMC as it has in the past, and the exit would be complete. Of course, at the start of this process, the FOMC is likely to need the assistance of increases in interest rates on reserves because of the high current level of reserves. And it might be wise to start reducing reserves by \$100 billion or \$200 billion before interest rates start to rise, because reserves are well above \$800 billion now. In any case, this exit rule for reserves could be supplemented by a similarly defined rule for reducing the share of MBS and TALF in the Fed's portfolio.

Where does the "$100 billion per quarter point" come from? We do not know much about the reserve-interest rate relationship, but $100bn per 25bps is close to what was observed when the Fed started increasing reserves in the fall of 2008. As shown in Figure 6 the funds rate fell from 2 percent to 0 percent as the Fed increased the supply of reserves by $800 billion. Of course we do not know if this relationship will hold now with changed circumstances in the banking sector, but it is a reasonable place to begin. In addition, these dollar amounts are not so large that they should constrain banks or put upward pressure on mortgage rates or other long term rates as the Fed's MBS or other assets are sold to enable the reduction in reserves. An attractive feature of this approach is that the Fed would exit unorthodoxy at the same 2 percent interest rate as it entered unorthodoxy: The federal funds rate was at 2 percent when it started financing its loans and securities purchases by increasing reserves and the balance sheet.

This exit strategy could be announced to the markets with a degree of precision that the FOMC deems appropriate for preserving flexibility. Of course, the FOMC would not instruct the Trading Desk to reduce reserves by the full amount on the day of the FOMC decision. Rather it would be spread out over weeks or months, and the Trading Desk should be given discretion to determine the best smoothing. Moreover, policy makers could treat this exit rule as an exit guideline rather than a mechanical formula to be followed literally, much as a policy rule for the interest rate is treated as a guideline rather than mechanical formula. They would vote on how much to reduce reserves at each meeting along with the interest rate vote. Note that the exit rule would we working in tandem with a policy rule for the interest rate, such as the Taylor rule.

Perhaps the biggest advantage of such an exit strategy is that it is predictable. It would reduce current uncertainty about the Fed's unwinding while providing enough flexibility to adjust if the exit appears to be too rapid or too slow. The strategy would likely have a beneficial effect on bank lending and thereby remove a barrier to more rapid growth: Some banks are apparently reluctant to buy mortgage securities because of uncertainty about the prices of the securities during a Fed exit. This strategy would reduce that uncertainty and allow market participants to start pricing securities with some basis for predicting Fed policy during the exit.

There are alternative exit rules. But whether policy makers choose this particular exit rule or another, it is essential that they develop and articulate one now.

Conclusion

My assessment of the Fed's extraordinary measures during the crisis is divided into three periods: pre-panic, panic, and post panic, where the period of the panic is from September to November 2008. While such assessments are inherently difficult and uncertain, I found that the measures taken before the panic did not work and likely worsened the crisis leading to the severe panic. The measures taken during the panic likely helped rebuild confidence and stabilize markets. The measures taken after the panic have had a rather small impact. The longer term consequences of these measures are negative and include risks to the Fed's independence to conduct monetary policy, risks of inflation, and uncertainty about the impact of an exit strategy.

In designing an exit strategy from these measures, it is important not only to list the instruments but also to describe the monetary framework that the Fed is exiting to. It is also important to describe how the instruments will be changed over time in order to reach that monetary framework. I proposed a simple exit rule which illustrates such a strategy and which would increase predictability and reduce the negative impact of the exit.

Table 1

Extraordinary Federal Reserve Measures Affecting the Balance Sheet

TAF (Term Auction Facility)	December 2007
SWAPS (Loans to Foreign Central Banks)	December 2007
PDCF (Primary Dealer Credit Facility)	March 2008*
Bailout of Bear Stearns (Loan through JP Morgan Chase, Maiden Lane I)	March 2008
Bailout of AIG (Loan to AIG, Maiden Lane II and III, AIA-ALICO)	September 2008
AMLF (Asset-Backed Com. Paper Money Mkt Mutual Fund Liq. Facility)	September 2008*
CPFF (Commercial Paper Funding Facility)	October 2008*
MMIFF (Money Market Investors Funding Facility)	October 2008*
MBS (Mortgage Backed Securities Purchase Program)	November 2008
TALF (Term Asset-Backed Securities Loan Facility)	November 2008

*These facilities are now closed, MMIF in October 2009 and PDCF, AMLF, CPFF in February 2010. The Fed has also purchased the debt of Fannie Mae, Freddie Mac, and the Federal Home Loan Banks as well as longer term Treasury securities during this period.

