

**MONETARY POLICY AND THE  
STATE OF THE ECONOMY**

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**HEARING**  
BEFORE THE  
**COMMITTEE ON FINANCIAL SERVICES**  
**U.S. HOUSE OF REPRESENTATIVES**  
ONE HUNDRED THIRTEENTH CONGRESS  
FIRST SESSION

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JULY 17, 2013  
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## MONETARY POLICY AND THE STATE OF THE ECONOMY

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Wednesday, July 17, 2013

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

The committee met, pursuant to notice, at 10:02 a.m., in room 2128, Rayburn House Office Building, Hon. Jeb Hensarling [chairman of the committee] presiding.

Members present: Representatives Hensarling, Miller, Bachus, King, Royce, Lucas, Capito, Garrett, Neugebauer, McHenry, Bachmann, Pearce, Posey, Fitzpatrick, Luetkemeyer, Huizenga, Duffy, Hurt, Stivers, Fincher, Stutzman, Mulvaney, Hultgren, Ross, Pittenger, Wagner, Barr, Cotton, Rothfus; Waters, Maloney, Velazquez, Watt, Sherman, Meeks, Clay, Lynch, Scott, Green, Cleaver, Perlmutter, Himes, Peters, Carney, Sewell, Foster, Kildee, Murphy, Delaney, Beatty, and Heck.

Chairman HENSARLING. The committee will come to order.

Without objection, the Chair is authorized to declare a recess of the committee at any time.

The Chair now recognizes himself for 5 minutes for an opening statement.

Chairman Bernanke, welcome. We all know your term as Chairman of the Federal Reserve is up at year's end, and, to paraphrase Twain, we do not know if the rumors of your departure are greatly exaggerated. I will not ask you to comment, but I at least know there is a possibility this could be your last appearance before the committee. I certainly hope it is not. We have other matters to discuss with you and the Fed.

But on the off possibility that it is, I did not want to let the moment pass without stating clearly for the record that, as one who has been in public office for 10 years, this chairman considers you to be one of the most able public servants that I have ever met.

I suspect that history will record that at a very perilous point in our Nation's economic history, you acted boldly and decisively and creatively, very creatively I might add, and kept your head. And under your leadership, the Fed took a number of actions that certainly staved off an even worse economic event, and for that I believe our Nation will always be grateful.

Now, my words are sincere, but they do not negate my concern over the state of the economy today and the role that the Fed is playing in it. In today's semi-annual Humphrey-Hawkins hearing on the state of the economy, we once again face the legacy of the President's economic policies, a failed experiment in fiscal policy

that will forever be remembered for its three central pillars: persistent weak economic growth; higher taxes on working families; and unsustainable, record trillion-dollar deficits that one day our children must pay off. Witness the debt clock on either side of the hearing room.

The Federal Reserve has, regrettably, in many ways enabled this failed economic policy through a program of risky and unprecedented asset purchases that has swollen its balance sheet by more than \$3 trillion. Our committee has an obligation to carefully scrutinize the Federal Reserve's decisions and the way it communicates those decisions to the American people.

Chairman Bernanke has correctly observed that credible guidance about the future course of monetary policy is a vital tool that the Fed must use to ensure that markets, consumers, and producers can plan their own economic futures. My constituents back in Texas are concerned about how much they must save for retirement or for their children's college tuition. They are left to wonder how much longer they will have to endure the paltry, paltry returns on the savings created by the Fed's current interest rate policy, which favors borrowers over savers.

And yet, recent panicked responses by financial markets to monetary policy communications and observations from a range of economists suggest the Federal Reserve's forward guidance clearly needs some improvement. The market's recent extreme volatility resulting from the offhanded comments of one individual, our witness today, is not healthy for an economy. Again, it indicates a monetary policy guidance system that is not working, and it begs the question: Are current equity market values based upon the fundamentals or unprecedented quantitative easing?

Former Fed Chairman William McChesney Martin once observed that the Fed "should always be engaged in a ruthless examination of its own record." Today, we will ask Chairman Bernanke to engage in such a ruthless examination of the Fed's QE exit strategy, which is both untested and clearly not well understood by market participants.

Based upon the economy's performance since the Federal Reserve embarked upon its unprecedented campaign of monetary stimulus, many economists have observed, and I would tend to agree, that it is fair to conclude that rarely has so much been spent in pursuit of so little, and rarely has so much been risked in return for so little. The extraordinary measures of 2008 have become the ordinary, albeit unsustainable, measures of 2013 and beyond. Again, as recent events demonstrate, it remains very much an open question whether the Fed can orchestrate an orderly withdrawal of monetary stimulus.

Finally, as the Federal Reserve approaches its 100th anniversary later this year, it is incumbent upon this committee to engage in an honest assessment of the Fed's performance and consider just how we can improve the Federal Reserve over the next century.

Chairman Bernanke, I appreciate your cooperation with the committee's work. Thank you for being here today.

At this time, I will recognize the ranking member for an opening statement.

Ms. WATERS. Thank you very much, Mr. Chairman. I would first would like to thank you, Mr. Chairman, for the words in support of Chairman Bernanke's chairmanship.

And Chairman Bernanke, I would like to thank you for being with us today.

Chairman Bernanke, under your leadership and actions taken by the Federal Open Market Committee (FOMC), the recovery continues to strengthen. Treasury yields and mortgage rates have fallen to their lowest levels in decades, and home values have in turn risen between 5 and 12 percent over the 12-month period ending in April, resulting in a substantial reduction in the number of borrowers with negative equity. Without the dramatic actions you have taken to restore economic growth, the economy simply could not have recovered to the extent it has today.

Since your last appearance before this committee to discuss the economy and the outlook for monetary policy back in February, there has been much debate about when and to what extent the FOMC might begin to slow the current pace of asset purchases. As the economic outlook improves, I would urge you not to scale back your monetary stimulus until it is absolutely clear that the now-fragile recovery will hold and real progress has been made in reducing unemployment.

Thanks to your efforts, the number of people who are unemployed has steadily fallen since the height of the crisis. However, we still have a long way to go before we have achieved any reasonable measure of full employment. More than 11 million Americans continue to search for work, and countless others have either given up looking altogether or are stuck working fewer hours than they need to get by. With inflation in check, well below the 2 percent target, I would ask that you and your colleagues on the FOMC continue to give the employment aspect of your dual mandate the critical attention it deserves.

In addition to the important work you are doing to foster economic growth, the Federal Reserve has also made significant progress in implementing key reforms aimed at strengthening our financial system. In particular, I was very pleased to see—

Chairman HENSARLING. Would the gentlelady suspend?

Mr. Chairman and the audience, forgive us. As my 9-year old would say, "Awkward." But it appears that the problem has been fixed.

If the ranking member wishes to start over, we would—

Ms. WATERS. Thank you very much, Mr. Chairman. I would like to start over.

Chairman Bernanke, under your leadership and through the actions taken by the FOMC, the recovery continues to strengthen. Treasury yields and mortgage rates have fallen to their lowest levels in decades, and home values have in turn risen between 5 and 12 percent over the 12-month period ending in April, resulting in a substantial reduction in the number of borrowers with negative equity. Without the dramatic actions you have taken to spur economic growth, the economy simply could not have recovered to the extent it has today.

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In addition to the important work you are doing to foster economic growth, the Federal Reserve has also made significant progress in implementing key reforms aimed at strengthening our financial system. In particular, I was very pleased to see the balanced approach taken by the Federal Reserve in issuing the final Basel III rule, which appropriately takes into account the unique needs of our Nation's community banks.

I look forward to your testimony today, and I yield back the balance of my time.

And thank you, Mr. Chairman.

Chairman HENSARLING. The chairman now recognizes the vice chairman of the Monetary Policy and Trade Subcommittee, Mr. Huizenga of Michigan, for 3 minutes.

Mr. HUIZENGA. Thank you, Chairman Hensarling, and Ranking Member Waters. I appreciate you holding this hearing today to discuss the semi-annual report on the state of the economy and our fiscal welfare.

Additionally, Chairman Bernanke, I do want to thank you for your distinguished service to our country. Certainly, as the Chairman of the Board of Governors over the last 7 years, no one questions your desire to help our country through some of its most difficult times that we have seen in recent history.

Today, I am particularly eager to hear your insights on monetary policy and the state of the economy. As I hear from small-business owners across Michigan, and, frankly, being a small-business owner myself in the construction and real estate fields, it is abundantly clear that small businesses are still feeling the negative impacts of the 2008 financial crisis.

The economy has been painfully slow to recover—in fact, the weakest of any of the recent recoveries. And, in turn, job creation has lagged. Too many Americans remain out of work, while others have simply stopped looking for work altogether.

These are the forgotten casualties that are oftentimes buried in government statistics. I am here to be their voice, and not be a voice of Wall Street but to be a voice for Main Street.

Additionally, Washington's addiction to spending remains evident. As we can see up here, we are exceeding \$17 trillion in debt, and our chances for recovery as well as the outlook for our chil-



dren's prosperity dims. For too long, government has in many forms looked upon itself to solve the social and economic ills that our country faces. The Federal Reserve hasn't been any different. Some would argue that may be because of the dual mandate and other things.

The Federal Reserve has chosen to implement government-based solutions instead of employing a market-based approach, I would argue, whether it is artificially lowering and sustaining a near-zero interest rate, QE2, Operation Twist, QE3, QE Infinity, as some have quipped about, the government-knows-best approach has only prolonged high levels of unemployment and perpetuated a lack of consumer confidence that has, outside of Wall Street, created an economic environment where investment and growth remain stifled.

With our GDP stagnating and unemployment remaining at 7.5 percent or more since President Obama has taken office in 2009, you don't see very many economists predicting the economy to take off in the near future. The policies implemented and prolonged by the Federal Reserve, I believe have worked hand-in-glove with that, and have failed.

So when are these failed policies going to come to an end? We know we have had lots of indications. I have already gotten an update from The Wall Street Journal and a number of others who are looking at your comments. But the FOMC says they are planning on keeping the near-zero rate at least until sometime in 2015, with a target of a 6.5 percent unemployment rate.

Questions that I think a lot of us have are: At what cost? And if not at what cost, at what benefit? And there are many who look at this analysis and have determined that you are tilting to a "dovish monetary easing policy," away from where we have been going. As a proponent of the free market and reducing the size of government, let me point out that is just one of the many problems with the Administration's policies.

Chairman Bernanke, I thank you, and I appreciate, again, your service and I look forward to today's hearing. Thank you.

Chairman HENSARLING. The Chair now recognizes the gentlelady from New York, Mrs. Maloney, for 2 minutes.

Mrs. MALONEY. Thank you.

I understand this may be Mr. Bernanke's last testimony on Humphrey-Hawkins, as his term expires in January, although I hope it is not—I hope you are reappointed—but I did want to join my colleagues in thanking you for your extraordinary service during one of the most painful periods in the United States' economic history.

You have been a creative, innovative leader. The one area where you have always been consistent is you have never been boring. As a former teacher, I appreciate your ability and willingness to explain the Fed's extraordinary measures in clear terms that all Americans can understand.

While talk of the Fed's tapering its asset-buying program has dominated the headlines recently, and the United States is still suffering from an unemployment crisis, it was reassuring to read in your prepared testimony that the Fed will continue its asset-buying program as long as economic conditions warrant. So I am

glad to see you are shaping Fed policy to help people and not just based on rigid ideological dogma.

I also thank you for listening to the concerns in our letter from Chairwoman Capito on the concerns we have for small community and regional banks. We asked you to treat them differently from large international banks, and that is precisely the approach that the Basel III rules took. Community banks did not cause the financial crisis, and I am glad that the Fed came around to seeing our view on this issue.

Thank you for your extraordinary service.

Chairman HENSARLING. The gentlelady yields back.

The Chair now recognizes the gentlelady from New York, Ms. Velazquez, for 1½ minutes.

Ms. VELAZQUEZ. Thank you, Mr. Chairman.

Welcome, Chairman Bernanke. Thank you for your public service.

When I am in my district each week, I hear from people who are truly struggling in the current labor market. Some are unemployed, others are underemployed, and many have stopped looking for work altogether.

Adding insult to injury, they hear that the stock market has recently achieved new highs and the housing market is recovering. But for many, this has not translated into new opportunities. Cuts to education and worker retraining programs as well as reduced investment in job-creating infrastructure projects have exacerbated what was an already dire situation. The truth is that it is hard for many to remember that just 6 years ago, the unemployment rate was less than 4.5 percent.

And while these are anecdotes, the data shows that they are reflective of the Nation as a whole. Unemployment has remained above 7 percent since December 2008. Gallup is reporting that 17.2 percent of the workforce is underemployed, and the labor participation rate is at a historical low.

While the Federal Reserve has a dual mandate, it is this unemployment backdrop that must be given the greatest weight in its deliberations. As the Fed considers when and how to transition away from QE3, it must make certain that it does so without making a challenging employment situation worse.

Thank you, Mr. Chairman.

Chairman HENSARLING. The Chair now recognizes the gentleman from North Carolina, Mr. Watt, for 1½ minutes.

Mr. WATT. Thank you, Mr. Chairman. And I want to—

Chairman HENSARLING. If the gentleman would suspend, if staff would please shut the door?

The gentleman is recognized.

Mr. WATT. I certainly join in the complimentary statements about the chairman's service. And I have a prepared statement which I will submit for the record, but I thought it might be helpful to just reminisce about some of the changes that this Chairman has made.

I was on this committee for a long, long time and never knew where the Federal Reserve was until Chairman Bernanke became the Chairman of the Fed. He opened up the process and demystified what the Fed does.

Since that time, we have gone through this whole debate about auditing the Federal Reserve, and substantially more of the records and proceedings of the Federal Reserve are open to the public. He speaks in plain language, as opposed to some of the prior Chairs, who tried to make everything seem so complicated and made it impossible for people to understand, either on the committee or certainly in the public.

So I think he has contributed greatly to the image of the Fed, and I just wanted to thank him for his service.

I will submit my official statement for the record.

Chairman HENSARLING. Today, we welcome back to the committee, in the words of the gentlelady from New York, the never-boring, Honorable Ben Bernanke, Chairman of the Board of Governors of the Federal Reserve System. I believe we all agree he needs no further introduction, so he will not receive one.

I do wish to all Members that the Chairman will be excused promptly at 1:00 p.m. And I wish to inform Members on the Majority side that those who were not able to ask questions during the Chairman's last appearance will be given priority today.

Without objection, Chairman Bernanke, your written statement will be made a part of the record. So, you are now recognized for your oral presentation.

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

Mr. BERNANKE. Thank you. Chairman Hensarling, Ranking Member Waters, and other members of the committee, I am pleased to present the Federal Reserve's semi-annual "Monetary Policy Report to the Congress." I will discuss current economic conditions and the outlook and then turn to monetary policy, and I will finish with a short summary of our ongoing work on regulatory reform.

The economic recovery has continued at a moderate pace in recent quarters, despite strong headwinds created by Federal fiscal policy. Housing has contributed significantly to recent gains in economic activity. Home sales, house prices, and residential construction have moved up over the past year, supported by local interest rates and improved confidence in both the housing market and the economy. Rising housing construction and home sales are adding to job growth, and substantial increases in home prices are bolstering household finances and consumer spending while reducing the number of homeowners with underwater mortgages.

Housing activity and prices seem likely to continue to recover notwithstanding the recent increases in mortgage rates, but it will be important to monitor developments in this sector carefully.

Conditions in the labor market are improving gradually, yet the unemployment rate stood at 7.6 percent in June, about a half percentage point lower than in the months before the Federal Open Market Committee initiated its current asset purchase program in September. Nonfarm payroll employment has increased by an average of about 200,000 jobs per month so far this year. Despite these gains, the job situation is far from satisfactory, as the unemployment rate remains well above its longer-run normal level and rates

of underemployment and long-term unemployment are still much too high.

Meanwhile, consumer price inflation has been running below the committee's longer-run objective of 2 percent. The price index for personal consumption expenditures rose only 1 percent over the year ending in May. This softness reflects, in part, some factors that are likely to be transitory. Moreover, measures of longer-term inflation expectations have generally remained stable, which should help move inflation back up toward 2 percent.

However, the committee is certainly aware that very low inflation poses risks to economic performance—for example, by raising the real cost of capital investment—and increases the risk of outright deflation. Consequently, we will monitor this situation closely, as well, and we will act as needed to ensure that inflation moves back toward our 2 percent objective over time.

At the June FOMC meeting, my colleagues and I projected that economic growth would pick up in the coming quarters, resulting in gradual progress toward the level of unemployment and inflation consistent with the Federal Reserve's statutory mandate to foster maximum employment and price stability.

Specifically, most participants saw real GDP growth beginning to step up during the second half of this year, eventually reaching a pace between 2.9 and 3.6 percent in 2015. They projected the unemployment rate to decline to between 5.8 and 6.2 percent by the final quarter of 2015, and they saw inflation gradually increasing toward the committee's 2 percent objective.

The pickup in economic growth predicted by most committee participants partly reflects their view that Federal fiscal policy will exert somewhat less drag over time, as the effects of the tax increases and the spending sequestration diminish. The committee also believes that risks to the economy have diminished since the fall, reflecting some easing of the financial stresses in Europe; the gains in housing and labor markets that I mentioned earlier; the better budgetary positions of State and local governments; and stronger household and business balance sheets.

That said, the risks remain that tight Federal fiscal policy will restrain economic growth over the next few quarters by more than we currently expect or that the debate concerning other fiscal policy issues, such as the status of the debt ceiling, will evolve in a way that could hamper the recovery. More generally, with the recovery still proceeding at only a moderate pace, the economy remains vulnerable to unanticipated shocks, including the possibility that global economic growth may be slower than currently anticipated.

With unemployment still high and declining only gradually and with inflation running below the committee's longer-run objective, a highly accommodative monetary policy will remain appropriate for the foreseeable future. In normal circumstances, the committee's basic tool to provide monetary accommodation is its target for the Federal funds rate. However, the target range for the Federal funds rate has been close to zero since late 2008 and cannot be reduced meaningfully further.

Instead, we are providing additional policy accommodation through two distinct yet complementary policy tools. The first tool

is expanding the Federal Reserve's portfolio of longer-term Treasury securities and agency mortgage-backed securities. We are currently purchasing \$40 billion per month in agency MBS and \$45 billion per month in Treasuries. The second tool is forward guidance about the committee's plans for setting the Federal funds rate target over the medium term.

Within our overall policy framework, we think of these tools as having somewhat different roles. We are using asset purchases and the resulting expansion in the Federal Reserve's balance sheet primarily to increase the near-term momentum of the economy, with the specific goal of achieving a substantial improvement in the outlook for the labor market in a context of price stability.

We have made some progress toward this goal, and, with inflation subdued, we intend to continue our purchases until a substantial improvement in the labor market outlook has been realized. In addition, even after purchases end, the Federal Reserve will be holding its stock of Treasury and agency securities off the market and reinvesting the proceeds from maturing securities, which will continue to put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

We are relying on near-zero short-term interest rates, together with our forward guidance that rates will continue to be exceptionally low—this is our second tool—to help maintain a high degree of monetary accommodation for an extended period after asset purchases end, even as the economic recovery strengthens and unemployment declines toward more normal levels. In appropriate combination, these two tools can provide the high level of policy accommodation needed to promote a stronger economic recovery with price stability.

In the interest of transparency, the committee participants agreed in June that it would be helpful to lay out more details about our thinking regarding the asset purchase program—specifically, provide additional information on our assessment of progress to date as well as the likely trajectory of the program if the economy evolves as projected.

This agreement to provide additional information did not reflect a change in policy. The committee's decisions regarding the asset purchase program and the overall stance of monetary policy depend on our assessment of the economic outlook and of the cumulative progress toward our objectives. Of course, economic forecasts must be revised when new information arrives and are, thus, necessarily provisional.

As I noted, the economic outcomes that the committee participants saw as most likely in their June projections involved continuing gains in labor markets, supported by moderate growth that picks up over the next several quarters as the restraint from fiscal policy diminishes. The committee participants also saw inflation moving back toward our 2 percent objective over time.

If the incoming data were to be broadly consistent with these projections, we anticipated that it would be appropriate to moderate the monthly pace of purchases later this year. And if the subsequent data continued to confirm this pattern of ongoing economic improvement and normalizing inflation, we expected to continue to

reduce the pace of purchases in measured steps through the first half of next year, ending then around midyear.

At that point, if the economy had evolved along the lines we anticipated, the recovery would have gained further momentum, unemployment would be in the vicinity of 7 percent, and inflation would be moving toward our 2 percent objective. Such outcomes would be fully consistent with the goals of the asset purchase program that we established in September.

I emphasize that, because our asset purchases depend on economic and financial developments, they are by no means on a pre-set course. On the one hand, if economic conditions were to improve faster than expected and inflation appeared to be rising decisively back toward our objective, the pace of asset purchases could be reduced somewhat more quickly. On the other hand, if the outlook for employment were to become relatively less favorable, if inflation did not appear to be moving back toward 2 percent, or if financial conditions, which have tightened recently, were judged to be insufficiently accommodative to allow us to attain our mandated objectives, the current pace of purchases could be maintained for longer.

Indeed, if needed, the committee would be prepared to employ all of its tools, including an increase in the pace of purchases for a time, to promote a return to maximum employment in the context of price stability.

As I noted, the second tool the committee is using to support the recovery is forward guidance regarding the path of the Federal funds rate. The committee has said that it intends to maintain a high degree of monetary accommodation for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the committee anticipates that its current exceptionally low target range for the Federal funds rate will be appropriate at least as long as the unemployment rate remains above 6.5 percent and inflation expectations remain well-behaved in the sense described in the FOMC's statement.

As I have observed on several occasions, the phrase, "at least as long as," is a key component of the rate policy guidance. These words indicate that the specific numbers for unemployment and inflation in the guidance are thresholds, not triggers. Reaching one of the thresholds would not automatically result in an increase in the Federal funds rate target. Rather, it would lead the committee to consider whether the outlook for the labor market, inflation, and the broader economy justifies such an increase.

For example, if a substantial part of the reductions in measured unemployment were judged to reflect cyclical declines in labor force participation rather than gains in employment, the committee would be unlikely to view a decline of unemployment to 6.5 percent as a sufficient reason to raise its target for the Federal funds rate. Likewise, the committee would be unlikely to raise the funds rate if inflation remained persistently below our longer-run objective.

Moreover, so long as the economy remains short of maximum employment, inflation remains near our longer-run objective, and inflation expectations remain well-anchored, increases in the target for the Federal funds rate, once they begin, are likely to be gradual.

I will finish by providing you with a brief update on progress on reforms to reduce the systemic risk of the largest financial firms.

As Governor Tarullo discussed in his testimony last week before the Senate Banking, Housing and Urban Affairs Committee, the Federal Reserve, with the other Federal banking agencies, adopted a final rule earlier this month to implement the Basel III capital reforms. The final rule increases the quality and quantity of required regulatory capital by establishing a new minimum common equity Tier 1 capital ratio and implementing a capital conservation buffer.

The rule also contains a supplementary leverage ratio and a countercyclical capital buffer that apply only to large and internationally active banking organizations, consistent with their systemic importance.

In addition, the Federal Reserve will propose capital surcharges on firms that pose the greatest systemic risk and will issue a proposal to implement the Basel III quantitative liquidity requirements as they are phased in over the next few years.

The Federal Reserve is considering further measures to strengthen the capital positions of large, internationally active banks, including the proposed rule issued last week that would increase the required leverage ratios of such firms.