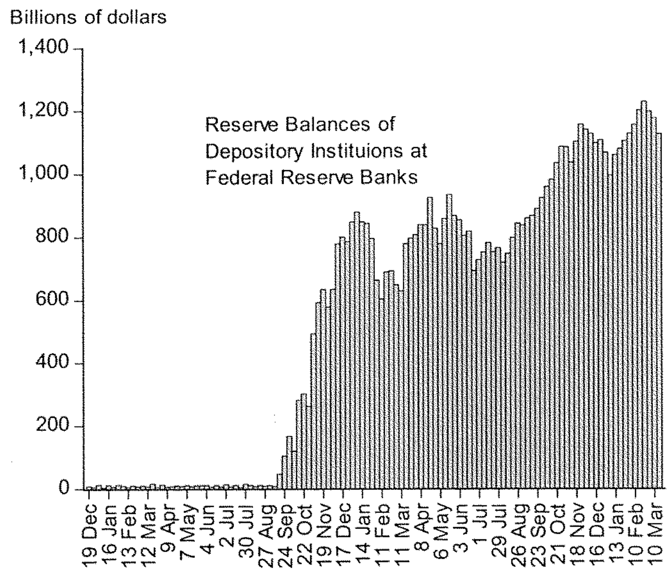

Figure 1 Reserve Balances: 19 Dec 2007 – 17 Mar 2010

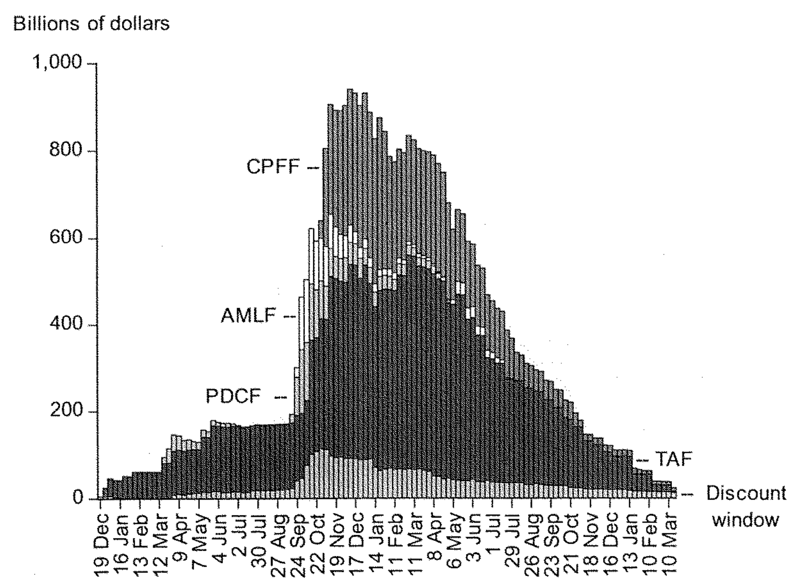

Figure 2 Liquidity Programs (see Table 1): 19 Dec 2007 – 17 Mar 2010

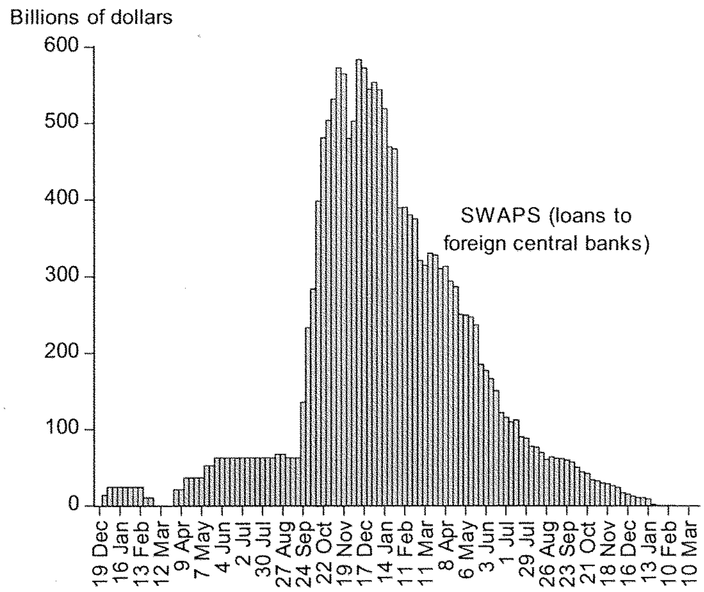

Figure 3 Swaps: 19 Dec 2007 – 17 Mar 2010

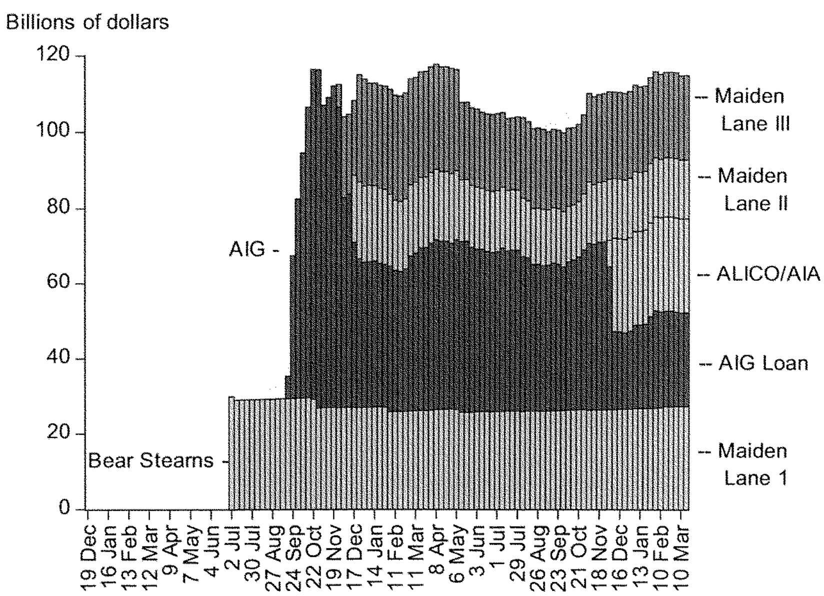