The Fed also is working to finalize the enhanced prudential standards set out in Sections 165 and 166 of the Dodd-Frank Act. Among these standards, rules relating to stress-testing and resolution planning already are in place, and we have been actively engaged in stress tests and reviewing the first wave of resolution plans. In coordination with other agencies, we have made significant progress on the key substantive issues relating to the Volcker Rule and are hoping to complete it by year end.

Finally, the Federal Reserve is preparing to regulate and supervise systemically important nonbank financial firms. Last week, the Financial Stability Oversight Council (FSOC) designated two nonbank financial firms. It has proposed the designation of a third firm, which has requested a hearing before the Council.

We are developing a supervisory and regulatory framework that can be tailored to each firm's business mix, risk profile, and systemic footprint, consistent with the Collins amendment and other legal requirements under the Dodd-Frank Act.

Thank you, Mr. Chairman. I would be pleased to take questions.

[The prepared statement of Chairman Bernanke can be found on page 61 of the appendix.]

Chairman HENSARLING. Thank you, Mr. Chairman.

The Chair will recognize himself for 5 minutes for questions.

Mr. Chairman, the first question is probably, in some respects, the most obvious question. You are aware better than most that, as you testified before the Joint Economic Committee on May 22nd, as *The Wall Street Journal* reports, the stock market "moved up when Mr. Bernanke's congressional testimony was released in the morning, near-triple-digit gains when he began taking questions, turned negative when the minutes were released." On June 19th, at the mere hint of tapering, the Dow Jones dropped almost 600 points in 2 days. And then recently, your comments on July 10th have seen the S&P hit record highs.

A couple of questions result from this—a couple of quotes, first. Warren Buffett has described our stock market as waiting “on a hair trigger” from the Fed. Dallas Fed President Richard Fisher describes stock markets as “hooked on the drug” of easy money.

You have described your thresholds as providing guidance to the market, but you have also qualified that the thresholds provide no guidance as to when or how the policy will change once those thresholds have been reached. A recent survey of 55 economists by The Wall Street Journal gives the Fed a D-minus for its guidance.

So can you comment on your guidance, and can you comment on Mr. Buffett’s and President Fisher’s comments?

Mr. BERNANKE. Certainly, Mr. Chairman.

We are in a difficult environment economically, financially, and, of course, we are dealing with unprecedented monetary policy developments. I continue to believe that we should do everything we can to apprise the markets and the public about our plans and how we expect to move forward with monetary policy. I think not speaking about these issues would risk a dislocation, a moving of market expectations away from the expectations of the committee. It would have risked increased buildup of leverage for excessively risky positions in the market, which I believe the unwinding of that is part of the reason for some of the volatility that we have seen.

And so I think it has been very important that we communicate as best we can what our plans and our thinking is. I think the markets are beginning to understand our message, and that volatility has obviously moderated.

Chairman HENSARLING. I hope you are right.

Let me change subjects. This committee tomorrow will have a hearing on a bill designed to reform Fannie and Freddie. The FHA put us on a path toward a sustainable housing policy in America.

The Fed, a number of years ago, released a study that estimated that Fannie and Freddie passed on a mere 7 basis points subsidy in their interest rates. That was by economists Passmore, Sherlund, and Burgess.

Does the Fed still stand by that study?

Mr. BERNANKE. It was a good study, yes.

Chairman HENSARLING. You have been quoted in the past with respect to the GSEs, stating, “Privatization would solve several problems associated with the current GSE model. It would eliminate the conflict between private shareholders and public policy and likely diminish the systemic risk, as well. Other benefits are that private entities presumably would be more innovative and efficient than a government agency, in that they could operate with less interference from political interests.”

Do you still stand by that statement?

Mr. BERNANKE. I stand by the view that the GSEs, as constituted before the crisis, had very serious flaws in terms of the implicit guarantee from the government that was not compensated, the lack of capital, and the fact that they were torn between public and private purposes. So I agree that the GSEs were a significant problem.

Chairman HENSARLING. Let me ask you about another one of your statements. In 2008, you observed, “GSE-type organizations are not essential to successful mortgage financing. Indeed, many



other industrial countries without GSEs have achieved homeownership rates comparable to that of the United States. One device that has been widely used is covered bonds.”

Do you still stand by that statement?

Mr. BERNANKE. Yes.

Chairman HENSARLING. Now, as I understand it, you do believe that it is advisable to retain some type of government backstop in times of great turmoil, as we saw in 2008. The Fed, I believe, has put forth its own plan; is that correct?

Mr. BERNANKE. No, the Fed hasn't put forth a plan.

Chairman HENSARLING. Maybe it is Federal Reserve economists Hancock and Passmore?

Mr. BERNANKE. That would be an independent piece of research that is not endorsed by the Board of Governors.

Chairman HENSARLING. Okay.

Regrettably, I see my time has come to an end. The Chair now recognizes the ranking member for 5 minutes.

Ms. WATERS. Thank you, Mr. Chairman.

Mr. Chairman, I am interested in the survey that was done by the IMF where they reported that the United States could spur growth by adopting a more balanced and gradual pace of fiscal consolidation, especially at a time when monetary policy has limited room to support the recovery further.

Specifically, the IMF recommended that Congress repeal the sequester, raise the debt ceiling to avoid any severe shocks, and adopt a comprehensive, backloaded set of measures to restore long-run fiscal sustainability.

Would you agree with the IMF's conclusion that the austerity policies currently in place have significantly depressed growth in the United States? And to what extent can monetary policy offset the adverse consequences of the current contractual fiscal policy?

Mr. BERNANKE. As I have said many times, I think that fiscal policy is focusing a bit too much on the short run, and not enough on the long run. The near-term policies, which include not only the sequester but the tax increases and other measures, according to the CBO, are cutting about a percentage point and a half, about 1.5 percentage points from growth in 2013. That would mean, instead of 2 percent growth, we might be enjoying 3.5 percent growth. At the same time, Congress has not addressed a lot of long-run issues, where sustainability remains not yet achieved.

So, yes, my suggestion to Congress is to consider possibilities that involve somewhat less restraint in the near term and more action to make sure that we are on a sustainable path in the long run. And I think that is broadly consistent with the IMF's perspective.

Ms. WATERS. I would like to ask you a question about housing finance, since the chairman mentioned that we will be meeting to hear about his bill that, among other things, winds down the GSEs and effectively ends the government's guarantee.

While I support reducing the current government footprint in the housing market, I am concerned that such a drastic reduction will adversely affect homeowners, depress the broader economy, and eliminate the 30-year, fixed-rate mortgage as we know it.

How might ending the 30-year, fixed-rate mortgage affect access to affordable mortgage credit, the housing markets generally, and the Fed's need to continue its extraordinary support of the housing market through quantitative easing?

Mr. BERNANKE. I think it is very important that average people in America have access to mortgage credit which allows them to buy a home if that is what their financial situation and their needs require. As long as the product is consumer-friendly, consumer-safe, protected in that respect, and is financially affordable, I don't think it necessarily has to be in a specific form. I think there are different ways. Many people use different types of mortgage structures.

I think the main thing, again, it is not the instrument itself but, rather, the access of the average American to homeownership and to mortgage credit.

Ms. WATERS. To what extent is the structure of a country's housing finance system a prime contributor to macroeconomic volatility? Would you agree that housing finance systems with variable-rate mortgages are the dominant product and more vulnerable to extreme bubble-bust cycles in the housing market?

Mr. BERNANKE. That is a good question. I haven't really seen evidence on that. In the United States, unfortunately, adjustable-rate mortgages were often sold to people who weren't really able to manage the higher payments when the payments rose, and they weren't very well disclosed. There are other countries that have adjustable-rate mortgages where they haven't had quite the same problems.

And I guess one small advantage is that when the central bank changes interest rates, it shows up immediately in costs of housing, and may be more powerful in that respect.

But I think the most important issue is disclosure and underwriting, making sure that people can afford the costs of the mortgage even when the payments go up.

Ms. WATERS. Thank you very much.

I appreciate your comments about the different types of structures. And I suppose your comments about variable-rate mortgages are probably consistent with concerns we have about no-documentation loans and other kinds of things where we know we can't guarantee that those people taking out the mortgages are able to repay them.

Mr. BERNANKE. Was there a question? Sorry. I can't hear very well.

Chairman HENSARLING. The time of the gentlelady has expired.

Ms. WATERS. Thank you very much.

Chairman HENSARLING. The Chair now recognizes the gentleman from Michigan, Mr. Huizenga, for 5 minutes.

Mr. HUIZENGA. Thank you, Mr. Chairman.

And, Mr. Chairman, I want to quickly cover three areas: one, talk a little bit about interest rates; two, talk about too-big-to-fail; and three, briefly talk about the Taylor Rule.

Now, I would be reticent if I didn't pass along a question one of my friends had: Should he refinance right now? I think that is probably a question a lot of people have. I know I did, not that long ago. You may answer if you would like.

Mr. BERNANKE. I am not a qualified financial advisor.

Mr. HUIZENGA. That would be part of the problem with Dodd-Frank. If you don't qualify, then nobody qualifies.

But I think there is that fear out there, with the increase in mortgage interest rates. A lot of us, me coming out of a real estate background, I think a lot of us finally said, maybe we should be watching what your comments were going to be and maybe get clued in.

But what I am really concerned about is that—and this is at some risk to myself of maybe not having a very warm welcome next time I am up in New York City visiting some of my friends up there. But I am concerned that Wall Street is too dependent on the Fed and sort of the signals that you are having, while Main Street is really getting buffeted about, whether it is interest rates, tax policy, certainly regulatory policy as well. And we need to make sure that we are moving beyond that.

I am sure, who knows, maybe the market just took an uptick based on my comments. Or maybe they took a downtick; who knows. We know that they are going to be following your comments much more closely. But we have to make sure that this is about Main Street, not about Wall Street, and how this is going to be affecting people back home.

On too-big-to-fail, we had a hearing last week regarding too-big-to-fail, and President Lacker from the Federal Reserve in Richmond testified about the new restrictions in Dodd-Frank imposed on Section 13.3 of the Federal Reserve Act, an emergency provision the Fed used to bail AIG out at the time.

And he said, "I think it is an open question as to how constraining it is. It says it has to be a program of market-based access, but it doesn't say that more than one firm has to show up to use it. But it certainly seems conceivable to me that a program could be designed that essentially is only availed of by one firm."

Now, do you agree with President Lacker and the new restrictions added in 13.3 will not be effective in limiting the Fed's freedom to carry out future bailouts? Or even if it did, would you have the authority to enforce those limitations?

Mr. BERNANKE. So, on your first point, I just want to emphasize that we are very focused on Main Street. We are trying to create jobs, we are trying to make housing affordable. Our low interest rates have created a lot of ability to buy automobiles.

Mr. HUIZENGA. Is it fair to say, though, that Wall Street has benefited more than Main Street has?

Mr. BERNANKE. I don't think so. We are working through the mechanisms we have, which, of course, are financial interest rates and financial asset prices. But our goals are Main Street, our goals are jobs, our goals are low inflation. And I think we have had not all the success we would like, but we have had some success.

I would like to respond to your second one, though, from President Lacker.

Mr. HUIZENGA. Yes.

Mr. BERNANKE. I don't think that 13.3, as significantly modified by Dodd-Frank, could be used to bail out an individual firm. According to Dodd-Frank, 13.3 has to be a broadly based program. It has to be open to a wide variety of firms within a category. It can-

not be used to lend to an insolvent firm. It requires both the approval of the Board and of the Secretary of the Treasury to be used. And it must be immediately communicated to the Congress.

I do not think that 13.3 could be used in that way.

Mr. HUIZENGA. Obviously, there may be some disagreement within your organization, but I would love to work with you on trying to tighten that up.

The other item, very quickly, in our last minute here, on the Taylor Rule. A recent survey of 55 economists by The Wall Street Journal gave the Federal Reserve a grade of D-minus for its guidance. Now, I would hate to see what it had been previously, 10 years ago, let's say.

But do you believe that these facts indicate a monetary policy guidance function that needs more work?

Mr. BERNANKE. I don't know what the grade refers to. It could be the fact that there are many different voices at the Fed. There are a lot of different views. And I think there is a benefit to having a lot of different views. People can hear the debate. On the other hand, if people are looking for a single signal, it can be a little confusing.

I think we are doing a reasonable job of communicating our intentions and our plans in the context of a complex monetary policy strategy.

Mr. HUIZENGA. I'm sorry, I have 10 seconds, and so I will make it more of a statement, but I would love to follow up with you in writing. I think many of us are concerned that when you rolled the threshold guidance out, you described it as Taylor Rule-like, but many of us are afraid that it may not have as much similarity to a rules-based approach. And I look forward to working with you on that.

Thank you, Mr. Chairman.

Chairman HENSARLING. The Chair now recognizes the gentleman from Missouri, Mr. Clay, the ranking member of the Monetary Policy Subcommittee.

Mr. CLAY. Thank you, Chairman Hensarling.

And thank you, Chairman Bernanke, for being here.

As you know, the unemployment rate is 7.60 percent. The economy added a little over 200,000 jobs per month for the first 6 months of this year. In 2012, we averaged about 180,000 jobs per month. This is a slight increase. And the private sector, I would say, added most of the jobs. Under the sequester, State and Federal Governments have lost jobs. Any forecast on, if the sequester stays in place, what the condition of the economy will be in the next year or so?

Mr. BERNANKE. The first observation which you made, which is quite right, is that in this recovery, even as the private sector has been creating jobs, governments at all levels have cut something on the order of 600,000 jobs. In previous recoveries, usually the government sector was adding jobs. So that is one reason why the recovery has been slow.

Again, this year, the best estimate I have is the CBO's estimate at 1.5 percentage points on growth this year. I can't say we are certain about how long those effects will last, but our anticipation is that later this year and into next year, as those effects become less

restrictive, that the economy will begin to pick up, and we will see some benefits from that. But of course that hasn't happened yet, and we have to keep monitoring that.

Mr. CLAY. Shifting to the housing market, which has been a drag on the economy for the last couple of years, it has recently begun to show signs of turning around. Do you believe the increase in housing prices provide evidence that the Fed's monetary policy is working, and is there a causal or correlative relationship between the two?

Mr. BERNANKE. Yes, I think so. Historically, the two areas of the economy which have been most impacted by monetary policy are housing and autos, and those are two of the areas right now which are leading our recovery. And evidently low mortgage rates have contributed, household formation and other factors have also contributed, but the housing sector is certainly an important component of the recovery at this point. And housing prices going up are not only beneficial in terms of stimulating more construction, but they also improve the balance sheets of households and make them more confident, more willing to spend on other goods and services.

Mr. CLAY. And so you are not concerned that recent increases in mortgage rates could jeopardize the fragile housing recovery?

Mr. BERNANKE. The mortgage rates remain relatively low, but they are higher than they were, and we do have to monitor that.

Mr. CLAY. And they are inching up.

Mr. BERNANKE. We will see how they evolve, but we do have to monitor that, and we will see how housing and house prices go from here.

Mr. CLAY. Do you believe the labor market in which the unemployment rate hovers just below 8 percent reflects a new normal, as some have suggested? What is a sustainable rate of unemployment, in your view, over the medium and long term? And what, in your view, could be done to strengthen the aspect of the labor force beyond the rate of employment, including wages, hours worked, and labor force participation?

Mr. BERNANKE. No. I think we are still far above the longer-run normal unemployment rate. To give you one illustration, the projections of the participants of the FOMC suggests that the long-run unemployment rate might be closer to 5.2 to 6 percent, but even beyond that, that amount of unemployment reflects the fact that there are people who don't have the right skills for the available jobs, who are located in the wrong parts of the country. So training, education, improving the functioning of the labor market, improving matching, there are things that can be done through labor policy, labor force policy, that could even lower unemployment further than the Fed can through just increasing demand.

Mr. CLAY. So say, for instance, in the African-American community where male unemployment hovers around 13 or 14 percent, do you think the Labor Department and community colleges and others need to do a better job of connecting job training to targeted growth industries?

Mr. BERNANKE. I have seen some very good programs where employers, community colleges, and State governments work together to try to link up people with jobs, and the community college provides the right training.

Mr. CLAY. My time is up. I thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Alabama, the chairman emeritus of our committee, Mr. Bachus.

Mr. BACHUS. Thank you, Mr. Chairman.

Chairman Bernanke, I have not seen a lot of discussion concerning the reduction in Treasury issuance with the deficit coming down. It seems like that would give you more latitude to reduce your purchases of Treasuries. Would you like to comment on that?

Mr. BERNANKE. The Fed still owns a relatively small share of all the Treasuries outstanding. It is true that as the new issuance comes down, our purchases become a larger share of the new flow of Treasuries coming into the market. But we have not seen that our purchases are disrupting the Treasury market in any way, and we believe that they have been effective in keeping interest rates low. That being said, as I have described, depending on how the economy evolves, we are considering changing the mix of tools that we use to maintain the high level of accommodation.

Mr. BACHUS. Yes, but the fact that they probably will be issuing less is, I think, a factor that you would consider.

Mr. BERNANKE. We would consider that, but our view is that what matters is the share of the total that we own, not the share of the new issuance.

Mr. BACHUS. All right. Chairman Bernanke, you mentioned last year in Jackson Hole that you viewed unemployment as cyclical. Do you still believe that it is cyclical and not structural?

Mr. BERNANKE. Just like my answer a moment ago, I think that probably about 2 percentage points or so, say the difference between 7.6 and 5.6 percent, is cyclical, and the rest of it is what economists would call frictional or structural.

Mr. BACHUS. Have you done any studies—do you think maybe 5 percent structural and 2 percent cyclical?

Mr. BERNANKE. Most importantly, so far we don't see much evidence that the structural component of unemployment has increased very much during this period. It is something we have been worried about, because with people unemployed for a year or 2 years or 3 years, they lose their skills, they lose their attachment to the labor market, and the concern is they will become unemployable. So far it still appears to us that we can attain an unemployment rate—we, the country, can attain an unemployment rate somewhere in the 5s.

Mr. BACHUS. Again, the most recent FOMC minutes didn't specifically address the 7 percent unemployment target, but you mentioned it in your press conference after that. Was that 7 percent target discussed and agreed on in the meeting?

Mr. BERNANKE. Yes, it was. Seven percent is not a target. It was intended to be indicative of the amount of improvement we want to see in the labor market. So I described a series of conditions that would need to be met for us to proceed with our moderation of purchases. We have a go-around where everybody in the committee, including those who are not voting, get to express their general views, and there was good support for both the broad plan, which I described, and for the use of 7 percent as indicative of the kind of improvement we are trying to get.

Mr. BACHUS. Okay. Thank you.

The FOMC participants have stated, some of them, that their assessment of the longer-run normal level of the Fed funds rate has been lowered. Do you agree with that?

Mr. BERNANKE. A rough rule of thumb is that long-term interest rates are roughly equal to the inflation rate plus the growth rate of the economy. The inflation rate, we are looking to get to 2 percent. To the extent that in the aftermath of the crisis and from other reasons that the economy had a somewhat lower real growth rate going forward, that would imply a lower equilibrium interest rate as well.

Mr. BACHUS. Okay. You mentioned—GDP estimates also come in. They were too optimistic.

Mr. BERNANKE. Yes.

Mr. BACHUS. I think you said earlier you believe one factor is the policy decisions made by Congress to a certain extent, the sequester, and failing to address the long-term structural changes in the entitlement programs.

Mr. BERNANKE. That is right, although I should say that we all should keep in mind that these are very rough estimates, and they get revised. For example, you get somewhat different numbers when you look at gross domestic income instead of gross domestic product. But, yes, as I have said a couple of times already, I think that Congress would be well-advised to focus more on the longer term.

Mr. BACHUS. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentlelady from New York, Mrs. Maloney.

Mrs. MALONEY. It is my understanding that we are going to people who did not have the opportunity to ask questions at the last hearing, so the next person would be Mr. Perlmutter.

Ms. WATERS. Mr. Perlmutter was next on the list, not Mrs. Maloney, so would you please call—

Chairman HENSARLING. I am happy to do it. It is just the list that we received from you, but we are very happy to recognize the gentleman from Colorado for 5 minutes.

Mr. PERLMUTTER. Sure you are. I thank the Chair, and I thank the gentlelady from New York.

Mr. Chairman, it is good to see you. As always, I think—I just want to compliment you on being a steady hand through all of this. In terms of fiscal policy, we had a very expansionary policy, and now we have had a very contractionary policy. And to sort of piggyback a little bit on Mr. Bachus' question and Mr. Clay's, and I am looking at page 11 of your report where it says, "The Congressional Budget Office estimated that the deficit-reduction policies in current law generating the 2¼ percentage point narrowing in the structural deficit will also restrain the pace of real GDP growth by 1½ percentage points this calendar year, relative to what it would have been otherwise."

What does 1½ percent of real GDP mean in terms of jobs and wealth? And, 1½ percent is just a number. What is that?

Mr. BERNANKE. It is very significant. The CBO also estimated that 1½ percentage points was something on the order of 750,000

full-time equivalent jobs. I think with another 1½ percentage point of growth, we would see probably unemployment down another 7- or 8/10, something like that. So it makes a very big difference. It is very substantial.

Now, again, we are hoping that as the economy moves through this period, we will begin to see more rapid growth later this year and into next year.

Mr. PERLMUTTER. Okay. So let us talk about—you have a graph, and I don't know if you have your report in front of you, but the graph on the preceding page, 10, graph A, Total and Structural Federal Budget Deficit 1980 to 2018. Do you see that?

Mr. BERNANKE. Yes.

Mr. PERLMUTTER. Can you explain that graph? It looks to me like at some point there isn't—you project or there is a projection here of no structural deficit in about 2017, 2018. What does that mean?

Mr. BERNANKE. That means taking away the effects of the business cycle. The business cycle causes extra deficit, because with the economy weak, you get less tax revenue. You have more spending on social programs of various kinds. What that is saying is that if we were at full employment, that in 2015, I believe it is, the structural deficit would be close to zero. That is the CBO estimate.

Mr. PERLMUTTER. Okay. I now kind of want to turn to some other questions, if I could. Mr. Huizenga and Mr. Clay were also asking you about interest rates, and you said we are at historically low interest rates. I would recommend to you, and you probably already know about, an app that you guys have that I can get on my iPad. It is called The Economy, and it shows—this one shows how we have been doing over the last 40 years. And we are—it was way up here in, like, 1980 at about 18 percent, and then way down here at about 3.3 percent about 2 months ago. And so we have come way down, except that in the last 2 months—see, what is good about this app, you can also do it on a 1-year basis. And on a 1-year basis, it shows that from April 2013 to the end of June, we went about straight up, about 33 percent increase in interest rates, which was from 3.3 percent to about 4.5 percent.

Mr. BERNANKE. You are talking about mortgages now?

Mr. PERLMUTTER. Mortgage rates, yes, sir.

So how does that come about?

Mr. BERNANKE. There will be three reasons for it. The first is that the economic news has been a little better. For example, there was a pretty strong labor market report that caused yields to go up as investors became more optimistic.

A second factor is probably that some excessively risky or leveraged positions unwound in the last month or two as the Federal Reserve communicated about policy plans. The tightening associated with that is unwelcome, but on the other hand, at least there is the benefit of maybe perhaps reducing some of those positions in the market.

Mr. PERLMUTTER. The concern I have, and I think it was expressed by both Mr. Huizenga and Mr. Clay, is that one of the underpinnings of this recovery, you said, is that now housing is beginning to get much stronger. It was historically so weak, but this kind of increase, if it continues, is going to slow that down. Wouldn't you agree?



Mr. BERNANKE. I agree that we need accommodative monetary policy for the foreseeable future, and I have said that.

Mr. PERLMUTTER. Thank you.

And I thank the Chair. I yield back.

Chairman HENSARLING. The Chair now recognizes the gentleman from California, Mr. Miller, for 5 minutes.

Mr. MILLER. Mr. Bernanke, welcome. I want to thank you for listening to us.

On the recent ruling on Basel III, you acknowledge insurance companies are very different from banks, and you postponed any negative decision on that. I think that was a very, very wise move.

You are probably aware that the committee is about to consider a housing finance reform bill. I have looked at the GSEs in the past, and I have always had a problem with the way they were fundamentally flawed. You had a hybrid situation where the private sector made all the profits, and the taxpayers took all the risk, which was problematic from the beginning. You can go back to a time when you could say they performed their function very well, but they created major problems. In recent years, they didn't adhere to underwriting standards. They were buying predatory loans rather than conforming loans. They were chasing the market rather than playing a countercyclical role, and that has been very problematic.

Now we look at a situation and say, what do we do and where do we go? And if the United States were to end the function of the GSEs as it applies to conforming loans, would the private market be able to provide liquidity to the market? And the second part of that is, what about the time of crisis? Would investors be there to purchase mortgage-backed securities, and would interest rates tend to rise in that type of situation?

Mr. BERNANKE. Let me first say that I agree with your analysis of GSEs. And the Fed for many years was warning about lack of capital, the implicit guarantee, the conflict between public and private motives, and so we agree that is something that needs to be fixed.

There are a number of plans out there for reform. I think everyone agrees that one of the key questions is what role, if any, the government should play. It seems pretty clear that the private sector should be playing more of a role than it is now. Right now, we have basically a government-run mortgage securitization market, but in order to protect the taxpayer, to increase efficiency, to allow for more product innovation and so on, we would like to have more market participation.

But, again, the question is what role should the government play? I don't know the answer to that, but I would say that, first, if the government does play a role, it should be fairly compensated; that is, instead of having an implicit guarantee that it ended up having to make good on, like the FDIC or some other similar institution, it should receive some kind of insurance premium.

Mr. MILLER. And I think that is important, because I have argued for a position where if you are going to have a conduit, let us say a facility to replace the GSEs, then the profits from the g-fees should go into a reserve account to make sure that is solvent. And then if you have a reinsurance fee when the mortgage-backed

security is sold, that should also go in a reserve account. And when the account goes up large enough over 7 or 8 years, there is no need for a government guarantee, because the reserves will be so huge based on the profits that they would turn, based on what they historically have done, you wouldn't put the taxpayer at risk.

But the problem we have had in the past, and I have always had a problem with it, is when you have investors investing in GSEs, the GSEs at that point in time chase market share to make investors happy. That is not their role. Their role is to be counter-cyclical.

But I am also concerned that if we make a mistake, the government is still going to be there on the hook, because they are not going to let the housing market crumble if something goes wrong. So if you don't have some entity that is self-sufficient, has huge capital to make sure that it can withstand a downturn, we are going to end up in the situation again. Maybe you can respond to that?

Mr. BERNANKE. I think that is right. Either you have to be 100 percent confident in the private thing you set up, or alternatively, if you think there is a scenario in which the government would come in ex post, then it might be a good idea to make sure the government gets paid appropriately ex ante, and that the rules of the game are laid out in advance.

Mr. MILLER. But instead of the government, if you can create a facility that was independent of government, but established by government, let us say, that the profits were held, and they were not abused by Congress as a slush fund to be able to take the money from, if you just look at the profits that GSEs are making today, if there is an entity doing that of an equivalent that was backed by some guarantee for "X" amount of years to allow the market to recover and stability to occur, and those reserves—and the g-fee alone probably in 8 to 10 years would be \$800 billion minimum if you charge a reasonable reinsurance fee on the mortgage-backed securities, that is probably \$200 billion in 8 to 10 years. You have a trillion dollars, which is 6 times the risk the government took in the worst downturn we have ever seen, would that not add to market security and stability?

Mr. BERNANKE. The question there, I think, is whether this new entity could charge those g-fees if you had competition, and would you be allowing private-sector competition.

Mr. MILLER. The goal is to allow the private sector in. They are not crowding in today, and that is what we want to do. We want to get them in, but we still need to provide a surety and liquidity. That is my concern.

Mr. BERNANKE. That is right.

Mr. MILLER. Thank you. I yield back.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Massachusetts, Mr. Lynch.

Mr. LYNCH. Thank you, Mr. Chairman.

And welcome, Chairman Bernanke, and thank you for your service and your willingness to come before the committee and help us with our work.

I want to stay right on that line of questioning that Mr. Miller actually began. As you may know, both the House and Senate are actively considering legislative proposals to reform the GSEs, and I think most of us on both sides of the aisle realize some reform is necessary.

Now, I won't ask you to comment on any particular legislative proposal, I am not sure you would anyway, but you are a scholar of the Great Depression, and, as you know, Fannie Mae and the FHA are sort of creations of the New Deal, and they are—I wanted to ask you, historically the 30-year fixed mortgage, which is really a major innovation, prior to the government getting in, GSEs getting in and providing that backstop, was that available and—

Mr. BERNANKE. No.

Mr. LYNCH. —was the private sector successful in trying to create that?

Mr. BERNANKE. During the Depression and that period of time, people usually took out 5-year balloon mortgages and refinanced them sequentially.

Mr. LYNCH. In terms of the last 80 years of government support, and that is really what has created opportunities for middle-income homeowners—well, middle-income potential homeowners from getting into the market, and as we are grappling with this GSE reform, I am very concerned about what happens to rates. I can't—I do agree with Mr. Miller, there seems to be some requirement of a backstop at some point, and obviously you want the taxpayer to be as far back as possible, and that the initial cushion or the initial loss, if necessary, would be absorbed by the private sector. And we are trying to figure out a way of preserving an affordable 30-year fixed mortgage, keep that market going, without having the taxpayer take all that risk up front. That is what we are trying to grapple with, and I am wondering if you can help us with that.

Mr. BERNANKE. Earlier, the chairman asked me about passing on subsidies to the consumer. I don't think that government backstops are very effective in lowering rates unless they have a price control on the interest rate that the—

Mr. LYNCH. Isn't that a function of risk, though? If the private sector knows that at a certain point—like with the terrorist risk insurance that we debated here, because the industry knew there was a backstop beyond which they would not be responsible, it did, in fact, result in a lower rate.

Mr. BERNANKE. Right, to some extent, but a lot of it doesn't get passed through.

What I was going to add, though, was that the argument for thinking about government participation is exactly the situation like we faced the last few years where there is a big housing problem, and private sector mortgage providers or securitizers are, for whatever reason, not willing to act countercyclically, then is there a role for the government to support this process? And the question we were just discussing is if that is going to happen anyway, is there a case for setting up the rules in advance in some sense and figuring out what the government ought to charge for whatever protection it is prepared to provide?

Mr. LYNCH. Okay. Sir, I want to thank you for your service. I have heard stories that this might be your last appearance before

this committee for this purpose, and I think you have served us very well under very, very difficult circumstances—

Mr. BERNANKE. Thank you.

Mr. LYNCH. —and I appreciate your service to your country. Thank you.

I yield back.

Chairman HENSARLING. The gentleman yields back.

The Chair recognizes the gentleman from California, Mr. Royce.

Mr. ROYCE. Thank you, Mr. Chairman.

Chairman Bernanke, I think the risk weighting at the end of the day is only as good as the metrics that we develop. I am thinking back to Basel I, and now we are looking at the final Basel III.

The Basel III includes a risk weighting of 20 percent for debt issued by Fannie Mae and Freddie Mac, and the rule includes a risk weighting of zero for unconditional debt issued by Ireland, by Portugal, by Spain, and by other OECD countries with no country risk classification. Both of these risk weightings are, in my memory, identical to the risk weightings under the original Basel I.

So my concern is that we should have learned a few things about those metrics, given the consequences of the clear failure, and yet here we have the accord of 1988 looking an awful lot like this particular accord.

Given what we have experienced, the failure of the GSEs, the propping up of many European economies, do you think these weightings accurately reflect the actual risk posed by these exposures?

Mr. BERNANKE. Basel III and all Basel agreements are international agreements. And each country can take that floor and do whatever it wants above that floor. We would not allow any U.S. bank to hold Greek debt at zero weight, I assure you.

Mr. ROYCE. Yes.

Mr. BERNANKE. In terms of GSEs, GSE mortgage-backed securities have not created any loss whatsoever. They have to the taxpayer, but not to the holders of those securities. So that, I don't think, has been a problem.

It is not just the risk weights, though, but Basel III also has significantly increased the amount of high-quality capital the banks have to hold for a given set of risky assets.

Mr. ROYCE. But it still seems to me that at the end of the day, in which—with respect to what you are working out as a calculation, you have a situation where high-risk countries like Spain and Portugal, should they receive the same risk weight as exposures to the United States? And that is the way that would be handled, I think, in Europe, but it just seems that should have been addressed in the calculus.

Mr. BERNANKE. One way to address it is through stress testing, where you create a scenario which assumes that certain sovereign debt bears losses, and then calculate capital into those scenarios. So, that is a bit of a backstop.

Mr. ROYCE. Let me ask you another question, which goes to this issue of the countercyclical role in the housing market that the government should play. And such a role obviously would be far better than the role government played during the last crisis, which was extraordinarily procyclical, if we look back over the greatly

ballooned bubble and subsequent bust that was developed as a result of housing policy and a lot of the actions taken.

Title II of the PATH Act has several provisions meant to allow FHA to play that countercyclical role. The goal obviously is to greatly expand eligibility, right, during the PATH Act—if the PATH Act were enacted, and that would get us to the point of that borrower eligibility in such a circumstance.

Would you agree enabling FHA to play an expanded role in times of crisis, as suggested under the Act, will help ensure continued access to the mortgage market for a great majority of borrowers regardless of the market conditions that we might face?

Mr. BERNANKE. I am not advocating a specific plan. I am just pointing out that we need to think about the situation where there is a lot of stress in the market, and then we need some kind of backstop. I obviously haven't studied this proposal, but it seems to me that FHA could be structured to provide such a backstop. It would depend on the details, but that would be one way to have the government provide a backstop.

Mr. ROYCE. I thank you very much, Chairman Bernanke, for attending the hearing here today and for your answers. And we will probably be in consultation later with some additional questions.

Mr. BERNANKE. Certainly.

Chairman HENSARLING. The gentleman yields back.

The Chair recognizes the gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman.

And thank you, Mr. Bernanke, for appearing again. And I trust that this will not be your last visit. I believe that our country has benefited greatly from your service, and not just the service itself, but the way you have conducted yourself in a time of great turmoil, so I am hopeful that you will be back.

I would like to, for just a moment, ask you to visit with us about the issue of certainty and uncertainty, confidence, optimism, because while you may do a lot of things, if consumer confidence or producers don't have confidence, that can have a significant impact on long-term growth. Confidence is important to growth.

I read through your paper, by the way, and I am very, very excited about some of the things that you have said, but I didn't get quite enough on the question of confidence. Would you please elaborate a bit?

Mr. BERNANKE. I think it is quite true that business confidence, homebuilder confidence, and consumer confidence are very important, and good policies promote confidence. The Fed policy, congressional policy, we want to try to create a framework where people understand what is happening, and they believe they have confidence that the basics of macroeconomic stability will be preserved.

It is a difficult thing. To some extent, it is a political talent to be able to create confidence in your constituents. So nobody has a magic formula for that, but clearly the more we can demonstrate that we are working together to try to solve these important problems, the more likely we are going to instill confidence in the public, and that in turn will pay off in economic terms.

Mr. GREEN. I compliment you, and I would like to focus on one aspect of what you said about working together. I contend that this is an important element in instilling confidence. And I believe that

the American economy is quite resilient. It is strong, notwithstanding some of the weaknesses that have been exposed. The reason I know it is strong is because it has survived Congress. If the economy can survive Congress, I am confident that it will thrive eventually. But things that we do, repealing continually, or attempting to repeal some of the significant aspects of bills that have passed that will impact the American people, I am not sure how much confidence these things engender. More than 30, 40 attempts to repeal the Affordable Care Act, an attempt to repeal Dodd-Frank without replacement, an attempt to repeal the CFPB without a good sense of what the replacement will be.

It seems to me that at some point we in Congress have to do more to engender the confidence that will cause the American people to want to buy, to want to invest, to want to produce. And I think that Congress has a significant role it could play, and unfortunately we have not—we have not been able to work together to the extent that the American people are confident that we will do things to help create jobs, to help build a broader economy. You have been very focused on jobs, very focused. We have not been as focused on jobs. Legislation that can produce jobs, much of it has lingered and has not had an opportunity to move forward.

I just believe that in the final analysis, your good work, while it is going to be lauded and applauded, still needs some help from the policymakers in terms of working together to instill confidence. Confidence is needed. I think this economy is ready to blossom, but when I talk to business people, they say to me, we need confidence, we need to know that the rules are going to be static and not dynamic. Consumers say to me, I need confidence. I will buy a house when I am confident that the system is going to remain static and not dynamic.

I thank you for your service, and I trust that we will be able to help instill the confidence to augment and supplement the good work that you have done.

Mr. BERNANKE. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from Virginia, Mr. Hurt.

Mr. HURT. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for being here today, and we thank you for your hard work.

I represent a rural district in Virginia, one that has not seen the same economic growth that other places in this country have seen. We still have places in our district where we have jobless rates at double digits. And we certainly look to Washington to adopt policies that will make it easier for our businesses to succeed, our families to succeed, as opposed to making things more difficult.

In listening to your remarks, you talk about systemic—adopting policies that go to systemic importance. Obviously Basel III, it seems to me you discussed Basel III in terms of what is systemically important. You also tip your hat to Main Street, talking about how the Fed has adopted policies to support Main Street, jobs, consumers, things that we all care about.

In the aftermath of the rules that were adopted earlier this month relating to Basel III, Frank Keating with the American Bankers Association said that—asked the question, are we making

things easier, or are we making things more difficult, and essentially said, if we are making them harder, that is not what we need for our economy. That is not what a recovering economy needs.

So as I think about what we need in my rural southside Virginia district, I think about community banks, and I think about what an important lifeblood they are to our Main Street economy. And I wonder if you could talk a little bit about the reasoning behind not just exempting community banks from the application rule that you all have adopted, and why you did that.

Mr. BERNANKE. And I agree with you about the importance of community banks, particularly in rural areas which might not be served by larger institutions. It is also important, of course, for community banks to be well-capitalized so that they can continue to lend during difficult periods, they don't fail, so we want to be sure that they are well-capitalized.

But in terms of the final Basel III rule that we just put out, we were very responsive to the concerns raised by community banks. They raised a number of specific issues relating, for example, to the risk weighting of mortgages, relating to the treatment of other comprehensive income, trust preferreds, a variety of things that they were concerned about, which we responded to. And that is part of our broader attempt through outreach, through meeting with advisory councils and so on to understand the needs of community banks and to make sure that we do everything we can to protect them. The—

Mr. HURT. Have—go ahead.

Mr. BERNANKE. I was going to say that Basel III is primarily aimed at the largest internationally active firms, and most of the rule was just not relevant to small firms.

Mr. HURT. Clearly, you all tried to make some accommodations for community banks, and I recognize that. I guess my question is, is there a reason that you all—if you could talk a little bit about why you all concluded that you could not exempt them entirely.

And I guess the second question that I have is, do you think—based on your studies or anybody else's studies—that these rules will have a disproportionate effect on community banks? Obviously, that is the heart of the concern, that the smaller banks have a much more difficult time complying with regulations than obviously the largest banks.

Mr. BERNANKE. Again, I don't think that Basel III is primarily aimed at community banks. And the amount of bureaucracy and rules is not significantly different from what they are doing now. In terms of capital, the community banks already typically held more capital as a ratio than larger banks do, and our calculations are that community banks are already pretty much compliant with the Basel III rules. We don't expect them to have to raise substantial amounts of new capital.

Mr. HURT. So you don't believe there will be a disproportionate effect on the smaller banks in complying with these additional regulations?

Mr. BERNANKE. Smaller banks are disproportionately affected by the entire collection of rules that they face, ranging from bank secrecy to a variety of consumer rules, et cetera, et cetera. I think that your constituents may not be distinguishing Basel III specifi-

cally from all the other different rules that they face. And, of course, the small bank just has fewer resources, fewer people to deal with the range of regulatory and statutory requirements that the banks have to deal with.

Mr. HURT. And just finally, in one of your earlier appearances here, we talked a little bit about the regulatory structure, what is perceived among some as a micromanagement by bank examiners and regulators in the function of the Federal Reserve as an examiner. Are you able to give us any indication of what has been done in the last 2 years or so to try to improve that? I know that you had mentioned that there were some things that the Federal Reserve had in mind and was trying to work with our smaller banks.

Mr. BERNANKE. Yes. I am not going to have time to go through the whole list, but we have a Community Depository Institution Advisory Council that meets with the Board, and gives us their perspective. We have a special subcommittee.

Mr. HURT. My time has expired, but do you believe that these efforts have been successful?

Mr. BERNANKE. I think we have made definite progress, yes.

Mr. HURT. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair now recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Bernanke, for being here. You have had a lot of compliments today. In my business, it is called a eulogy, but that is—I am not trying to frighten you. Even the Twinkie came back. But I also want to thank you for your service.

The stimulus, the Fed stimulus, has been roundly criticized by many. Can you in a short time express what you believe would be the consequences of easing quantitative easing prematurely?

Mr. BERNANKE. Again, it is important to talk about our overall monetary policy stance. Our intention is to keep monetary policy highly accommodative for the foreseeable future, and the reason that is necessary is because inflation is below our target, and unemployment is still quite high.

In terms of asset purchases, though, I have been very clear that we are going to be responding to the data, and if the data are stronger than we expect, we will move more quickly, at the same time maintaining the accommodation-to-rate policy. If the data are less strong, if they don't meet the kinds of expectations we have about where the economy is going, then we would delay that process or even potentially increase purchases for a time.

So we intend to be very responsive to incoming data both in terms of our asset purchase program, but it is also very important to understand that our overall policy, including our rate policy, is going to remain highly accommodative.

Mr. CLEAVER. Thank you.

One of your former colleagues, Tom Hunting, from my hometown, has repeatedly warned in papers that he has written that too-big-to-fail is still a major threat to the U.S. economy. He suggests that in many instances, many of the huge financial institutions have gotten even larger. Do you think that if we went through again what we went through a few years ago, that we would be in a situation where we would almost be required to save the U.S. economy



and perhaps even the world economy from a depression because those—or we would have to step in again to bail out these major corporations, AIG and—

Mr. BERNANKE. I think there is more work to be done before we feel completely comfortable about systemic firms. The Dodd-Frank Act and Basel III and other international agreements provide a framework for working towards the day, which is not here yet, where we can declare too-big-to-fail a thing of the past, but we do have some tools now that we didn't have in 2008, 2009.

Very importantly, we have the Orderly Liquidation Authority of the FDIC—the Federal Reserve supports the FDIC in that—which would allow us to do a much more orderly resolution of a failing firm that would take into account the impact on financial market stability, unlike 2008, 2009, when we had no such tools and were looking for ad hoc ways to try to prevent these firms from failing. In addition, these firms are now much better capitalized than they were. And we are making other reforms that will make it much less likely that this situation will arise.

But I wouldn't be saying the truth if I said the problem is gone. It is not gone. We need to keep following through on the various programs here, and I think we need to keep doing what is necessary to make sure that this problem is solved for good.

Mr. CLEAVER. But the question is—and I was here as we went through all of this. We didn't have the time, we were told, and actually I believe, to rationally and thoughtfully consider all the options. And my fear is that if something happened even—I agree with you. In Dodd-Frank, we tried to reduce the likelihood that this was going to happen, but what assurance do we have that we would have time for action by the Fed, by Congress? Thank you.

Mr. BERNANKE. We have the framework now. We have the Orderly Liquidation Authority.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from Ohio, Mr. Stivers.

Mr. STIVERS. Thank you, Mr. Chairman. And Chairman Bernanke, thank you for being here today. I really appreciate your willingness to come and answer all our questions. I am going to try to get through Basel III as well as some QE questions, and we will see how my time goes.

The first thing I want to talk about is following up on the questions Mr. Hurt asked. And you—I will try to quote. You said that Basel III was not primarily aimed at community banks, and it is clear that it is aimed at the larger financial institutions which helped create the financial crisis. And I agree with you that it won't result in most community banks having to raise capital, because their capital is normally higher, but for a few community banks that don't have capital right now, where they have not as much access to the capital markets, it actually could harm them. And none of these banks are going to be too-big-to-fail; nobody is going to come in and bail them out. They also aren't so interconnected. And I am just curious why, given that Basel III is voluntarily compliant internationally, we didn't just exempt out the community banks?

Mr. BERNANKE. I think it is important that they be well-capitalized, both to protect the deposit insurance fund, to protect their

local communities and the borrowers that depend on them. And we have seen—in the past we have seen financial crises that were small firms, like in the Depression and in the savings and loan crisis, so I think they do need to have capital.

But on this issue that you mentioned, we are giving really long transitions. We aren't saying, you have to have this level of capital tomorrow. And so banks can raise capital through retained earnings and through other mechanisms as well.

Mr. STIVERS. Right. And I appreciate that. I don't think it is a burden on most community banks, but I do worry about a few of them, and I think it could result in consolidation in the industry and less community banks that serve some of our rural areas, and that troubles me a little bit.

Mr. BERNANKE. No. I agree with that concern.

Mr. STIVERS. The second thing I want to recognize in your Basel III is that you, I think appropriately, recognize that activity, for example, international activity, increases systemic risk, but I was a little troubled that you continue to use artificial asset numbers.

I am from Ohio. We have a lot of regional banks that serve the middle market that are either based in Ohio or have a major presence in Ohio. And, you use the \$10 billion number at very bottom for the smallest banks; the \$50 billion up to \$250 billion. And if you look at sort of the size of all the 50 largest banks in America, there is really—there are kind of some tiers. There are the top banks above \$2 trillion, and there are 3 of those, I think—I'm sorry—2 of those—there are 2 more above \$1 trillion, between \$1 trillion and \$2 trillion, and then there are 3 more above half a trillion dollars, but then it falls way off to 350. And you set that top limit for regional banks at 250. And there are banks that are regional banks that are essentially super community banks that are above that 250 to 350. A couple of them have a major presence in Ohio and serve our middle market.

And I guess I would ask where you picked that artificial number of 250, because most people would recognize both PNC and U.S. Bank as regional banks.

Mr. BERNANKE. We have met with middle-market banks and tried to understand their concerns. The basic philosophy here is that both the capital requirements and the supervisory requirements are gradated with size. So, for example, the largest banks will have capital surcharges. Where we have failed to grade appropriately, of course, we can go back and try to figure out how to get it right.

Mr. STIVERS. I appreciate that. And I would really urge you to take a look at the major cliffs in our asset sizes, because they really do—that spell themselves out. And I think the big jump between, say—there are no banks between \$350 million and \$500 million. There are 2 at just above \$350 million, and then there is nobody until you get to almost \$550 million. So, that is a big jump, and I think—I would urge you to take a look at that.