Figure 4: Loans and Other Facilities Related to Bear Stearns and AIG

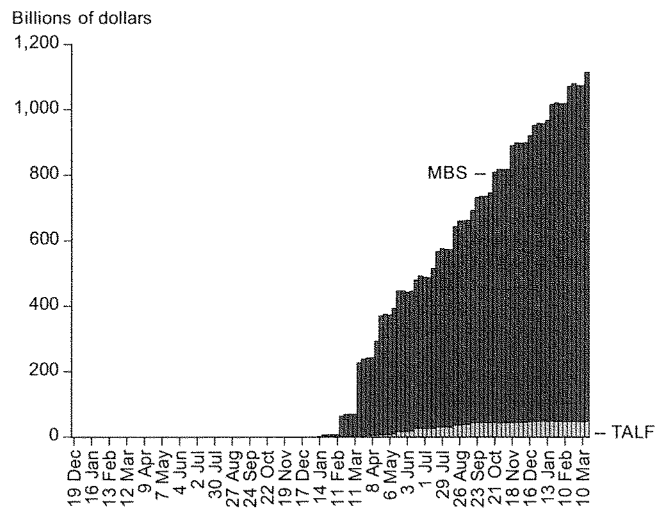

Figure 5 Mortgage Backed Securities and Term Asset-Backed Securities Loan Facility

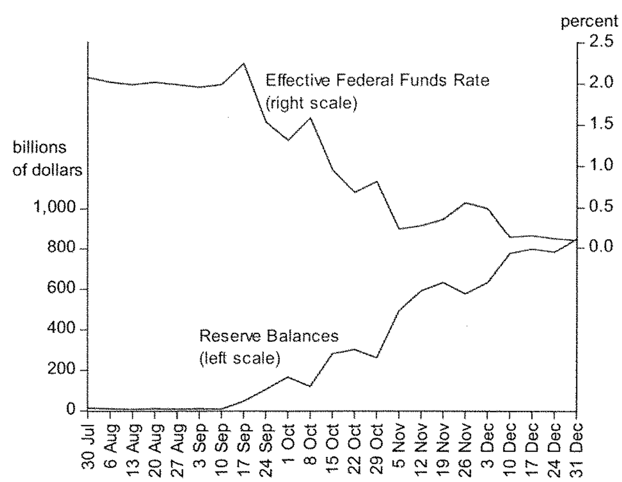

Figure 6 The Entrance to Quantitative Easing During the Fall of 2008

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