And the last question I would like to quickly ask is about—you talked about stress testing a lot for the banks. And in your QE and the way you judge QE portfolio, would you be willing to submit the Federal Reserve's QE to the same kind of stress testing under the

same kind of provisions you provide for these banks of potential interest rate spikes and inflation?

Mr. BERNANKE. The stress test has a different purpose for the Fed, which is to effect how much remittances we send to the Treasury. And we have done various stress tests in that respect, and many of them are publicly available. We have a number of research papers. And there are also outside researchers, the IMF and others, who have done these tests. And the bottom line is that for any reasonable interest rate path, this is going to end up being a profitable policy for the taxpayer.

Chairman HENSARLING. The time of the gentleman has expired. The Chair recognizes the gentleman from Michigan, Mr. Peters.

Mr. PETERS. Thank you, Mr. Chairman.

And, Chairman Bernanke, thank you for being here today and for your service.

Last week, the Bank of Japan announced that they were going to maintain their current monetary policy, which, as you know, includes significant devaluation of the yen for the purposes of improving the competitiveness of Japanese exports. The yen has fallen in value almost 30 percent compared to the dollar since last year. And Japan, as you also know, is joining the U.S.-led Trans-Pacific Partnership trade talks.

I have raised a number of concerns about Japan's entry into the trade talks until they open their markets, particularly to U.S. autos. And while they continue to manipulate their currency, this increases my concerns, and it could make our trade deficit even worse.

I know in 2011 you expressed concern with China's devaluation of their currency. I am quoting you saying, "Right now our concern is that the Chinese currency policy is blocking what might be a more normal recovery process in the global economy, and it is to an extent hurting our recovery."

Could you please discuss your views on Japan's currency policy, its impact on the economy, and do you believe that their currency policy is hurting the economic recovery in the globe right now?

Mr. BERNANKE. Yes. There are some fundamental differences between China's policy and Japan's policy. China has managed its exchange rate and kept it for many years below its equilibrium level in order to increase its exports. That is what economists call a zero sum game: What they gain we lose, basically.

The Japanese approach is different. They are not manipulating their exchange rate. They are not directly trying to set their exchange rate right at a given level. What they are doing is engaging in strong domestic monetary policy measures, trying to break the deflation that they have had for about 15 years, and a side effect of that is that the yen has weakened.

The G20 and the G7 have discussed these matters, and the international consensus is that as long as a country is using domestic policy tools for domestic purposes, that would be an acceptable approach.

Now, I recognize that movements in exchange rates do affect competition. You said you are from Michigan, right? Yes. So I can see where your concern would come from. I think that it is in our interest, though, to see Japan strengthened, to see their economy

grow faster. It will increase our market there as well as the competitive supply. And over time, if they do, in fact, achieve positive inflation, that increase in prices there will partially offset the exchange rate movement.

So, I recognize the concern. I don't know how big an effect it has had so far. I have actually talked to a couple of people in the auto industry at some of the companies to try and get their sense. But, again, there is a difference, which is that Japan is trying to expand its overall economy, and therefore, there is a benefit as well as a cost, and that benefit is a stronger Japanese economy and a stronger Asian market.

Mr. PETERS. To pick up from that point, so if you could kind of give me some sense, as you wind down your quantitative easing activities while Japan maintains this current policy which is driving down the yen, do you believe it is going to have an impact on American manufacturing and exports as you wind down as they continue that policy?

Mr. BERNANKE. It could. It could to some extent, but, of course, as you know, for example, many Japanese producers produce in the United States, and there is a sense that for a number of reasons, including productivity and others, that U.S. manufacturing is actually generally becoming more competitive globally than it has been in some time. So I don't think that this change in the value of the yen would offset that underlying trend.

Mr. PETERS. If I could just switch briefly, this is another big topic, but if you could touch on it. There have been some recent reports, in fact, a recent IMF report came out to talk about monetary policy and its impact on inequality in the United States. As you know, inequality has expanded dramatically, particularly in the last 20, 30 years. And in the report they talk about monetary policies having a much more significant role in driving historical inequality patterns in the United States than has been expected in—or that has been anticipated and certainly written about in the economic literature. Would you comment briefly? Do you believe that monetary policy has a significant impact on inequality as we are seeing it and—

Mr. BERNANKE. No, I don't think so. The purpose of monetary policy is, first of all, to keep inflation low, and everybody is affected by inflation, and to maintain employment at the highest level that the economy can sustain. And, of course, jobs are critical to the welfare of the broad middle class of Americans. So I really don't understand that.

It is true that in the short run, some of the tools that we have involve changing asset prices, so higher stock prices and things of that sort, but we can't affect those things in the long run. It is only a short-run transmission mechanism that is involved there.

Mr. PETERS. Thank you.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from Tennessee, Mr. Fincher.

Mr. FINCHER. Thank you, Mr. Chairman.

And, Chairman Bernanke, thank you for your service and for being here today.

I am going to read a paragraph, for my benefit probably more than yours, to get started, and then I have a couple of questions.

“The Federal Reserve was intended to be a fully independent central bank and monetary authority. The authors of the original Federal Reserve Act did not want to subject the institution to the whims of politicians, but, rather, set clear objectives for the institution in the interests of fostering the macroeconomic stability. That independence has eroded significantly since the 2008 financial crisis, when the Federal Reserve and the Treasury Department initially took coordinated steps to stabilize the economy. One persistent concern—that is, if the central bank’s independence is infringed upon by the government, fiscal authorities can compel the Fed to monetize sovereign debt.”

A couple of questions. With what has happened with quantitative easing, I was looking at the Dow a few minutes ago, 15,400; Nasdaq, 3,604; and 1,680 for the S&P. To Chairman Hensarling’s comments earlier, I think the private sector is addicted to the government money. And anytime you talk about cutting the money off, there is a panic.

Because we have our own currency and we can manipulate that currency, unemployment where it is, inflation where it is, with the entitlements in this country where they are—I am saying a lot here, but will we ever get to back to that place of unemployment at 5 percent?

I live in a part of the country, in a rural part of the country with a lot of farmers, a lot of agricultural real estate. We have seen land prices go through the roof, and one reason I think we have is interest rates are so low that people can borrow money. It is just—it is there. But that causes problems, also, because if this thing ever does turn around, how do you stop it? And interest rates are how you stop it. But the country also is in debt up to their eyeballs, which creates another problem. High interest rates breaks the back of the country.

So I said a lot, but are you concerned that pumping the money into the economy, when we stop that, can the country take it? Can the private sector react? And how do we do that?

Mr. BERNANKE. The reason for the low interest rates is because the economy is weak and inflation is low. And even if the Fed wasn’t engaging in asset purchases, interest rates would still be quite low, as they are in other countries, for example.

One reason that asset markets react to what the Fed says is that they are trying to determine whether the Fed will provide sufficient support for the economy to get back to full employment. That is our job, that is our mandate, when the economy is away from full employment, to try to provide the financial support that will move the economy in that direction.

Mr. FINCHER. Do you not think the politics over the past 4, 5, 6 years are playing more of a role than they did 6, 7 years ago?

Mr. BERNANKE. No, I don’t. Your earlier point about collaborating with the Treasury in the financial crisis, that had nothing to do with monetary policy. That had to do with the two main financial institutions in the government working together to prevent a big financial collapse. And I think the collaboration was needed there.

But at no time during the crisis or at any point did the Administration, the Congress, or the Treasury Department ever tell the Fed, we need monetary policy of "X." We have always maintained that independence, and we think it is critically important that we maintain it.

Mr. FINCHER. I just have about a minute left. I fear that the government's intervention into trying to make sure the private sector is running at full capacity creates all sorts of problems.

Now that I am up here and I see how big this is—I had a constituent the other day who brought this point up, and he said, with the regulatory policies that we have, with the choking effect that some say, the big government is really good for big business, the unintended consequences, because the big businesses can react to big government. The smaller businesses have a harder time doing that with the resources they have. And I thought about it a minute, and it is a great point.

Again, I am fearful that we are out of control, pumping the money in. The private sector is addicted to the pumping of the money. And when we ever shut that off, there is going to be a reaction. The reaction now that the stock market is 15,000, if we drop back to 12,000, again you are going to see a panic. What do we do then?

So many people, Chairman Bernanke, think now that the government's role is to step in and save the day. And this is taxpayer money. This is very, very dangerous.

Mr. BERNANKE. There is sort of an idea going around that the Fed can step away and not do anything. We have to do something. We have to have interest rates somewhere. The Fed does control our money supply. So we have to do something, and I think that we are better off trying to get the economy moving than not.

Mr. FINCHER. Thank you.

Chairman HENSARLING. The time of the gentlemen has expired. The Chair recognizes the gentleman from Illinois, Mr. Foster.

Mr. FOSTER. Thank you.

Chairman Bernanke, I think when it is time for the T-shirts to be passed out at your retirement party, a very good candidate for that would be the \$34 trillion swing in household net worth.

When we have seen in the last several years the \$16 trillion drop in household net worth caused by a complete failure of the Republican fiscal, regulatory, and monetary policy replaced by an \$18 trillion recovery, it is one of the most impressive achievements. And there is no doubt that, of the three legs of financial policy—monetary, fiscal, and regulatory—monetary policy deserves a lot of credit. So I just—you deserve the compliments you have been getting.

The question I would like to pursue is, it is my understanding that the Fed and the CBO maintain roughly comparable macroeconomic models. And in the last few weeks, the CBO has analyzed two different macroeconomic scenarios: one in which Congress has passed the Senate proposal for comprehensive immigration reform and a path to citizenship, which they found resulted in about a \$1.5 trillion increase in economic activity over the next 10 years and about a \$200 billion reduction in the Federal debt; and the second scenario, in which the Republicans succeed in blocking com-

prehensive immigration reform, resulting in a \$200 billion larger level of Federal debt and a \$1.5 trillion decrease in economic activity compared to the other scenario.

And so my question is, do you anticipate, given this policy uncertainty, that you are going to have to separately consider both of those scenarios, both the high-debt, low-growth scenario caused by Republican obstruction and the high-growth, low-debt scenario that would follow congressional passage of the Senate comprehensive immigration reform bill?

Mr. BERNANKE. To begin with, we haven't done any comparable analysis of the economic implications of immigration. I think, in general, a growing population, more talented people, all those things do help the economy grow. A younger population will also help us deal with our aging situation. To use a cliché, we are a Nation of immigrants.

All that being said, there are a lot of details in setting up a program in terms of how it should be monitored and managed and so on that I really think are the province of Congress. And I don't really want to try to set immigration policy. I really think that the details there have to be worked out in Congress.

Mr. FOSTER. I guess my question is, how do you deal with, when there are policy choices being made by Congress with fairly large macroeconomic effects, this in your forward planning?

Mr. BERNANKE. Generally, we take those decisions as given, and we try to figure out what the best thing we can do is given the economic environment we find ourselves in. So, with respect to fiscal policy and the restraint this year from fiscal policy, we sort of take that as given, again, and try to figure out how much monetary accommodation is therefore needed.

And, with respect to immigration, I think these are much longer-term propositions; these are gains and losses over many years. And the Fed, because it focuses mostly on short-term cyclical movements in the economy, our focus is typically not 10 or 20 years but, rather, the next few years.

Mr. FOSTER. Okay.

I would like to follow up on Representative Royce's questions about the countercyclical element in Federal housing policies, which are present, as he pointed out, not only in the Republican PATH Act proposal but also in the Democratic principles for housing market reform.

There was also a recent front-page article in *The Wall Street Journal* that was entitled, "Central Bankers Hone Tools to Pop Bubbles." Had you seen that?

Mr. BERNANKE. "Central Bankers—

Mr. FOSTER. "Hone Tools to Pop Bubbles." It discussed the efforts in various countries to implement countercyclical housing policies.

Mr. BERNANKE. Yes.

Mr. FOSTER. So you have seen that. The American Enterprise Institute is also hosting a 2-day workshop on this subject at the end of this month.

So my question is, do you believe that regulators have today the tools necessary, as well as the collective will, to address the development of potential asset bubbles, such as the housing bubble from which we are still recovering?

Mr. BERNANKE. We have some tools. For example, Basel III included a countercyclical capital requirement. In other words, if we see the economy growing too fast with too much credit being extended, we could raise capital requirements.

I think it makes a big difference that the CFPB and other agencies have done a lot to eliminate the worst kinds of mortgage abuses that were very important in the housing boom. The Federal Reserve has recently issued some guidance to banks on leveraged lending and other kinds of practices that could contribute to asset bubbles.

All that being said, we want to make the financial system as fair and transparent as possible, but I don't think we can guarantee that we can prevent any bubble.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from Indiana, Mr. Stutzman.

Mr. STUTZMAN. Thank you, Mr. Chairman.

Thank you, Chairman Bernanke, for being here today.

And I really want to thank you for your comments earlier about what Congress should be focused on, and that is the long-term liabilities to our country. I do believe that if we would address those issues, the trajectory of our economy would change, instead of being focused on such a near-term rhetoric and the effects to the economy by short-term policies. So I appreciate what you mentioned earlier.

I want to talk a little bit about employment. For the entire U.S. workforce, employers have added far more part-time employees in 2013, averaging 93,000 a month, seasonally adjusted, than full-time workers, which have averaged 22,000. Last year, the reverse was true, with employers adding 31,000 part-time workers monthly compared with 171,000 full-time ones.

Earlier in June, I, along with other colleagues from Indiana, wrote HHS Secretary Kathleen Sebelius and Treasury Secretary Jack Lew to find out whether or not they had forecasted the impact of the Affordable Care Act on part-time workers who are currently just above the 30-hour threshold.

Does this shift of a lot of workers, many workers, from the full-time category to part-time status at all affect your statutory mandate to reach full employment?

Mr. BERNANKE. I think it does. As I mentioned in my testimony, there are a number of problems with the labor market. Unemployment is one problem, but long-term unemployment and underemployment—and by “underemployment,” I mean people who are either working fewer hours than they would like or possibly are working at jobs well below their skill level—are also indicative of a weak labor market. And a stronger economy will help, I think, in all those dimensions.

So, yes, that is part of our concern. And as we look at the unemployment rate and try to determine what it means for the labor market, we look at these other indicators as well.

Mr. STUTZMAN. You mentioned earlier that the taxes at the beginning of the year were affecting the economy. You mentioned something else, that I can't recall.



Mr. BERNANKE. There were spending cuts from before, and then there were tax increases and then sequestration.

Mr. STUTZMAN. That is right, sequestration and the tax increases. Do you believe that the Affordable Care Act is dragging the economy or slowing the economy down at all with the transition that we are currently going through and the effort of implementation?

Mr. BERNANKE. It is very hard to make any judgment. One thing that we hear in the commentary we get at the FOMC is that some employers are hiring part-time in order to avoid the mandate there. So, we have heard that.

But, on the other hand, a couple of observations: one, the very high level of part-time employment has been around since the beginning of the recovery, and we don't fully understand it; two, those data come from the household survey, and they are a little bit inconsistent with some of the data from the firm survey, which suggests that work weeks haven't really declined very much.

So I would say at this point that we are withholding judgment on that question.

Mr. STUTZMAN. Do you think that a delay in the mandates would be appropriate?

Mr. BERNANKE. That is beyond my pay grade. It would depend on questions of how much time is needed to fully implement the bill.

Mr. STUTZMAN. Okay. Thank you.

With about a minute left, I would like to touch on some of the global economic concerns and other countries beginning a trend of currency devaluation in fear of currency wars that might follow. Could you comment on that at all?

Mr. BERNANKE. As I mentioned in an earlier answer, the international community makes a distinction between attempts to manipulate an individual exchange rate in order to gain an unfair advantage in export markets versus using monetary or fiscal policy to achieve domestic objectives that may have the side effect of weakening the currency.

So this was the example with Japan. Japan has taken policy actions that have weakened the yen, but that wasn't the focus of those actions. Their actions were intended to break the deflation which they faced for the last 15 years or so to get their economy growing more quickly and to get back to a 2 percent or so inflation objective.

If they are successful, there may be some exchange rate effects, as the earlier question raised, but there also will be the benefit that a stronger Japanese economy and a stronger Asian economy will increase world growth and be a benefit to the United States, as well.

So those are the distinctions between those different types of management of the currency.

Mr. STUTZMAN. Okay. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chair recognizes the gentleman from Florida, Mr. Murphy. Mr. MURPHY. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, as well. I want to echo what has been said already in thanking you for your service to our country.

Mr. BERNANKE. Thank you.

Mr. MURPHY. There has been a lot of talk already in the committee about the talk of tapering in the last several weeks. And the Board of Governors has come out and tried to clarify some of those comments. It has been turmoil somewhat on Wall Street, these ups and downs. And this isn't a knock on Wall Street, but my concern is really Main Street.

What we have seen in the last—I guess since May—is a 40 percent increase in interest rates on mortgage rates. What do you think we should be doing? What can you do? And what do you think is the effect of this pretty sudden and sharp rise in interest rates?

Mr. BERNANKE. First of all, we are going to continue to communicate our policy intentions and to make clear that, notwithstanding how the mix of policy tools change, we intend to maintain a highly accommodative monetary policy for the foreseeable future. I think that message is beginning to get through, and I think that will be helpful.

More generally, we will be watching to see if the movement in mortgage rates has any material effect on housing. The main thing is to see housing continue to grow, more jobs in construction and the like. And as we have said, if we think that mortgage rate increases are threatening that progress, then we would have to take additional action in the monetary sphere to try to address that.

Of course, there is always hope for Congress to look at problems that remain in the housing market in terms of people underwater, in terms of refinancing of underwater mortgages, and other kinds of issues that Congress could examine. But we are going to be looking at it from the perspective of whether or not the housing recovery is continuing to a degree sufficient to provide the necessary support for the overall economic recovery.

Mr. MURPHY. Thank you.

My background is as a CPA. I worked at Deloitte for a while, dealing with Sarbanes-Oxley, and as an auditor. So I am not one to say we need more or less regulation, necessarily, but that we need smarter regulation.

And, certainly, being here now, trying to understand all the different regulators, and dealing with a lot of the institutions in my district, especially the small and medium-sized banks, what are you doing to work with all the different regulators to try to streamline and make it easier for these small institutions?

Mr. BERNANKE. One of the vehicles that we have is an organization called the FFIEC, which is basically the place where the banking regulators gather and talk to each other about policy and regulatory decisions. And the FFIEC has a regular committee which is focused on small community banks and trying to find ways to reduce the burden of regulation and to find ways to make it easier for them to deal with the regulations that do bear on smaller banks.

As far as the Fed itself is concerned, I mentioned earlier that we have an advisory council of community institutions, we have a spe-

cial subcommittee that looks at the effects of our regulations on smaller institutions. We have had meetings around the country, outreach, special training sessions for examiners and the like.

So we do take that very seriously, recognizing that there is a heavy regulatory burden on community banks, and we want to do everything we can to mitigate that.

And I would just perhaps add that Congress probably has a role here, too, since some of the things that community banks have to deal with come from the statute and not the regulation.

Mr. MURPHY. Thank you. I agree with that.

So this kind of leads to my next question about the systemic importance of banks and determining if the balance sheet is the best place we should be drawing this line. And if not, do you have any other thoughts on that? And what would the difference be in a bank with \$55 billion versus say \$45 billion, as far as systemic risk to our economy?

Mr. BERNANKE. As I have mentioned, Dodd-Frank tells us to do this in a graduated way, to have capital requirements and supervisory requirements become tougher as the size and complexity and systemic importance of the bank increases. And so there are obviously going to be certain dividing lines to try to separate banks into these different categories.

But even within the categories, we are trying to distinguish between the smaller banks in that category and the larger banks in that category. And as I said earlier to a questioner on the other side of the aisle, to the extent that the rules don't provide sufficient smoothness in how they vary by type of bank, we have plenty of capacity to go back and look at them.

But the basic idea is that the very largest internationally active banks should bear the hardest burden of regulation.

Mr. MURPHY. Thank you, Mr. Chairman.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from South Carolina, Mr. Mulvaney.

Mr. MULVANEY. Thank you.

Chairman Bernanke, I want to begin by going back to some of the questions that Chairman Hensarling began with at the very outset of the hearing regarding whether or not the markets were addicted to easy money.

And I have a graph that I think you have in front of you, that we would like to put up on the screen. It simply shows the correlation between the size of your balance sheet and the performance of the S&P over the course of the last 4 or 5 years. And as you can see, there is a strong argument that the two things tend to move together.

So my question to you is fairly simple: What can you say to convince us and to convince the markets that you will be able to return the balance sheet to its normal size, as I think your internal study says you want to do by 2018, 2019, Mrs. Yellen says by 2025? Will you be able to do that without dragging the markets down at the same time, especially in light of what happened last month after your comments in the JEC?

Mr. BERNANKE. The main thing that supports the stock market or other markets is the underlying economy. I don't know what it

means to say that markets are addicted. I don't think that is really a technical term in finance. But the reason, I think, that markets have improved so much since 2009 is because Fed policy and other policies have succeeded in providing a stronger economy with low inflation.

Mr. MULVANEY. If the economy is growing at such a strong rate as to support some fairly dramatic increases in the stock markets that we have seen, then why are you continuing your easy-money policies?

Mr. BERNANKE. Profits are actually ahead of jobs. That is one of the problems. So we continue to provide easy money in order to get the job situation back to where we need it and also because inflation is below our target.

I think the kind of scenario you are worried about would be most likely to happen if the Fed withdrew easy monetary policies prematurely and the economy relapsed into weakness. Then, I think you would see asset prices come down.

Mr. MULVANEY. Are you satisfied that if you were called upon at some point in the future—and I am not trying to rattle any markets—to begin bringing the balance sheet back to normal size, and the markets reacted with fairly substantial reductions, you will have the staying power to keep that exit strategy despite the fact the markets are going down?

Mr. BERNANKE. I think the key is making sure that the markets, first of all, understand our plan, but, secondly, that we have done enough that the economy is growing on its own. If the economy is growing on its own, it won't need the Fed's help and support. And then the markets, I think, will be just fine.

Mr. MULVANEY. Thank you, sir.

I want to talk about something else that is a little off the beaten track. You and I have talked about it before; you mentioned it when you were here earlier this year. I am talking about remittances to the Fed.

Mrs. Yellen mentioned it in a speech she gave at about the same time. And I think your written testimony at the time said they could be quite low for a time in some scenarios, particularly if interest rates were to rise quickly. Mrs. Yellen was a little stronger when she spoke to the NABE and said remittances could cease entirely for some period.

You have an internal study conducted by Mr. Carpenter and others in January of this year which indicates that having the Fed generate combined earnings insufficient to cover its operating costs, dividends, and paid-in capital isn't that much of a problem, as the Fed can simply carry it on your balance sheet as a deferred asset. But it goes on to say that whenever you have done that in the past, when the Fed has done that in the past, it has been for a very short period of time and that we have never seen a period where the Fed is not able to make these remittances over a fairly long period of time.

Given the fact that you have an extraordinarily large balance sheet, we have gone through this, what I think you called unprecedented expansion of the balance sheet, and given the fact that you stand to lose a tremendous amount of money in a higher-interest-rate environment—I think we had a witness here testify that a

100-basis-point interest-rate rise in a short period of time could generate losses to the Fed of in excess of hundreds of billions of dollars.

If we end up in an environment where remittances from the Fed go on for an extended period of time, how would that impact the Fed's operation and especially its independence?

Mr. BERNANKE. It won't affect our ability to do monetary policy. Independence is up to Congress.

In terms of the fiscal impact, we have done many simulations. There may be a period of regular remittances, but we have already had a period of very high remittances, almost \$300 billion in the last 4 years.

Mr. MULVANEY. Which you have already remitted, though. Where does the money come from? If your combined earnings don't generate enough to cover your operating expenses, your paid-in capital, and whatever else you need to pay for, where does the money come from to operate the Federal Reserve?

Mr. BERNANKE. From the balance sheet. We have all the resources we need to do that.

Mr. MULVANEY. But if you have tremendous losses on your balance sheet because of higher interest rates, you are paying a lot higher interest to the banks that keep their excess reserves and you are negative cash, where does the money come from?

Mr. BERNANKE. It comes from the income from our assets. It is just that, from an accounting perspective, we don't have to recognize those losses unless we sell them.

Mr. MULVANEY. Is there ever a circumstance where you go to your shareholders for a capital call?

Mr. BERNANKE. No.

Mr. MULVANEY. And I guess that is the end of my time. Thank you, Mr. Chairman.

Chairman HENSARLING. It is the end of the gentleman's time, although I wish we could carry it out a little further.

The gentlemen from Maryland, Mr. Delaney, is now recognized.

Mr. DELANEY. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for your incomparable service to our country over the last several years of your tenure.

My first question—I have several questions; I will try to ask them quickly, and I think they have relatively short answers—is, there has obviously been recent volatility in the bond markets, an uptick in rates over the last several months based on a variety of factors, and it seems to me that the economy has actually handled that pretty well. Would you agree with that assessment?

Mr. BERNANKE. I think it is a little early to say so far. But as I said in my remarks, I think we need to monitor particularly the housing market to see if there is any impact from higher mortgage rates.

Mr. DELANEY. You get a lot of very current micro data. Have you seen any data to suggest that this uptick in rates has had a negative effect on what appears to be a reasonably good housing recovery? I know, again, I understand, it is very early.

Mr. BERNANKE. No, I haven't seen anything that points strongly to any particular problem, but again, it is very early.

Mr. DELANEY. Is there any kind of second-half economic data coming out that would lead you to conclude that your original views about the economy for the second half of the year, particularly as it relates to your ability to begin to taper, has changed your views?

Mr. BERNANKE. I am sorry, is there any information—

Mr. DELANEY. Is there any new kind of second-half economic data which causes you to think differently about the economy from what you did a month ago?

Mr. BERNANKE. No. Our general, broad outline is that we expect the economy to pick up probably later this year. The exact timing depends on the impact of the fiscal restraint. We should see continued improvement in the labor market, unemployment continuing to fall, and inflation moving back up toward 2 percent.

That general scenario still seems to be correct. But it has not yet, obviously, been confirmed by the data. That is what we need to see.

Mr. DELANEY. And this notion of a highly accommodative monetary policy, I assume you can taper in the context of that position, that doesn't imply that you can't begin to taper your purchases.

Mr. BERNANKE. As I described in my testimony, we think of the two tools we have as having different roles. So the purpose of the asset purchases was to achieve more near-term momentum, to achieve a substantial improvement in the outlook for the labor market. We are making progress on that objective.

But the traditional, most reliable, most powerful tool that the Fed has is short-term interest rates. And using low short-term interest rates and guidance about those rates is going to provide us, ultimately, with sufficient monetary policy accommodation to achieve what we are trying to get to.

Mr. DELANEY. That sounds like you are maintaining the posture you think is important for the economy using short-term interest rates. In that context, you should have the flexibility to potentially taper consistent with what you had wanted to do.

Mr. BERNANKE. If the economy does more or less what I described. But as I also emphasized, that is contingent. And if the economy is stronger, we can moderate faster. If it is weaker, we can moderate more slowly.

Mr. DELANEY. And you don't have any data that the economy has softened or housing has softened based on this interest-rate volatility that we have seen?

Mr. BERNANKE. It is just really too early. We have had some strong data in some areas. This morning, we had a housing report that was a little bit weaker. But again, I think given the amount of noise in every piece of data, I don't think it is appropriate to take too strong a signal from that.

Mr. DELANEY. Switching gears a little bit to banks and their portfolios, which is obviously part of the responsibility of the Federal Reserve, how concerned are you about interest-rate risk that may be accumulating on the balance sheets of the regulated financial institutions based on the interest-rate environment we have been in and some of the asset shortages, if you will, or—it has been hard for banks to originate assets. How concerned are you that they are building up reasonably significant interest-rate risks in their business?

Mr. BERNANKE. We have been looking at that as regulators, and we are reasonably comfortable that banks are managing their interest-rate risk appropriately.

Note that from the banks' perspective, even as higher interest rates reduce the value of some of their securities that they hold, higher interest rates also potentially improve their net interest margins and their profitability. So as interest rates have gone up, we have actually seen some bank stocks go up, rather than down.

Mr. DELANEY. Great.

Thank you again for your service.

Chairman HENSARLING. The time of the gentleman has expired. The Chair now recognizes the gentleman from Illinois, Mr. Hultgren.

Mr. HULTGREN. Thank you, Chairman Hensarling.

And thank you, Chairman Bernanke. I very much appreciate your time today.

If I may, I would like to highlight a Crain's article from earlier this year that discussed the rash of bank closings and consolidations in and around Chicago. Certainly, there are many causes, but the article uses Hyde Park Bank, which is from President Obama's home neighborhood, to discuss one contributing cause. They talk about how the near-zero interest rates, which were set by the Fed, make it nearly impossible for banks to invest safely and earn a decent yield.

I wonder, for communities banks that rely on net interest margin, how do you justify the Fed policy? And is the Fed using the tool to help one section of the economy while hurting another?

Mr. BERNANKE. First, I think that is not accurate. Net interest margins have come down a little but not all that much. And profitability in banks in the last few years has been generally quite good.

Moreover, low interest rates, what is the purpose of low interest rates? The purpose is to give us a stronger economy. And a stronger economy means better asset quality, it means more lending opportunities. So what low interest rates take away they give on the other hand by giving a better economic environment for banks to operate in.

Mr. HULTGREN. Theoretically, maybe that is true. I just don't hear that from my community banks. They are struggling, partially under the regulation I think, the regulatory burden that they are feeling, but also feeling because of an interest-rate crunch, is really how they are expressing it to me.

Let me switch gears. Quickly, you have been outspoken on the negative effects of Section 716 of Dodd-Frank, the swap push-out/spin-off provision. As some of my colleagues on the committee have reversed their position from last year, I wonder if you could quickly restate why Section 716 could have a negative effect on end users and systemic soundness.

Mr. BERNANKE. It creates additional costs, essentially, because it moves out certain kinds of instruments from the banks, makes it more difficult for banks to offer a range of services to their customers, and puts U.S. banks at a potential cost disadvantage to international competitors.

Mr. HULTGREN. So you would still be supportive of changing this provision in Section 716?

Mr. BERNANKE. We have some concerns with that provision. Of course, everything depends on what the alternative is and how the Congress makes those changes.

Mr. HULTGREN. Let me switch again to something else. Mr. Chairman, as you know, Dodd-Frank requires the Fed to adopt procedures to implement the new limitations on the Section 13.3 authority, its 13.3 authority. It is now 3 years later, and the Fed still has not done so.

How do you justify the Fed's 3-year delay in implementing these basic restrictions on the Fed's authority to bail out nonbank firms?

Mr. BERNANKE. First of all, I think that the law is very clear about what we can and cannot do. And I don't think that the absence of a formal rule would allow us to do something which the law prohibits. And I mentioned earlier that the law prohibits us from bailing out individual firms using 13.3, and there would be no way we could do that.

We have made a lot of progress on that rule, and I anticipate we will have that out relatively soon.

Mr. HULTGREN. You think by the end of the year?

Mr. BERNANKE. I will check with staff, but I would hope so.

Mr. HULTGREN. Okay. That would be great.

Kind of following up on that, as well, I know there were some questions asked last time you were here—again, we always appreciate your willingness to come here and spend time with us. But I do know, hearing from some colleagues and from myself that some questions were submitted and we hadn't heard back from that. I know it has been about 4 months since you were here last time. So I am just asking again if maybe you could check on that, as well as letting us know from your staff when this final rule-making would be done.

Mr. BERNANKE. We will do that.

Mr. HULTGREN. One last thing that I will touch on—you know what? Actually, with 1 minute left, I am going to yield back, if Chairman Hensarling has any further questions.

You are okay?

Okay. Then, I am going to ask one more question, if I could. And getting back to banking rules as applied to insurance companies, it seems that the adoption of GAAP accounting for mutual insurance companies remains one of the Federal Reserve's top priorities. However, statutory accounting is considered superior to GAAP for purposes of ensuring the sound and prudential regulation of insurance companies.

Wouldn't applying SAP be a more prudent approach as the Fed develops capital rules for savings and loan holding companies that are predominantly in the business of insurance?

Mr. BERNANKE. We have a lot of issues still. We deferred the Basel rule for insurance, for savings and loan holding companies that have more than 25 percent insurance activity. So we are looking at a range of issues about how we can adapt the consolidated supervisory rules and the capital rules for insurance. And we recognize that there are some differences that we need to look at.

Chairman HENSARLING. The time of the gentleman has expired.

Mr. HULTGREN. Thank you, Mr. Chairman. I yield back.



Chairman HENSARLING. The Chair now recognizes the gentlelady from Ohio, Ms. Beatty.

Mrs. BEATTY. Thank you, Mr. Chairman, and Madam Ranking Member.

Chairman Bernanke, I certainly join my colleagues in thanking you for all the work that you have done. We started the questions today with a series of quotes or statements from you, so I would like to end it with one and thank you for it. And that is, "Our mission as set forth by the Congress is a critical one: to preserve price stability; to foster maximum sustainable growth in output and employment; and to promote a stable and efficient financial system that serves all Americans well and fairly."

My question will be centered around that last part of it, the efficient financial system that will serve "all Americans."

I know you have had a lot of questions related to the housing market. I want to thank you for opening your testimony and starting with housing, because I am a long-term housing advocate. And in reviewing your document this morning, the multiple pages on housing put in mind this question for you.

Will you speak to what impact maintaining an adequate supply of affordable housing options for first-time homeowners, as well as moderate-income buyers, has? And then, conversely, what will happen to the economy if we only promote a housing finance system where only the well-off who have the high credit scores, who have the double-digit dollars to put down, 10, 20 percent, what happens to our market there?

Because when you look at what I believe is more than \$10 trillion in economic value, the United States housing market certainly is inextricably linked to the performance of our Nation's economy.

Mr. BERNANKE. In this recovery, one of the credit areas which is not normalized is mortgage credit. And we have noted that people with lower credit scores and first-time home buyers are not able to get mortgage credit in many cases. And, of course, that is a problem for them, it is a problem for their communities, and it is a problem for the overall economy since we are looking for a stronger housing market as one of the engines to help the economy recover.

So there are many reasons why mortgage credit is still tight for those borrowers, but it is definitely a concern and something we are paying close attention to.

Mrs. BEATTY. And let me take this a step further, because so often—and, certainly, that is the answer we get. And I think America expects this Congress to advocate for those folks. Because as soon as you say "low-income" and "moderate-income," then someone has to stand up for them. But let's look at the flip side of this.

In your opinion, let's look at what it does to the market for credit unions and banks. Because housing is not only being able to purchase the house, but it deals with construction and jobs and employment. So what responsibility do you think those credit unions and banks have to play in this environment that we are in now?

Mr. BERNANKE. We encourage banks to lend to credit-worthy borrowers. We certainly enforce fair-lending laws. It is important that first-time home buyers be able to get credit in order to buy a home. It is important for our economy.

There are some issues still out there, as I mentioned, and I think regulators have to take responsibility for the fact that not all the rules for making mortgage loans are finished and out there. We need more clarity on those things.

There is still a lot of concern among banks about so-called “put-back risk,” the notion that the GSEs will put back any mortgage that goes bad if there is anything, any technical flaw wrong with it. That makes the banks less likely to lend.

So there are a lot of things to work on to get the mortgage market in better shape. And we are approaching this both from the monetary policy point of view, which is trying to keep mortgage rates low so that housing is of affordable, but also as regulators and working with other regulators to try to solve some of the problems that still exist in extending mortgage credit.

Mrs. BEATTY. Thank you.

Chairman HENSARLING. The gentlelady yields back.

The Chair now recognizes the gentleman from Florida, Mr. Ross. Mr. ROSS. Thank you, Chairman Hensarling.

Chairman Bernanke, I wish to begin by addressing one of your earlier comments in your opening statement, when you said that the debate concerning other fiscal policy issues, such as the status of the debt ceiling, will evolve in a way that could hamper the recovery.

My concern with that is, I believe that at \$17 trillion and counting in debt, as we see on our national debt clock up there, when 6 percent of our Federal budget is used to pay interest payments alone on national debt, I firmly believe that our sovereign debt should not go unpaid, but there is a tremendous difference between borrowing money to pay for an IRS “Star Trek” video and paying our sovereign debt.

You see, I believe that it is disingenuous to say that the debate on the debt ceiling or the debt limit for this country will adversely impact us, when, in fact, 2 years ago, the credit-rating agencies came to us and said that if we don’t have in place a systemic, long-term path to reduce and address our debt, that we are going to be downgraded in our ratings. It wasn’t so much the debate on the debt that we had; it was the fact that we failed to take action to reduce in a systemic fashion, in a long-term fashion, our debt.

Out of the debt-ceiling debates that we have had in the past, we have come out with things such as Pay-As-You-Go, the Gramm-Rudman Act. There have been good things to help us with that. So I think it is important that we acknowledge that having a healthy debate on the debt ceiling is prudent and responsible.

With that, I also want to address the second part of your opening statement, when you addressed the important nonbank financial institutions, specifically the implementation of the Collins amendment.

My concern with that—and going back to last week when Fed Governor Tarullo testified before the Senate Banking Committee, he told Senator Johnson that, in regard to postponing and delaying the rules, as you have testified before, on Basel III, on nonbank financial institutions—however, he said, “That is to say that the Collins amendment does require that generally applicable capital re-

quirements be applied to all of the holding companies we supervise.”

I look at the Collins amendment, and what concerns me is that I am afraid your hands may be tied, in that we have two different types of financial institutions here. We have the short-term funding and the banks, and we have the long-term—and insurance companies, and yet we are going to give risk-based capital requirements, expanded requirements, based on generally accepted accounting principles, which don’t apply to insurance companies, we are going to increase the cost of insurance. And I come from Florida, a State where insurance is very important. And, more importantly, this is probably going to result in a conflict between the McCarran-Ferguson Act and the implementation of a Basel III capital requirement for insurance companies.

How do you feel that we can resolve that? Can we resolve that?

Mr. BERNANKE. So, quickly, on the debt limit, I wasn’t trying to make a policy recommendation other than to say that, the last time around, we did get a pretty big shock to consumer sentiment, and it was harmful to the economy. So I just hope that whatever is done, it is done in a way that is confidence-inspiring.

On insurance companies, we are going to do our best to tailor our consolidated supervision to insurance companies. But I agree with you that the Collins amendment does put some tough restrictions that—

Mr. ROSS. Would you agree that we would have to legislate in order to give you—in other words—

Mr. BERNANKE. Yes.

Mr. ROSS. Thank you. Because I think that where we are at and one of the reasons for the delay is that you can’t put the capital requirements for banks as the minimum-level capital requirements for insurance companies.

As was pointed out yesterday in a Wall Street Journal opinion article, you are going to see that the insurance companies are now going to be held to a higher capital standard, do more short-term debt. And now, all of a sudden, they may enter the banking business, which is going to be counterproductive to where we want to go with the correction that we are trying to do.

So my question to you, I guess, as a result is, if we impose the bank-centric capital requirements on insurance companies, would that have done anything to have saved AIG from its financial collapse of 5 years ago?

Mr. BERNANKE. There were a lot of things that AIG was doing that it couldn’t do now. Let me just put it that way.

Mr. ROSS. Right.

Mr. BERNANKE. On the Collins amendment, it does make it more difficult for us, because it imposes, as you say, bank-style capital requirements on insurance companies. There are some things we can do, but it is providing some—

Mr. ROSS. Would it be safe to say, in my last 20 seconds, that the future is not too bright for the nonbank financial institutions in terms of having any reduction in their capital requirements?

Mr. BERNANKE. There are some assets that insurance companies hold that we can differentially weight, for example. There are some

things we can do. But, again, I think this does pose some difficulty for our oversight.

Mr. ROSS. Thank you. And thank you again for your service.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentleman from Washington, Mr. Heck.

Mr. HECK. Thank you, sir.

Mr. Chairman, given all the eulogies that have been delivered here today, at least on the Democratic side, I feel a little bit like Bette Midler, the very last guest on the very last episode of "The Tonight Show" that Johnny Carson hosted. She famously quipped to Mr. Carson, "You are the wind beneath my wings." There is some application to you, sir, as it relates to the economy. And I thank you for your service, as well.

Mr. BERNANKE. Thank you.

Mr. HECK. I also thank Mr. Ross for brilliantly anticipating where it is I wanted to go. I have to admit that, every day that goes by, I am increasingly less optimistic that I am a Member of an institution that can successfully deal with the debt limit. Sadly, I must admit that.

I am wondering if failure by Congress to deal with it was one of the "unanticipated shocks" that you suggested our economy might be vulnerable to and, whether it is or not, what you would suggest about what the economic consequence would be if Congress does, in fact, fail to lift the debt limit later this early fall.

Mr. BERNANKE. I think it would be quite disruptive.

It is important to understand that passing the extension of the debt limit is not approving new spending. What it is doing is approving payment for spending already incurred. So it would be very concerning for financial markets and, I think, for the general public if the United States didn't pay its bills. So I hope very much that particular issue can be resolved smoothly.

I am not claiming in any way that it is not important to discuss these critical fiscal issues. It is. But to raise the prospect that the government won't pay its bills, including not just its interest on debt but even what it owes to seniors or to veterans or to contractors, is very concerning. And I think it could provide some shock to the economy if it got severely out of hand.

Mr. HECK. Is there a material possibility that the shock would be so great as to be recession-inducing?

Mr. BERNANKE. Depending on how it plays out, I think, in particular, that a default by the U.S. Government would be extremely disruptive, yes.

Mr. HECK. Secondly, and lastly, over the last couple of years the Fed has begun targeting interest rates on mortgages, in addition to your historic focus on baseline interest rate. Has the Fed considered, is the Fed considering, would the Fed consider implementing monetary policy through other credit channels either to minimize the possibility of an asset bubble or to target job creation, should we not see continued progress toward that lower unemployment rate that is desired by so many?

Mr. BERNANKE. The Federal Reserve actually is quite limited in what we can buy. We can basically buy Treasuries and government-guaranteed agency securities—that is, MBS. We are not allowed to

buy corporate debt or other kinds of debt. So we don't really have the tools to address other types of credit.

Mr. HECK. Setting aside for the moment that, if we fast-rewound "X" number of years, some people would probably have said the same thing about the activity you are exactly engaged in today, it was you, sir, who 11 years ago in a speech indicated that there might be other monetary policy options available to the Fed.

It just does not seem to me to be much of anything other than a fairly easily adapted technical fix to allow you, for example, to engage in credit channels that, for example, back infrastructure. Infrastructure is something which, of course, is the gift that keeps on giving. But I don't see a legal impediment to you being able to venture into that area, as some would conclude you might have hinted back in 2002 before you were Chair and some might have suggested is a direct parallel to what you are doing today.

Mr. BERNANKE. I will put you in touch with our General Counsel. I don't think that is within our legal authorities.

Mr. HECK. You would rule that out altogether?

Mr. BERNANKE. I don't see what the legal authority is to do that.

Mr. HECK. Then I would like to have a conversation with your General Counsel.

Mr. BERNANKE. Okay. We will give you his number.

Mr. HECK. And in the meantime, in 5 seconds, thank you, sir, very much.

Mr. BERNANKE. Thank you.

Chairman HENSARLING. The time of the gentleman has now expired.

The Chair recognizes the gentleman from North Carolina, Mr. Pittenger.

Mr. PITTENGER. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke.

In response to an earlier question by Mr. Stivers regarding whether the Fed would be willing to conduct the same type of stress tests of its quantitative easing exit strategy that it has subjected financial institutions to, you stated that under a reasonable interest-rate scenario you would not expect any significant disruptions from the Fed's withdrawal of monetary stimulus.

But the whole point of the stress test is to position an extremely adverse scenario, akin, say, to the inflation levels last seen in the late 1970s and early 1980s, not a reasonable interest-rate environment.

Mr. Bernanke, has the Fed stress-tested its strategy according to that more extreme scenario?

Mr. BERNANKE. Again, this is not about our strategy; this is about our remittances to the Treasury. And when we do very tough interest-rate tests—and again, there are a number of them that have been published and are publicly available—what we see is, first, that even though there may be a period where remittances to the Treasury are low or zero, that over the 15-year period from 2009 to 2023, the total remittances generally are higher than they would have been in the case where there were no asset purchases. But I think you need to look beyond that, which is that to the extent that our asset purchases are strengthening the overall economy, that is very beneficial to the Treasury because of higher tax

collections. And so I think most scholars who have looked at this conclude that the asset purchases are a winner for the taxpayer under almost all scenarios.

Mr. PITTENGER. Are you concerned by the perception, though, that the Fed will stress test the banks and other financial institutions but not review its own policies and strategies by the same rules?

Mr. BERNANKE. It is not comparable. The banks have credit risk. We have no credit risk. We buy only Treasuries and government-guaranteed MBS. So in a recession, we make money, because interest rates go down.

Mr. PITTENGER. Chairman Hensarling has shown up on the board the running debt clocks. Of concern to you, you have already expressed earlier, my friend for 20 years, Erskine Bowles, has run around the country, he and Alan Simpson were here last week, they rang the bell on the concerns relating to the debt. I want to get your thoughts on the policies that the Fed could lead to this compounding problem when it comes to the interest payments on the debt. Do you believe that when interest rates rise over the coming years, and the spending trajectory we are on towards the close of the decade, that the interest rates, along with annual deficits, could push America's debt to unsustainable levels, perhaps close to what we are seeing across Europe? That is really the thought that Erskine left with many of us. He said, "I used to say this is for my grandchildren. Then I would say it is for my kids. Now I would say it is for me." And the urgency seems to be gone. President Obama has never mentioned it in the State of the Union, in his inauguration. It is the big elephant in the room that for some reason hasn't been there in terms of the focal point, and yet the interest rate, the interest requirements are going to be compounded this entire issue. How would you like to address that as we look ahead and foresee the outcomes that might achieve the same results that they have had in Europe?

Mr. BERNANKE. The CBO and the OMB, when they do the deficit projections, they assume that interest rates are going to rise. And if the economy recovers, interest rates should rise. That is part of a healthy recovery. So that is taken into account in their analysis.

What their analysis finds is that, for the next 5 years or so, the debt-to-GDP ratio is fairly stable. But getting past into the next decade, then we start to see big imbalances arising mostly from long-term entitlement programs and a variety of other things, including interest payments.

And so, as I have said on numerous occasions, I am all in favor of fiscal responsibility, but I think that in focusing only on the very near term and not the long term, you are sort of looking for the quarter where the lamppost is rather than looking for it where the quarter actually is. So that is my general view, that you should be looking at the longer-term fiscal situation.

Mr. PITTENGER. Straightening pictures while the house is burning down. Thank you, Mr. Chairman.

Chairman HENSARLING. The time of the gentleman is yielded back.

The Chair now recognizes the gentleman from Michigan, Mr. Kil-dee.

Mr. KILDEE. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke. I will just echo what many have said before. We certainly appreciate the great service that you have provided to this country.

When you were here back in February, I was a mere freshman with 6 weeks' experience in Congress, and now I am a seasoned Member of Congress with almost 7 months. So I want to follow up on a line of questioning that I will take a minute or 2 to pursue. And I may not take my full 5 minutes; I may leave some time for others.

But in your prepared remarks, you make some pretty important references. I think one of many that got my attention was the reference to improved financial positions of State and local governments. And while I think we all would acknowledge that is generally the case, I want to return to what will likely be my theme here for a long time, which is that there is great unevenness or inequity in the condition of municipal governments—State governments for sure, but municipal governments certainly.

So I ask if you would mind perhaps commenting further. And, actually, in anticipation of not having time, I prepared a letter for you that I would like to submit and ask for your response.

But if you think about it in the context of your dual mandate, the potential impact on regional economies and employment as an extension of what seems nearly certain to be severe financial stress for cities like Detroit—which, in many ways, is sort of a placeholder for what is a much bigger problem, and that is the disconnect between the presence of wealth and economic activity in America's legacy cities, older industrial cities, and the obligations that those cities have to sustainable regions.

And so, sort of following on Mr. Heck's—although maybe not quite as far as Mr. Heck's comment regarding the reach of the Federal Reserve, I would ask if you would think about how you would advise Congress or how the Fed itself might pursue policy that would have the effect of potentially avoiding but certainly mitigating the economic effect of municipal financial failure.

The one that always comes to mind first is the potential for municipal bond default, which could affect not only the creditworthiness of the municipality but obviously could have implications for State governments, since virtually all municipalities are creatures of State government, but, as importantly, the effect on the economic health of particular regions.

I say this because, as I said back in February, I think this potentially is an institutional failure that is regionalized or localized but, for those places, is every bit as much and, I would argue, even more a threat than what we have seen with the financial distress that we faced back in the last half-decade and in the case of maybe the auto industry, what it faced. This is a serious pending crisis.

I would just ask for your comments. And I will submit my letter for further response.

Thank you.

Mr. BERNANKE. No. I agree that it is a very serious problem. If I am not mistaken, we have a Detroit City Manager on one of our local boards, and she has kept us informed about some of the projects that are being undertaken razing parts of the City and

working on economic development and the like. So it is a very serious problem.

I think as far as the Fed is concerned, there are two kinds of things we can do. First, obviously to solve the problem, you have to solve the underlying economic problem, and that means jobs, and that means economic growth, and our monetary policies are aimed at trying to achieve that. I think that is fundamental.

Beyond that, we do have community development experts at the Fed. They work with community development groups, CDFIs and others, to try to reestablish an economic base in places that have been hollowed out for various reasons. And I recently—a few years ago, I guess it was, I went to Detroit and talked to suppliers, auto suppliers who provide input to the big companies to try to understand their economy.

So I think that working through community groups, community organizations, CDFIs and the like to try to restore the economic base, that is the only long-run solution. You can provide help through the government in the short run, but unless the economy comes back, you don't really have a sustainable situation.

Mr. KILDEE. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chair recognizes the gentleman from Kentucky, Mr. Barr.

Mr. BARR. Thank you, Mr. Chairman.

Chairman Bernanke, thank you for your service and for your testimony here today.

I have listened to your testimony and I have an observation, then a couple of questions. The observation is this: The Fed has held interest rates near zero for 4 years now. The Fed's balance sheet has more than tripled to \$3.5 trillion and continues to grow. Today, you have testified that a highly accommodative policy will remain appropriate for the foreseeable future, and yet unemployment remains at 7.6 percent; 54 consecutive weeks of unemployment higher than 7½ percent; only 58 percent of the working-age population is employed; 5 straight years of declining wages; three-quarters of the American people are living paycheck to paycheck; and GDP growth remains well below the long-run average of 3 percent. All of this has happened coincident to a time when the role of government has grown dramatically as a percentage of our economy, higher taxes, stimulus spending, government bailouts, Obamacare, Dodd-Frank, skyrocketing compliance costs on financial institutions and crushing overregulation of the energy sector by the EPA.

Given these realities and the Fed's extraordinary expansionary monetary policy, struggling American families are asking the following very important question: What is the cause of weakness and persistent weakness in our labor market? Is it the relative ineffectiveness of the Fed's monetary policy, or is it the fiscal policies like higher taxes, Obamacare, Dodd-Frank and overregulation by the EPA?

My question is related to the exit strategy. During testimony in front of Congress last month, you refused to rule out tapering by the fall time period. The Federal Open Market Committee then released a statement that the Federal Reserve, "will continue its purchases of Treasury mortgage-backed securities and employ its other



policies as appropriate until the outlook for the labor market has improved substantially in the context of price stability.”

You have reiterated that today. These are hardly definitive statements about reducing the Fed’s unprecedented and aggressive bond purchase program, yet the average 30-year, fixed-rate mortgage, as we have discussed earlier today, jumped by 42 basis points, the Dow suffered back-to-back declines of more than 200 points, and billions of dollars were traded out of credit funds after you said last month that the Fed could start winding down bond buying later this year.

Given the sharp reaction of the credit markets to even the possibility of tapering, how will you prevent a catastrophic spike in interest rates when you actually do slow bond purchases?

Mr. BERNANKE. By communicating, by not surprising people, by letting them know what our plan is and how it relates to the economy. You talked about the weakness of the economy. I think that is evidence that we need to provide a continued accommodation, even if we begin to change over time the mix of tools that we use to provide that accommodation.

You said a lot of correct things about the weakness of our economy. I agree with a lot of what you said. On the other hand, it is the case that we have made some progress since 2009, and many people think of the United States as one of the bright spots in the world. We are doing better than a lot of other industrial countries. And while we are certainly not where we want to be, at least we are going in the right direction, and we hope to support that.

Mr. BARR. Given the persistent high unemployment, it seems to me that American families who are struggling, many of whom are in my district in eastern Kentucky, who continue to remain unemployed, persistently unemployed, and as you testified, the underemployment problem persists in this country, I think they justifiably have to ask themselves, given the expansionary policy that you have pursued quite aggressively, and to your credit, there has to be a fiscal policy problem here that has created this uncertainty.

Let me conclude by bringing to your attention a quote that a commentator recently had to say about Fed policy, and I would like your reaction to it: “If the economy begins to improve, and the Fed does not withdraw the tremendous reserves that it has created from the banking system, rampant inflation will follow. If it doesn’t withdraw reserves quickly, interest rates will rise rapidly. This situation makes economic calculations extremely difficult and makes businesses less willing to invest, especially for the long term. If business owners could fully trust the Fed, this would not be an issue, but we have all been burned too many times to trust the Fed.”

Can you respond to that?

Mr. BERNANKE. There have been people saying we are going to have hyperinflation any day now for quite a while, and inflation is 1 percent. We know how to exit; we know how to do it without inflation. Of course, there is always a chance of going too early or too late and not hitting the sweet spot. That happens all the time whenever monetary policy tightens. But we have all the tools we need to exit without any concern about inflation.

Mr. BARR. Thank you.

Chairman HENSARLING. The time of the gentleman has expired. The Chairman has graciously agreed to stay an extra 10 minutes, whether he knows it or not, notwithstanding the fact the problem was with our sound system. Without objection, I would like to recognize the remaining Members who are in the hearing room at this time for 2 minutes apiece.

The gentleman from Pennsylvania, Mr. Rothfus, is now recognized.

Mr. ROTHFUS. Thank you.

Chairman Bernanke, thank you for being here today. A simple question that I have is, when I have somebody in my district who is going to go out and buy a Treasury bill, that individual is looking to make an investment, they go to their bank, they go to their broker, they have \$1,000, \$5,000, and they get a bill. Where does the Fed get its money to buy its Treasury bills?

Mr. BERNANKE. When we buy securities from a private citizen, we create a deposit in the bank, their bank, and that shows up as reserves. So if you look at our balance sheet, our balance sheet balances, we have Treasury securities on the assets side. And liabilities side, we have either cash or reserves at banks, and that is what has been—on the margin, that is what has been building up is the excess reserves and—

Mr. ROTHFUS. You create the reserves?

Mr. BERNANKE. Yes.

Mr. ROTHFUS. And so, is that printing money?

Mr. BERNANKE. Not literally.

Mr. ROTHFUS. Not literally.

Mr. BERNANKE. No.

Mr. ROTHFUS. It is troubling me, when I look at the balance sheet that the Fed has, and I look at 4 years ago, it was \$800 billion, and now we are up to \$3.5 trillion. And I just—I know you say you are confident that you have the tools available to do a draw-down when necessary without risking hyperinflation, yet by your own admission, what you are doing is unprecedented. What assurance can you give to the American people that we are not going to have a round of rampant inflation 5 years down the road?

Mr. BERNANKE. It is not unprecedented, because many other central banks use similar tools to the ones that we plan to use.

Mr. ROTHFUS. Currently? Or can you look back in history and see—

Mr. BERNANKE. No.

Mr. ROTHFUS.—somebody that has brought up its balance sheet by 311 percent in 4 years without any kind of negative consequence?

Mr. BERNANKE. Absolutely. Japan, Europe, and the U.K. have all done similar kinds of things with very large balance sheets.

Mr. ROTHFUS. I appreciate your feedback on that, and we may reach out to you and get that information. Thank you.

Mr. BERNANKE. Sure.

Chairman HENSARLING. The Chair recognizes the gentleman from New Jersey, Mr. Garrett.

Mr. GARRETT. I thank the chairman.

I thank Chairman Bernanke for our back-and-forth, what we have had over the years. So in 2 minutes, let me just run through a couple of questions, if I may.

Right now with the balance sheet, as everyone has pointed out, at \$3 trillion, I guess you stand as the world's largest bond fund manager. We have seen recently, since early May, a 1 percentage point spike in long-term Treasurys, right? If the Fed were to mark to market, can you tell us what the change in value of that fund is?

Mr. BERNANKE. It takes us from an \$150 billion unrealized capital gain close to even.

Mr. GARRETT. One hundred fifty to eight hundred. Can you also then give us a rule of thumb going forward, because we have already heard progressions as to increases potentially today, tomorrow, or someday in the future as far as inflation. But if you do see further increases in that, maybe as a rule of thumb, illustrate the relationship between yields and the 10-year Treasury rates and the values of the bond fund. For example, what would the magnitude of losses be for every percentage point increase in long-term yields?

Mr. BERNANKE. I don't have a rule of thumb. I would refer you to the analyses that we published on this. It depends on the mix of maturities that we have and also the mix of Treasurys and MBS.

Mr. GARRETT. And do you compute that regularly to do—

Mr. BERNANKE. Yes.

Mr. GARRETT. —to do that?

Mr. BERNANKE. Yes. And we publish it.

Mr. GARRETT. And so if we see a 2 or 3 percent, then what would that result in?

Mr. BERNANKE. I don't have a number for you.

Mr. GARRETT. All right. And in 20 seconds, right now during the week of September 13th, Fannie Mae and Freddie Mac and Ginnie Mae have been originating around \$12.5 billion in debt. You have been purchasing around—or no, they have been generating about 11.4-. You have been purchasing around 12.5- in agency debt, which means a result of about 109 percent ratio there. Is there a problem there, and do you look at their originations going forward in your bond purchases?

Mr. BERNANKE. We are not seeing any problems in the MBS market, because we are not just buying new stuff, but old stuff as well.

Mr. GARRETT. Right. And I guess that is the point. Do you consider that when you do go forward or—

Chairman HENSARLING. Time—

Mr. GARRETT. Okay.

Chairman HENSARLING. The time of the gentleman has expired.

The Chair recognizes the gentlelady from Minnesota, Mrs. Bachmann.

Mrs. BACHMANN. Thank you, Mr. Chairman.

And thank you, Chairman Bernanke, for being here today.

I note that in the daily Treasury statement for July 12th, the Fed debt subject to the legal limit was \$16,699,000,000,000. It stood at exactly \$16,699,396,000,000 for 56 straight days, defying all forces of nature, when we were accumulating about \$4 billion a day in additional debt. And I note that just during part of the

questioning, we have added over \$400 million in debt, just in the time that you have talked to us today.

So how could this freak of nature occur that the U.S. Treasury would report for 56 straight days that the debt stayed at \$16,699,000,000,000? Has the Federal Government been cooking the books for these 56 days in a row, or what happened?

Mr. BERNANKE. That is not the Federal Reserve. You would have to ask the Secretary of the Treasury.

Mrs. BACHMANN. Could you comment on that?

Mr. BERNANKE. I don't know what the issue is. I would have to look at the numbers and what they refer to.

Mrs. BACHMANN. This was reported at CNS.com, but it is on the Treasury statement for July 12th. Were you aware of this—

Mr. BERNANKE. No.

Mrs. BACHMANN.—that the debt stayed, by some freak coincidence, at this level?

Mr. BERNANKE. Maybe it has to do with the use of unusual special measures to deal with the debt limit. There are various things they can do, to give some extra space. Maybe that is what is happening, so it is not being counted in the debt.

Ms. BACHMANN. That is what was reported in the news, that this is an extraordinary action, but to the common American citizen this clearly looks like the Federal Government is cooking the books.

Mr. BERNANKE. They are using—as you know, whenever the debt limit comes close, Treasury Departments under both parties have used a variety of different accounting devices to give some extra headroom, some extra space.

Mrs. BACHMANN. Have we exceeded our debt limit?

Mr. BERNANKE. I don't think so.

Mrs. BACHMANN. Thank you. I yield back.

Chairman HENSARLING. The time of the gentlelady has expired.

The last questioner will be the gentleman from New Mexico, Mr. Pearce. You are recognized.

Mr. PEARCE. Thank you, Mr. Chairman. You almost beat the clock. I appreciate you staying around.

As you remember, last time you were here I gave you an invitation to come to New Mexico and explain to seniors about your policy. And we have also talked a couple of times. The group is still gathering out there, we are trucking them in for lunches, so if you ever decide to come to New Mexico to have that meeting—

Mr. Perlmutter actually headed down this direction. You continue to take advantage of seniors because they don't have access to sophisticated instruments, so a lot of them have their money in cash or near cash equivalents.

Now, Mr. Perlmutter noted that the home financing has increased by from 3.3 to 4.5. We have a whole sheaf of Wall Street profit reports. Those are growing extraordinarily high. Did the seniors even get kind of a mention, an honorable mention, in the question about who is going to pay the bill for this? When are you going to start going up on the interest rate just a little bit? Because right now you are taking from seniors, and you are giving to Wall Street, basically. In my district we are, like, 43rd per capita income, \$14,000 to \$18,000 per year. Seniors live their life right. They paid off their bills, and they are being punished for this economy.

Mr. BERNANKE. Again, I don't think the Fed can get interest rates up very much, because the economy is weak, inflation rates are low. If we were to tighten policy, the economy would tank, and interest rates would be low.

Mr. PEARCE. These guys are making record rates. They just went up a percent and a half. Their costs are not going up.

One last question, as we run out of time. I was interested in the Republican obstructionism comments earlier. I am wondering why the Democrats didn't do anything from 2009 to 2010 on immigration. Considering the multipliers that came in 1986, they thought it was 1 million, they legalized 3.3 million—3.5 million, they brought 5- with them. That is 16 million. If we get that multiple, 150 million people could be here. Is there a number at which the economy is adversely affected?

Mr. BERNANKE. I don't know.

Mr. PEARCE. Thank you, sir. I will yield back.

Chairman HENSARLING. All time has expired.

I want to thank Chairman Bernanke again for his testimony today.

The Chair notes that some Members may have additional questions for this witness, which they may wish to submit in writing. Without objection, the hearing record will remain open for 5 legislative days for Members to submit written questions to this witness and to place his responses in the record. Also, without objection, Members will have 5 legislative days to submit extraneous materials to the Chair for inclusion in the record.

This hearing is now adjourned.

[Whereupon, at 1:15 p.m., the hearing was adjourned.]



# **A P P E N D I X**

July 17, 2013

**Statement of Rep. Melvin Watt**

**Full Committee Hearing on “Monetary Policy and the State of the Economy”**

**July 17, 2013**

Thank you Chairman Bernanke for appearing before this Committee again and for your leadership during tough economic times and I certainly join in the complimentary statements of the Chair and other Members. While increasing consumer confidence and other economic indicators suggest that we are making some progress, I'm pleased to see that the Fed has approached these indicators with caution. The unemployment rate in my District, which includes some of the most urban areas in the State, has increased to as high as 9.5%, significantly higher than the national rate and, unfortunately, I believe the actual unemployment rate is even higher because a number of my constituents have been unemployed for so long that they are no longer looking for work and because minorities (who predominate in my congressional district) are much at risk of being unemployed.

Mr. Chairman, I hope that you are able to shed some light on these dynamics during your remarks today and I look forward to hearing your testimony.



For release at 8:30 a.m. EDT  
July 17, 2013

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

July 17, 2013

Chairman Hensarling, Ranking Member Waters, and other members of the Committee, I am pleased to present the Federal Reserve's semiannual *Monetary Policy Report* to the Congress. I will discuss current economic conditions and the outlook and then turn to monetary policy. I'll finish with a short summary of our ongoing work on regulatory reform.

**The Economic Outlook**

The economic recovery has continued at a moderate pace in recent quarters despite the strong headwinds created by federal fiscal policy.

Housing has contributed significantly to recent gains in economic activity. Home sales, house prices, and residential construction have moved up over the past year, supported by low mortgage rates and improved confidence in both the housing market and the economy. Rising housing construction and home sales are adding to job growth, and substantial increases in home prices are bolstering household finances and consumer spending while reducing the number of homeowners with underwater mortgages. Housing activity and prices seem likely to continue to recover, notwithstanding the recent increases in mortgage rates, but it will be important to monitor developments in this sector carefully.

Conditions in the labor market are improving gradually. The unemployment rate stood at 7.6 percent in June, about a half percentage point lower than in the months before the Federal Open Market Committee (FOMC) initiated its current asset purchase program in September. Nonfarm payroll employment has increased by an average of about 200,000 jobs per month so far this year. Despite these gains, the jobs situation is far from satisfactory, as the unemployment rate remains well above its longer-run normal level, and rates of underemployment and long-term unemployment are still much too high.

Meanwhile, consumer price inflation has been running below the Committee's longer-run objective of 2 percent. The price index for personal consumption expenditures rose only 1 percent over the year ending in May. This softness reflects in part some factors that are likely to be transitory. Moreover, measures of longer-term inflation expectations have generally remained stable, which should help move inflation back up toward 2 percent. However, the Committee is certainly aware that very low inflation poses risks to economic performance--for example, by raising the real cost of capital investment--and increases the risk of outright deflation. Consequently, we will monitor this situation closely as well, and we will act as needed to ensure that inflation moves back toward our 2 percent objective over time.

At the June FOMC meeting, my colleagues and I projected that economic growth would pick up in coming quarters, resulting in gradual progress toward the levels of unemployment and inflation consistent with the Federal Reserve's statutory mandate to foster maximum employment and price stability. Specifically, most participants saw real GDP growth beginning to step up during the second half of this year, eventually reaching a pace between 2.9 and 3.6 percent in 2015. They projected the unemployment rate to decline to between 5.8 and 6.2 percent by the final quarter of 2015. And they saw inflation gradually increasing toward the Committee's 2 percent objective.<sup>1</sup>

The pickup in economic growth projected by most Committee participants partly reflects their view that federal fiscal policy will exert somewhat less drag over time, as the effects of the tax increases and the spending sequestration diminish. The Committee also believes that risks to the economy have diminished since the fall, reflecting some easing of financial stresses in Europe, the gains in housing and labor markets that I mentioned earlier, the better budgetary

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<sup>1</sup> These projections reflect FOMC participants' assessments based on their individual judgments regarding appropriate monetary policy.

positions of state and local governments, and stronger household and business balance sheets. That said, the risks remain that tight federal fiscal policy will restrain economic growth over the next few quarters by more than we currently expect, or that the debate concerning other fiscal policy issues, such as the status of the debt ceiling, will evolve in a way that could hamper the recovery. More generally, with the recovery still proceeding at only a moderate pace, the economy remains vulnerable to unanticipated shocks, including the possibility that global economic growth may be slower than currently anticipated.

**Monetary Policy**

With unemployment still high and declining only gradually, and with inflation running below the Committee's longer-run objective, a highly accommodative monetary policy will remain appropriate for the foreseeable future.

In normal circumstances, the Committee's basic tool for providing monetary accommodation is its target for the federal funds rate. However, the target range for the federal funds rate has been close to zero since late 2008 and cannot be reduced meaningfully further. Instead, we are providing additional policy accommodation through two distinct yet complementary policy tools. The first tool is expanding the Federal Reserve's portfolio of longer-term Treasury securities and agency mortgage-backed securities (MBS); we are currently purchasing \$40 billion per month in agency MBS and \$45 billion per month in Treasuries. The second tool is "forward guidance" about the Committee's plans for setting the federal funds rate target over the medium term.

Within our overall policy framework, we think of these two tools as having somewhat different roles. We are using asset purchases and the resulting expansion of the Federal Reserve's balance sheet primarily to increase the near-term momentum of the economy, with the

specific goal of achieving a substantial improvement in the outlook for the labor market in a context of price stability. We have made some progress toward this goal, and, with inflation subdued, we intend to continue our purchases until a substantial improvement in the labor market outlook has been realized. In addition, even after purchases end, the Federal Reserve will be holding its stock of Treasury and agency securities off the market and reinvesting the proceeds from maturing securities, which will continue to put downward pressure on longer-term interest rates, support mortgage markets, and help to make broader financial conditions more accommodative.

We are relying on near-zero short-term interest rates, together with our forward guidance that rates will continue to be exceptionally low--our second tool--to help maintain a high degree of monetary accommodation for an extended period after asset purchases end, even as the economic recovery strengthens and unemployment declines toward more-normal levels. In appropriate combination, these two tools can provide the high level of policy accommodation needed to promote a stronger economic recovery with price stability.

In the interest of transparency, Committee participants agreed in June that it would be helpful to lay out more details about our thinking regarding the asset purchase program--specifically, to provide additional information on our assessment of progress to date, as well as of the likely trajectory of the program if the economy evolves as projected. This agreement to provide additional information did not reflect a change in policy.

The Committee's decisions regarding the asset purchase program (and the overall stance of monetary policy) depend on our assessment of the economic outlook and of the cumulative progress toward our objectives. Of course, economic forecasts must be revised when new information arrives and are thus necessarily provisional. As I noted, the economic outcomes that

Committee participants saw as most likely in their June projections involved continuing gains in labor markets, supported by moderate growth that picks up over the next several quarters as the restraint from fiscal policy diminishes. Committee participants also saw inflation moving back toward our 2 percent objective over time. If the incoming data were to be broadly consistent with these projections, we anticipated that it would be appropriate to begin to moderate the monthly pace of purchases later this year. And if the subsequent data continued to confirm this pattern of ongoing economic improvement and normalizing inflation, we expected to continue to reduce the pace of purchases in measured steps through the first half of next year, ending them around midyear. At that point, if the economy had evolved along the lines we anticipated, the recovery would have gained further momentum, unemployment would be in the vicinity of 7 percent, and inflation would be moving toward our 2 percent objective. Such outcomes would be fully consistent with the goals of the asset purchase program that we established in September.

I emphasize that, because our asset purchases depend on economic and financial developments, they are by no means on a preset course. On the one hand, if economic conditions were to improve faster than expected, and inflation appeared to be rising decisively back toward our objective, the pace of asset purchases could be reduced somewhat more quickly. On the other hand, if the outlook for employment were to become relatively less favorable, if inflation did not appear to be moving back toward 2 percent, or if financial conditions--which have tightened recently--were judged to be insufficiently accommodative to allow us to attain our mandated objectives, the current pace of purchases could be maintained for longer. Indeed, if needed, the Committee would be prepared to employ all of its tools, including an increase the

pace of purchases for a time, to promote a return to maximum employment in a context of price stability.

As I noted, the second tool the Committee is using to support the recovery is forward guidance regarding the path of the federal funds rate. The Committee has said it intends to maintain a high degree of monetary accommodation for a considerable time after the asset purchase program ends and the economic recovery strengthens. In particular, the Committee anticipates that its current exceptionally low target range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent and inflation and inflation expectations remain well behaved in the sense described in the FOMC's statement.

As I have observed on several occasions, the phrase "at least as long as" is a key component of the policy rate guidance. These words indicate that the specific numbers for unemployment and inflation in the guidance are thresholds, not triggers. Reaching one of the thresholds would not automatically result in an increase in the federal funds rate target; rather, it would lead the Committee to consider whether the outlook for the labor market, inflation, and the broader economy justified such an increase. For example, if a substantial part of the reductions in measured unemployment were judged to reflect cyclical declines in labor force participation rather than gains in employment, the Committee would be unlikely to view a decline in unemployment to 6-1/2 percent as a sufficient reason to raise its target for the federal funds rate. Likewise, the Committee would be unlikely to raise the funds rate if inflation remained persistently below our longer-run objective. Moreover, so long as the economy remains short of maximum employment, inflation remains near our longer-run objective, and inflation expectations remain well anchored, increases in the target for the federal funds rate, once they begin, are likely to be gradual.

**Regulatory Reform**

I will finish by providing you with a brief update on progress on reforms to reduce the systemic risk of the largest financial firms. As Governor Tarullo discussed in his testimony last week before the Senate Banking, Housing, and Urban Affairs Committee, the Federal Reserve, with the other federal banking agencies, adopted a final rule earlier this month to implement the Basel III capital reforms.<sup>2</sup> The final rule increases the quantity and quality of required regulatory capital by establishing a new minimum common equity tier 1 capital ratio and implementing a capital conservation buffer. The rule also contains a supplementary leverage ratio and a countercyclical capital buffer that apply only to large and internationally active banking organizations, consistent with their systemic importance. In addition, the Federal Reserve will propose capital surcharges on firms that pose the greatest systemic risk and will issue a proposal to implement the Basel III quantitative liquidity requirements as they are phased in over the next few years. The Federal Reserve is considering further measures to strengthen the capital positions of large, internationally active banks, including the proposed rule issued last week that would increase the required leverage ratios for such firms.<sup>3</sup>

The Fed also is working to finalize the enhanced prudential standards set out in sections 165 and 166 of the Dodd-Frank Act. Among these standards, rules relating to stress testing and resolution planning already are in place, and we have been actively engaged in stress tests and reviewing the “first-wave” resolution plans. In coordination with other agencies, we have made

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<sup>2</sup> See Daniel K. Tarullo (2013), “Dodd-Frank Implementation,” statement before the Committee on Banking, Housing, and Urban Affairs, U.S. Senate, July 11, [www.federalreserve.gov/newsevents/testimony/tarullo20130711a.htm](http://www.federalreserve.gov/newsevents/testimony/tarullo20130711a.htm); and Board of Governors of the Federal Reserve System (2013), “Federal Reserve Board Approves Final Rule to Help Ensure Banks Maintain Strong Capital Positions,” press release, July 2, [www.federalreserve.gov/newsevents/press/bcreg/20130702a.htm](http://www.federalreserve.gov/newsevents/press/bcreg/20130702a.htm).

<sup>3</sup> See Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency (2013), “Agencies Adopt Supplementary Leverage Ratio Notice of Proposed Rulemaking,” joint press release, July 9, [www.federalreserve.gov/newsevents/press/bcreg/20130709a.htm](http://www.federalreserve.gov/newsevents/press/bcreg/20130709a.htm).



significant progress on the key substantive issues relating to the Volcker rule and are hoping to complete it by year-end.

Finally, the Federal Reserve is preparing to regulate and supervise systemically important nonbank financial firms. Last week, the Financial Stability Oversight Council designated two nonbank financial firms; it has proposed the designation of a third firm, which has requested a hearing before the council.<sup>4</sup> We are developing a supervisory and regulatory framework that can be tailored to each firm's business mix, risk profile, and systemic footprint, consistent with the Collins amendment and other legal requirements under the Dodd-Frank Act.

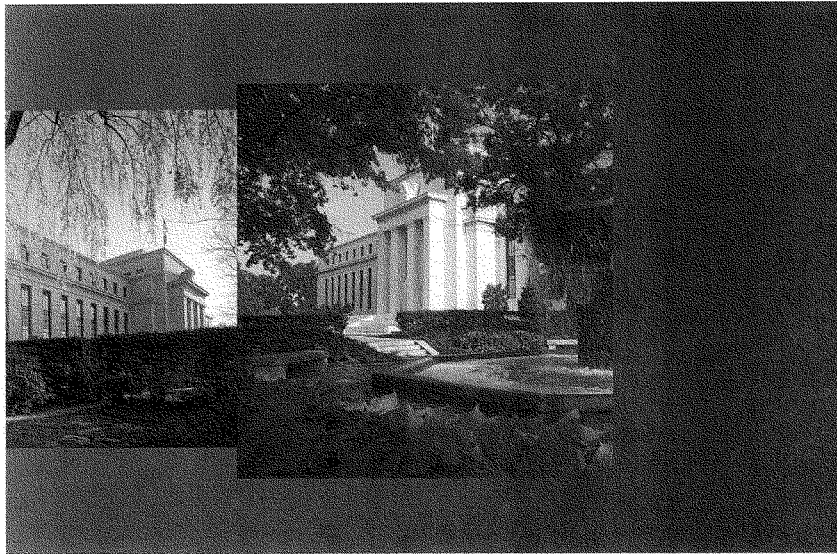
Thank you. I would be pleased to take your questions.

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<sup>4</sup> U.S. Department of the Treasury (2013), "Financial Stability Oversight Council Makes First Nonbank Financial Company Designations to Address Potential Threats to Financial Stability," press release, July 9, [www.treasury.gov/press-center/press-releases/Pages/j12004.aspx](http://www.treasury.gov/press-center/press-releases/Pages/j12004.aspx).

# MONETARY POLICY REPORT

July 17, 2013



Board of Governors of the Federal Reserve System

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LETTER OF TRANSMITTAL

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BOARD OF GOVERNORS OF THE  
FEDERAL RESERVE SYSTEM

Washington, D.C., July 17, 2013

THE PRESIDENT OF THE SENATE  
THE SPEAKER OF THE HOUSE OF REPRESENTATIVES

The Board of Governors is pleased to submit its *Monetary Policy Report* pursuant to section 2B of the Federal Reserve Act.

Sincerely,

A handwritten signature in black ink, appearing to read "Ben Bernanke".

Ben Bernanke, Chairman

## STATEMENT ON LONGER-RUN GOALS AND MONETARY POLICY STRATEGY

*As amended effective on January 29, 2013*

The Federal Open Market Committee (FOMC) is firmly committed to fulfilling its statutory mandate from the Congress of promoting maximum employment, stable prices, and moderate long-term interest rates. The Committee seeks to explain its monetary policy decisions to the public as clearly as possible. Such clarity facilitates well-informed decisionmaking by households and businesses, reduces economic and financial uncertainty, increases the effectiveness of monetary policy, and enhances transparency and accountability, which are essential in a democratic society.

Inflation, employment, and long-term interest rates fluctuate over time in response to economic and financial disturbances. Moreover, monetary policy actions tend to influence economic activity and prices with a lag. Therefore, the Committee's policy decisions reflect its longer-run goals, its medium-term outlook, and its assessments of the balance of risks, including risks to the financial system that could impede the attainment of the Committee's goals.

The inflation rate over the longer run is primarily determined by monetary policy, and hence the Committee has the ability to specify a longer-run goal for inflation. The Committee judges that inflation at the rate of 2 percent, as measured by the annual change in the price index for personal consumption expenditures, is most consistent over the longer run with the Federal Reserve's statutory mandate. Communicating this inflation goal clearly to the public helps keep longer-term inflation expectations firmly anchored, thereby fostering price stability and moderate long-term interest rates and enhancing the Committee's ability to promote maximum employment in the face of significant economic disturbances.

The maximum level of employment is largely determined by nonmonetary factors that affect the structure and dynamics of the labor market. These factors may change over time and may not be directly measurable. Consequently, it would not be appropriate to specify a fixed goal for employment; rather, the Committee's policy decisions must be informed by assessments of the maximum level of employment, recognizing that such assessments are necessarily uncertain and subject to revision. The Committee considers a wide range of indicators in making these assessments. Information about Committee participants' estimates of the longer-run normal rates of output growth and unemployment is published four times per year in the FOMC's Summary of Economic Projections. For example, in the most recent projections, FOMC participants' estimates of the longer-run normal rate of unemployment had a central tendency of 5.2 percent to 6.0 percent, unchanged from one year ago but substantially higher than the corresponding interval several years earlier.

In setting monetary policy, the Committee seeks to mitigate deviations of inflation from its longer-run goal and deviations of employment from the Committee's assessments of its maximum level. These objectives are generally complementary. However, under circumstances in which the Committee judges that the objectives are not complementary, it follows a balanced approach in promoting them, taking into account the magnitude of the deviations and the potentially different time horizons over which employment and inflation are projected to return to levels judged consistent with its mandate.

The Committee intends to reaffirm these principles and to make adjustments as appropriate at its annual organizational meeting each January.

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NOTE: The figures and tables in this report generally reflect information available as of Friday, July 12, 2013. Unless otherwise noted, the time series in the figures extend through, for daily data, July 12, 2013; for monthly data, June 2013; and, for quarterly data, 2013:Q1. In bar charts, except as noted, the change for a given period is measured to its final quarter from the final quarter of the preceding period.

## SUMMARY

Thus far this year, labor market conditions have improved further, while consumer price inflation has run below the Federal Open Market Committee's (FOMC) longer-run objective of 2 percent. Gains in payroll employment since the start of the year have averaged about 200,000 jobs per month, and various measures of underutilization in labor markets have continued to trend down. Even so, the unemployment rate, at 7½ percent in June, was still well above levels prevailing prior to the recent recession and well above the levels that FOMC participants think can be sustained in the longer term consistent with price stability.

Consumer price inflation has slowed this year. Over the first five months of the year, the price index for personal consumption expenditures increased at an annual rate of only ½ percent, while the index excluding food and energy prices rose at a rate of 1 percent, both down from increases of about 1½ percent over 2012. This slowing appears to owe partly to transitory factors. Survey measures of longer-term inflation expectations have remained in the narrow ranges seen over the past several years, while market-based measures have declined so far this year, reversing their rise over the second half of 2012.

Meanwhile, real gross domestic product (GDP) continued to increase at a moderate pace in the first quarter of this year. Available indicators suggest that the growth of real GDP proceeded at a somewhat slower pace in the second quarter. Although federal fiscal policy is imposing a substantial drag on growth this year and export demand is still damped by subdued growth in foreign economies, some of the other headwinds that have weighed on the economic recovery have begun to dissipate. Against this backdrop, a sustained housing market recovery now appears to be under way, and consumption growth is estimated to have

held up reasonably well despite the increase in taxes earlier this year.

Credit conditions generally have eased further, though they remain relatively tight for households with lower credit scores—and especially for such households seeking mortgage loans. However, beginning in May, longer-term interest rates rose significantly and asset price volatility increased as investors responded to somewhat better-than-expected economic data as well as Federal Reserve communications about monetary policy. Despite their recent moves, interest rates have generally remained low by historical standards, importantly due to the Federal Reserve's highly accommodative monetary policy stance.

With unemployment still well above normal levels and inflation quite low, and with the economic recovery anticipated to pick up only gradually, the FOMC has continued its highly accommodative monetary policy this year in order to support progress toward maximum employment and price stability.

The FOMC kept its target range for the federal funds rate at 0 to ¼ percent and anticipated that this exceptionally low range would be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. The Committee also stated that when it decides to begin to remove policy accommodation, it would take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

The FOMC also has continued its asset purchase program, purchasing additional agency mortgage-backed securities at a pace

of \$40 billion per month and longer-term Treasury securities at a pace of \$45 billion per month. The Committee has reiterated that the purchase program will continue until the outlook for the labor market has improved substantially in a context of price stability. In addition, the FOMC has indicated that the size, pace, and composition of purchases will be adjusted in light of the Committee's assessment of the likely efficacy and costs of such purchases as well as the extent of progress toward its economic objectives. The Committee has noted that it is prepared to increase or reduce the pace of purchases to maintain appropriate policy accommodation as the outlook for the labor market or inflation changes.

At the June FOMC meeting, Committee participants generally thought it would be helpful to provide greater clarity about the Committee's approach to decisions about its asset purchase program and thereby reduce investors' uncertainty about how the Committee might react to future economic developments. In choosing to provide this clarification, the Committee made no changes to its approach to monetary policy. Against this backdrop, Chairman Bernanke, at his postmeeting press conference, described a possible path for asset purchases that the Committee would anticipate implementing if economic conditions evolved in a manner broadly consistent with the outcomes the Committee saw as most likely. The Chairman noted that such economic outcomes involved continued gains in labor markets, supported by moderate growth that picks up over the next several quarters, and inflation moving back toward its 2 percent objective over time. If the economy were to evolve broadly in line with the Committee's expectations, the FOMC would moderate the pace of purchases later this year and continue to reduce the pace of

purchases in measured steps until purchases ended around the middle of next year, at which time the unemployment rate would likely be in the vicinity of 7 percent, with solid economic growth supporting further job gains and inflation moving back toward the FOMC's 2 percent target. In emphasizing that the Committee's policy was in no way predetermined, the Chairman noted that the pace of asset purchases could increase or decrease depending on the evolution of the outlook and its implications for further progress in the labor market. The Chairman also drew a strong distinction between the asset purchase program and the forward guidance regarding the target for the federal funds rate, noting that the Committee anticipates that there will be a considerable period between the end of asset purchases and the time when it becomes appropriate to increase the target for the federal funds rate.

In conjunction with the most recent FOMC meeting in June, Committee participants submitted individual economic projections under each participant's judgment of appropriate monetary policy. According to the Summary of Economic Projections (SEP), Committee participants saw the downside risks to the outlook for the economy and the labor market as having diminished since the fall. (The June SEP is included as Part 3 of this report.) Committee participants also projected that, with appropriate monetary policy accommodation, economic growth would pick up, the unemployment rate would gradually decline, and inflation would move up over the medium term from recent very low readings and subsequently move back toward the FOMC's 2 percent longer-run objective. Committee participants saw increases in the target for the federal funds rate as being quite far in the future, with most expecting the first increase to occur in 2015 or 2016.

## PART 1 RECENT ECONOMIC AND FINANCIAL DEVELOPMENTS

Real economic activity continued to increase at a moderate pace in the first quarter of 2013, though available indicators suggest that the pace of economic growth was somewhat slower in the second quarter. Federal fiscal policy is imposing a substantial drag on economic growth this year, and subdued growth in foreign economies continues to weigh on export demand. However, some other headwinds have diminished, and interest rates, despite recent increases, have generally remained low by historical standards, importantly due to the ongoing monetary accommodation provided by the Federal Open Market Committee (FOMC). A sustained housing market recovery appears to be under way, and, despite the increase in taxes earlier this year, consumption growth is estimated to have held up reasonably well, supported by higher equity and home prices, more-upbeat consumer sentiment, and the improving jobs situation. Payroll employment has continued to rise at a moderate pace, and various measures of underutilization in labor markets have improved further. But, at 7½ percent in June, the unemployment rate was still well above levels prevailing prior to the recent recession. Meanwhile, consumer price inflation has slowed further this year, in part because of falling energy and import prices and other factors that are expected to prove transitory, and it remains below the FOMC's longer-run objective of 2 percent. Survey measures of longer-term inflation expectations have remained in the fairly narrow ranges seen over the past several years.

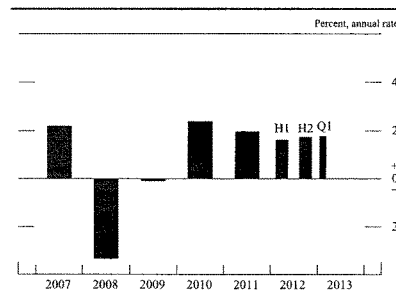
### Domestic Developments

#### Economic growth continued at a moderate pace early this year

Output appears to have risen further in the first half of 2013 despite the substantial drag on economic growth from federal fiscal policy this year and the restraint on export demand from subdued foreign growth. Real gross domestic product (GDP) increased at an estimated annual rate of 1¼ percent in the first quarter of the year (figure 1), the same as the average pace in 2012, though available indicators point at present to a somewhat smaller gain in the second quarter. Economic activity so far this year has been supported by the continued expansion in demand by U.S. households and businesses, including what appears to be a sustained recovery in the housing market. Private demand has been bolstered by the historically low interest rates and rising prices of houses and other assets, partly associated with the FOMC's continued policy accommodation.

In addition, some of the other headwinds that have held back the economy in recent years have dissipated further. Risks of heightened financial stresses in Europe appear to have diminished

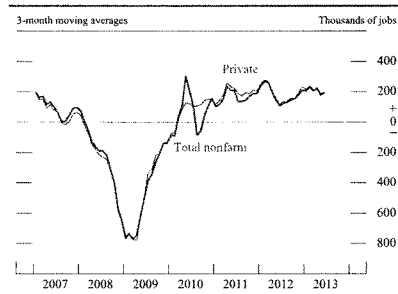
1. Change in real gross domestic product, 2007–13



SOURCE: Department of Commerce, Bureau of Economic Analysis.

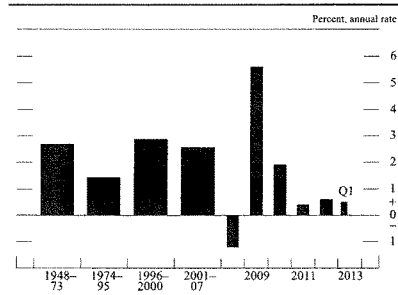


2. Net change in payroll employment, 2007–13



SOURCE: Department of Labor, Bureau of Labor Statistics.

3. Change in output per hour, 1948–2013



NOTE: The data are from the nonfarm business sector.  
SOURCE: Department of Labor, Bureau of Labor Statistics.

somewhat, consumer confidence has improved noticeably, and credit conditions in the United States generally have eased. Nonetheless, tight credit conditions for some households are still likely restraining residential investment and consumer spending, and uncertainty about the foreign outlook continues to represent a downside risk for U.S. financial markets and for sales abroad.

**Conditions in the labor market have continued to improve . . .**

The labor market has continued to improve gradually. Gains in payroll employment averaged about 200,000 jobs per month over the first half of 2013, slightly above the average increase in each of the previous two years (figure 2). The combination of this year’s output and employment increases imply that gains in labor productivity have remained slow. According to the latest published data, output per hour in the nonfarm business sector rose at an annual rate of only ½ percent in the first quarter of 2013, similar to its average pace in both 2011 and 2012 (figure 3).

Meanwhile, the unemployment rate declined to 7½ percent in the second quarter of this year from around 8¼ percent a year earlier. A variety of alternative, broader measures of labor force underutilization have also improved over the past year, roughly in line with the official unemployment rate (figure 4).

While the unemployment rate and total payroll employment have improved further, the labor force participation rate has continued to decline, on balance. As a result, the employment–population ratio, a measure that combines the unemployment rate and labor force participation rate, has changed little so far this year. To an important extent, the decline in the participation rate likely reflects changing demographics—most notably the increasing share in the population of older persons, who have lower-than-average participation rates—that would have occurred regardless of the strength of the labor market. However,

it is also likely that some of the decline in the participation rate reflects an increase in the number of workers who have stopped looking for work because of poor job prospects.<sup>1</sup>

### ... but considerable slack in labor markets remains ...

Although labor market conditions have improved moderately so far this year, the job market remains weak overall. The unemployment rate and other measures of

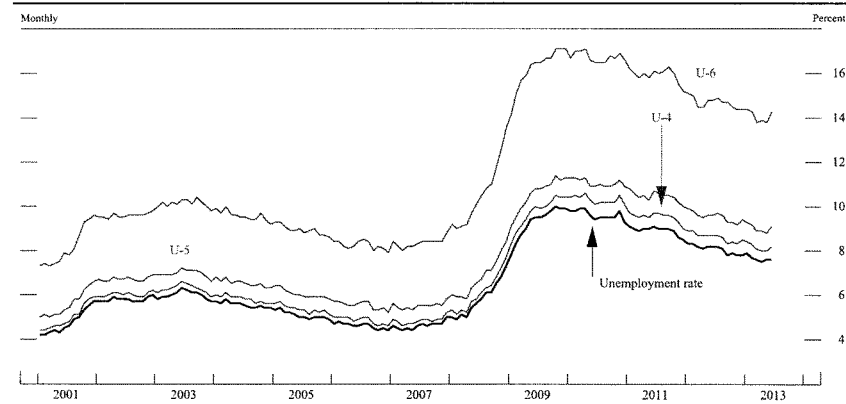
1. As was discussed in the box “Assessing Conditions in the Labor Market” in the February 2013 *Monetary Policy Report*, the unemployment rate typically provides a very good summary of labor market conditions; however, other indicators also provide important perspectives on the health of the labor market, with the most accurate assessment of labor market conditions obtained by combining the signals from many such indicators. For the box, see Board of Governors of the Federal Reserve System (2013), *Monetary Policy Report* (Washington: Board of Governors, February), [www.federalreserve.gov/monetarypolicy/mpr\\_20130226\\_part1.htm](http://www.federalreserve.gov/monetarypolicy/mpr_20130226_part1.htm).

labor underutilization are still well above their pre-recession levels, despite payroll employment having now expanded by nearly 7 million jobs since its recent trough and the unemployment rate having fallen 2½ percentage points since its peak. Moreover, unemployment has been unusually concentrated among the long-term unemployed; in June, the fraction of the unemployed who had been out of work for more than six months remained greater than one-third, although this share has continued to edge down (figure 5). In addition, last month, 8 million people, or 5 percent of the workforce, were working part time because they were unable to find full-time work due to economic conditions.

### ... and gains in compensation have been slow

Increases in hourly compensation continue to be restrained by the weak condition of the labor market. The 12-month change in the employment cost index for private industry

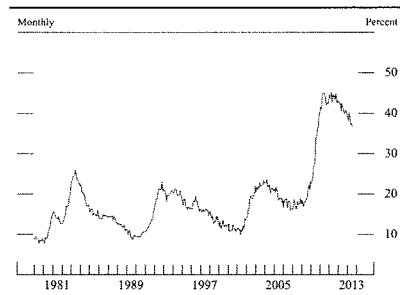
4. Measures of labor underutilization, 2001–13



NOTE: U-4 measures total unemployed plus discouraged workers, as a percent of the labor force plus discouraged workers. Discouraged workers are not currently looking for work because they believe no jobs are available for them. U-5 measures total unemployed plus all marginally attached to the labor force, as a percent of the labor force plus persons marginally attached to the labor force. Marginally attached workers are not in the labor force, want and are available for work, and have looked for a job in the past 12 months. U-6 measures total unemployed plus all marginally attached workers plus total employed part time for economic reasons, as a percent of the labor force plus all marginally attached workers.

SOURCE: Department of Labor, Bureau of Labor Statistics.

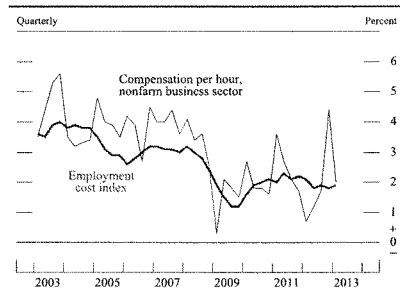
## 5. Long-term unemployed, 1979–2013



NOTE: The series shown is the percent of total unemployed persons who have been unemployed for 27 weeks or more.

SOURCE: Department of Labor, Bureau of Labor Statistics.

## 6. Measures of change in hourly compensation, 2003–13



NOTE: For nonfarm business compensation, change is over four quarters; for the employment cost index, change is over the 12 months ending in the last month of each quarter.

SOURCE: Department of Labor, Bureau of Labor Statistics.

workers, which measures both wages and the cost to employers of providing benefits, has remained close to 2 percent throughout most of the recovery (figure 6). Compensation per hour in the nonfarm business sector—a measure derived from the labor compensation data in the national income and product accounts—rose 2 percent over the year ending in the first quarter of 2013. Similarly, average hourly earnings for all employees—the timeliest measure of wage developments—increased 2¼ percent in nominal terms over the 12 months ending in June. Even with relatively slow productivity gains, the change in unit labor costs faced by firms—an estimate of the extent to which nominal hourly compensation rises in excess of labor productivity—has remained subdued.

### Consumer price inflation has been especially low . . .

The price index for personal consumption expenditures (PCE) increased at an annual rate of just ½ percent over the first five months of the year, down from a rise of 1½ percent over 2012 and below the FOMC's long-run objective of 2 percent (figure 7). The very low rate of inflation so far this year partly reflects declines in consumer energy prices, but price inflation for other consumer goods and services has also been subdued. Consumer food prices have remained largely unchanged so far this year, and consumer prices excluding food and energy increased at an annual rate of 1 percent in the first five months of this year after rising 1½ percent over 2012. With wages growing slowly and materials prices flat or moving downward, firms have generally not faced cost pressures that they might otherwise try to pass on.

### . . . as some transitory factors weighed on prices . . .

In addition to the decline in energy prices, this year's especially low inflation reflects, in part, other special factors that are expected to be transitory. Notably, increases in both medical services prices and the nonmarket component

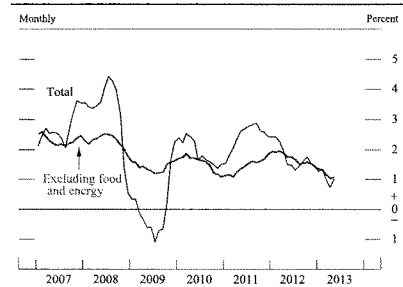
of PCE prices have been unusually low. While the average rate of medical-price inflation as measured by the PCE index has been considerably lower during the past few years than it was earlier, the increase over the first five months of 2013—at below ½ percent—has been extraordinarily muted, largely reflecting the effects on medical services prices of cuts in Medicare reimbursements associated with federal budget sequestration. (In contrast, medical services prices in the consumer price index (CPI), which exclude most Medicare payments, have risen at an annual rate of nearly 2 percent so far this year.) Because medical services have a relatively large weight in PCE expenditures (as the PCE price index reflects payments by all payers, not just out-of-pocket expenses as in the CPI), price changes in this component of spending can have a sizable effect on top-line PCE inflation.

The nonmarket PCE price index covers spending components for which market prices are not observed, such as financial services rendered without explicit charge; as a result, the Bureau of Economic Analysis imputes prices for those items. Overall, this nonmarket index declined early this year before moving up again in recent months; however, these prices tend to be volatile and appear to contain little signal for future inflation.

#### ... and as oil and other commodity prices declined ...

Global oil prices have come down, on net, from their February peak of nearly \$120 per barrel, though in recent weeks they have increased somewhat from their spring lows to almost \$110 per barrel (figure 8). Tensions in the Middle East have likely continued to put upward pressures on crude oil prices, but those pressures have been mitigated by concerns about the strength of oil demand in China and the rest of emerging Asia and by rising oil production in North America. Nonfuel commodity prices have eased since the beginning of the year, also reflecting slowing economic growth in emerging Asia. Notably, the

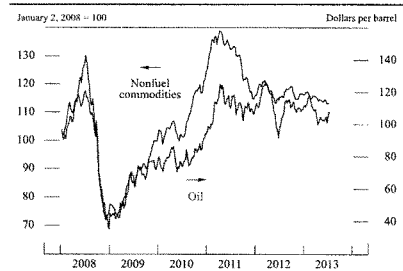
7. Change in the chain-type price index for personal consumption expenditures, 2007–13



NOTE: The data extend through May 2013; changes are from one year earlier.

SOURCE: Department of Commerce, Bureau of Economic Analysis.

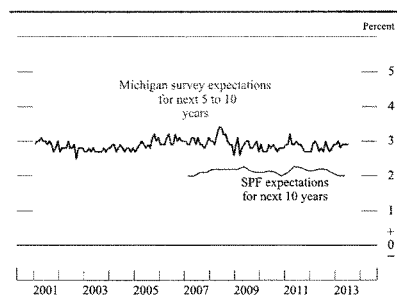
8. Prices of oil and nonfuel commodities, 2008–13



NOTE: The data are weekly through July 12, 2013. The price of oil is the spot price of Brent crude oil, and the price of nonfuel commodities is an index of 23 primary-commodity prices.

SOURCE: Commodity Research Bureau.

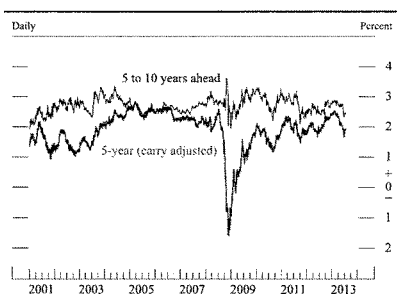
9. Median inflation expectations, 2001–13



Note: The Michigan survey data are monthly and extend through a preliminary estimate for July 2013. The SPF data for inflation expectations for personal consumption expenditures are quarterly and extend from 2007:Q1 through 2013:Q2.

SOURCE: Thomson Reuters/University of Michigan Surveys of Consumers; Survey of Professional Forecasters (SPF).

10. Inflation compensation, 2001–13



NOTE: Inflation compensation is the difference between yields on nominal Treasury securities and Treasury inflation-protected securities (TIPS) of comparable maturities, based on yield curves fitted to off-the-run nominal Treasury securities and on- and off-the-run TIPS. The 5-year measure is adjusted for the effect of indexation lags.

SOURCE: Federal Reserve Bank of New York; Barclays; Federal Reserve Board staff estimates.

price of iron ore, widely viewed as an indicator of Chinese demand for commodities, has fallen roughly 20 percent since early January. Along with falling commodity prices, prices of non-oil imported goods declined in the first half of 2013, also likely holding down domestic price increases this year.

### ... but longer-term inflation expectations remained in their historical range

The Federal Reserve monitors the public's expectations of inflation, in part because these expectations may influence wage- and price-setting behavior and thus actual inflation. Survey-based measures of longer-term inflation expectations have changed little, on net, so far this year. Median expected inflation over the next 5 to 10 years, as reported in the Thomson Reuters/University of Michigan Surveys of Consumers (Michigan survey), was 2.9 percent in early July, within the narrow range of the past decade (figure 9).<sup>2</sup> In the Survey of Professional Forecasters, conducted by the Federal Reserve Bank of Philadelphia, the median expectation for the increase in the PCE price index over the next 10 years was 2 percent in the second quarter of this year, similar to its level in recent years.

Measures of medium- and longer-term inflation compensation derived from the differences between yields on nominal and inflation-protected Treasury securities have declined between  $\frac{1}{4}$  and  $\frac{1}{2}$  percentage point so far this year (figure 10). Nonetheless, these measures of inflation compensation also remain within their respective ranges observed over the past several years, as the recent declines reversed the rise over the second half of last year. In general, movements in inflation compensation can reflect not only market participants' expectations of future inflation but also changes in investor risk aversion and fluctuations in the relative liquidity of nominal versus inflation-protected securities; the recent declines in inflation compensation may have been amplified

2. The question in the Michigan survey asks about inflation generally but does not refer to any specific price index.

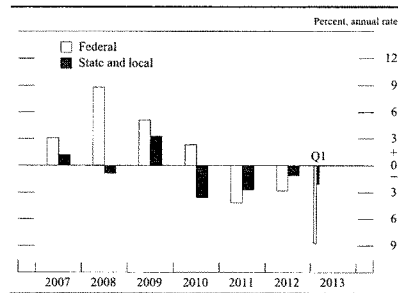
by a reduction in demand for Treasury inflation-protected securities amid increased volatility in fixed-income markets.

### Fiscal consolidation has quickened, leading to stronger headwinds but smaller deficits

Fiscal policy at the federal level has tightened significantly this year. As discussed in the box “Economic Effects of Federal Fiscal Policy,” fiscal policy changes—including the expiration of the payroll tax cut, the enactment of other tax increases, the effects of the budget caps on discretionary spending, the onset of the sequestration, and the declines in defense spending for overseas military operations—are estimated, collectively, to be exerting a substantial drag on economic activity this year. Even prior to the bulk of the spending cuts associated with the sequestration that started in March, total real federal purchases contracted at an annual rate of nearly 9 percent in the first quarter, reflecting primarily a significant decline in defense spending (figure 11). The sequestration will induce further reductions in real federal expenditures over the next few quarters. For example, many federal agencies have announced plans to furlough workers, especially in the third quarter. However, considerable uncertainty continues to surround the timing of these effects.

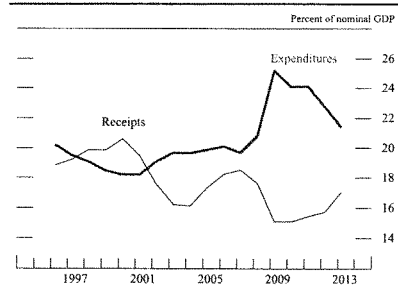
These fiscal policy changes—along with the ongoing economic recovery and positive net payments to the Treasury by Fannie Mae and Freddie Mac—have resulted in a narrower federal deficit this year. Nominal outlays have declined substantially as a share of GDP since their peak during the previous recession, and tax receipts have moved up to about 17 percent of GDP, their highest level since the recession (figure 12). As a result, the deficit in the federal unified budget fell to about \$500 billion over the first nine months of the current fiscal year, almost \$400 billion less than over the same period a year earlier. Accordingly, the Congressional Budget Office projects that the budget deficit for fiscal year 2013 as a whole will be 4 percent of GDP, markedly narrower than

11. Change in real government expenditures on consumption and investment, 2007–13



SOURCE: Department of Commerce, Bureau of Economic Analysis.

12. Federal receipts and expenditures, 1995–2013



NOTE: Through 2012, receipts and expenditures are for fiscal years (October–September); GDP is for the four quarters ending in Q3. For 2013, receipts and expenditures are for the 12 months ending in June, and GDP is the average of 2012:Q4 and 2013:Q1. Receipts and expenditures are on a unified-budget basis.

SOURCE: Office of Management and Budget.

## Economic Effects of Federal Fiscal Policy

Federal fiscal policy has had important effects on the pace of economic growth in recent years. One useful indicator of the stance of fiscal policy is the structural component of the federal budget deficit. The structural deficit excludes the cyclical part of the deficit—that is, changes in government revenues and expenditures that occur automatically over the business cycle. (It also excludes the budgetary effects of financial stabilization programs.<sup>1</sup>) Changes in

1. Financial stabilization programs include the Troubled Asset Relief Program (TARP), the conservatorship of Fannie Mae and Freddie Mac, and deposit insurance. These programs are excluded from the structural deficit because, although the programs helped stabilize financial markets and alleviate the crisis, neither their budgetary nor their economic effects are well captured in the deficit figures, owing in part to the accounting procedures used

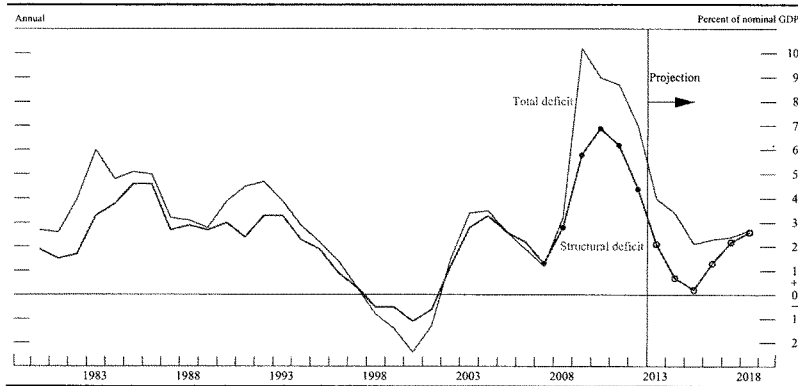
the structural deficit mainly result from fiscal policy actions: Expansionary fiscal policies that can boost near-term economic growth generate increases in the structural deficit, whereas contractionary policies that can temporarily restrain growth generate reductions in the structural deficit.

The evolution of one measure of the structural deficit is shown by the blue line in figure A.<sup>2</sup> During

to score these programs in the budget. For example, in the case of the TARP, the budget scores the estimated net subsidy cost of the program (adjusted for market risk) as an outlay. Reassessments of the subsidy cost have led to large fluctuations in TARP-related outlays from year to year that do not reflect changes in policy.

2. The structural deficit used here is constructed based on estimates by the Congressional Budget Office. For estimates of the cyclical component of the deficit, see Congressional

A. Total and structural federal budget deficit, 1980–2018



NOTE: The data are on a unified-budget basis and are for fiscal years (October–September); GDP is for the four quarters ending in Q3. Deficits appear as positive numbers. The structural deficit excludes the cyclical part of the deficit as well as the budgetary effects of financial stabilization programs, which include the Troubled Asset Relief Program, the conservatorship of Fannie Mae and Freddie Mac, and deposit insurance.  
SOURCE: Federal Reserve Board calculations based on Congressional Budget Office data and projections.

the recession and early in the recovery, federal fiscal policy was quite expansionary, as indicated by the widening of the structural deficit from 1¼ percent of gross domestic product (GDP) in fiscal year 2007 to 7 percent in fiscal 2010. The tax cuts and federal spending increases put in place by the Economic Stimulus Act of 2008; the American Recovery and Reinvestment Act of 2009; and the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 were the primary policy changes contributing to the increase in the structural deficit over this period.<sup>3</sup> In addition, the so-called automatic stabilizers caused the total deficit to be wider than the structural deficit. Starting in 2011, however, fiscal policy transitioned from expansionary to contractionary as the structural deficit began to narrow. The narrowing intensified somewhat last year as the structural deficit decreased from 6¼ percent of GDP in 2011 to 4½ percent of GDP in 2012: As some temporary stimulus-related policies expired, federal policymakers shifted to deficit-reduction efforts with the enactment of the Budget Control Act of 2011, and spending on overseas military operations continued to decrease.

<sup>3</sup> Budget Office (2013), *The Effects of Automatic Stabilizers on the Federal Budget as of 2013* (Washington: CBO, March), available at [www.cbo.gov/publication/43977](http://www.cbo.gov/publication/43977). For projections of the total deficit, and of transactions related to financial stabilization programs, for fiscal years 2013–18, see Congressional Budget Office (2013), *Updated Budget Projections: Fiscal Years 2013 to 2023* (Washington: CBO, May), available at [www.cbo.gov/publication/44172](http://www.cbo.gov/publication/44172).

<sup>3</sup> Several supplemental appropriations bills enacted during this period also contributed to the increase in the structural deficit.

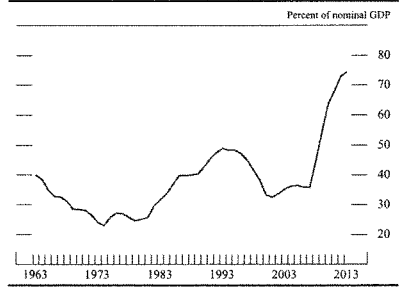
This year, the structural deficit is expected to decline a further 2¼ percent of GDP. This large decrease reflects the expiration of the temporary payroll tax cut and the enactment of some income tax increases, as well as significant restraint on government expenditures from the budget caps on discretionary spending specified in the Budget Control Act, the onset of the spending sequestration, and further declines in defense spending for overseas operations. The Congressional Budget Office estimated that the deficit-reduction policies in current law generating the 2¼ percentage point narrowing in the structural deficit will also restrain the pace of real GDP growth by 1½ percentage points this calendar year, relative to what it would have been otherwise.<sup>4</sup> Under current law, fiscal policy is slated during the next couple of years to continue restraining economic growth, albeit to a diminishing extent compared with the current year, as the structural deficit shrinks further but at a slowing pace.

Despite the substantial near-term narrowing of the structural deficit, the federal government continues to face significant longer-term fiscal pressures. Indeed, under current policies, the structural deficit is projected to begin rising again later in this decade, in large part reflecting the budgetary effects of population aging and rising health-care costs, along with mounting debt service payments.

<sup>4</sup> See Congressional Budget Office (2013), *The Budget and Economic Outlook: Fiscal Years 2013 to 2023* (Washington: CBO, February), available at [www.cbo.gov/publication/43907](http://www.cbo.gov/publication/43907).



13. Federal government debt held by the public, 1963–2013



NOTE: The data for debt through 2012 are as of year-end, and the corresponding values for GDP are for Q4 at an annual rate. The observation for 2013:Q2 is based on an estimate for debt in Q2 and GDP in Q1. Excludes securities held as investments of federal government accounts.  
 SOURCE: Department of Commerce, Bureau of Economic Analysis; Department of the Treasury, Financial Management Service.

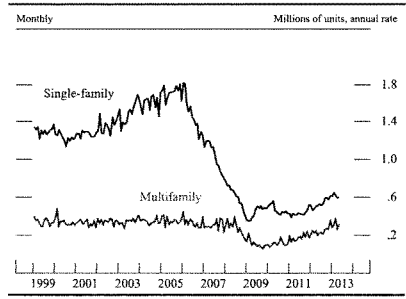
the deficit of 7 percent of GDP in fiscal 2012. In addition, as shown in box figure A, the deficit is projected to narrow further over the next couple of years in light of ongoing policy actions and continued improvement in the economy. Despite the substantial decline in the deficit, federal debt held by the public has continued to rise and stood at 75 percent of nominal GDP in the first quarter of 2013 (figure 13).

At the state and local level as well, the strengthening economy has helped foster a gradual improvement in the budget situations of most jurisdictions. In the first quarter of 2013, state tax receipts came in 9 percent higher than a year earlier. (Some of the recent strength in receipts, though, likely reflects tax payments on income that was shifted into 2012 in anticipation of higher federal tax rates this year.) Consistent with improving sector finances, states and municipalities are no longer reducing their workforces; employment in the nonfederal government sector edged up over the first half of the year after contracting only slightly in 2012. However, construction expenditures by these governments have declined significantly further this year. In all, real government purchases at the state and local level decreased in the first quarter and have imposed a drag on the pace of economic growth so far this year.

**The housing market recovery continued to gain traction . . .**

Activity in the housing market has continued to strengthen, supported by low mortgage rates, sustained job gains, and improved sentiment on the part of potential buyers. In the Michigan survey, many households report that low interest rates and house prices make it a good time to buy a home; a growing percentage of respondents also expect that house price gains will continue. Reflecting the improving demand conditions, sales of both new and existing homes have continued to move up, on net, this year. Construction of new housing units has also trended up over the past year (figure 14), contributing to solid rates of increase in real residential investment in the first half of 2013.

14. Private housing starts, 1999–2013



NOTE: The data extend through May 2013.  
 SOURCE: Department of Commerce, Bureau of the Census.

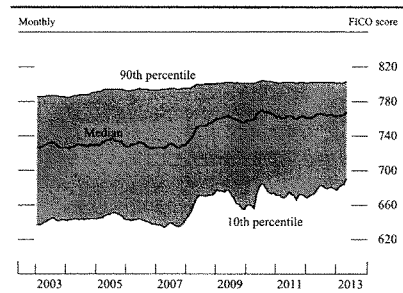
Even so, the level of construction activity remains low by historical standards. The steep rise in mortgage interest rates since May could temper the pace of home sales and construction going forward, though the pace of purchase mortgage applications so far has shown no material signs of slowing, even as the pace of refinancing applications has tailed off sharply.

The strengthening in housing demand has occurred despite the fact that mortgage credit remains limited for borrowers without excellent credit scores or the ability to make sizable down payments. Responses to special questions in the Federal Reserve's April Senior Loan Officer Opinion Survey on Bank Lending Practices (SLOOS) suggested that some banks had actually tightened standards over the past year on some loans that are eligible for purchase by the government-sponsored enterprises and loans guaranteed by the Federal Housing Administration, specifically those to borrowers with credit scores below 620 and with low down payments. Indeed, only about 10 percent of new prime mortgage originations made this spring were reported to be associated with FICO scores below 690, compared with a quarter of originations in 2005 (figure 15).

**... as house prices rose further**

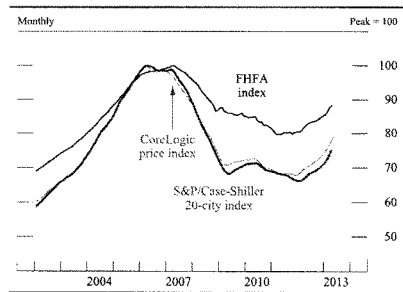
House prices, as measured by several national indexes, have increased significantly further since the end of last year (figure 16). In particular, the CoreLogic repeat-sales index rose about 7 percent (not at an annual rate) over the first five months of 2013 to reach its highest level since the third quarter of 2008. Some of the largest recent gains have occurred where the housing market has been most severely depressed. Recent increases notwithstanding, house prices remain far below the peaks reached before the recession, and the national price-to-rent ratio continues to be near its long-run average. Still, the increase in house prices has helped to materially reduce the number of "underwater" mortgages and made households somewhat less likely to default on their mortgages.

15. Credit scores on new prime mortgages, 2003–13



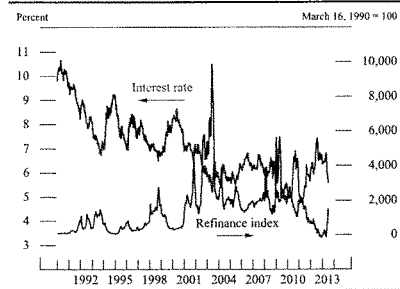
NOTE: Includes purchase mortgages only. The data extend through May 2013.  
SOURCE: McDash Analytics, LLC, a wholly owned subsidiary of Lender Processing Services, Inc.

16. Prices of existing single-family houses, 2002–13



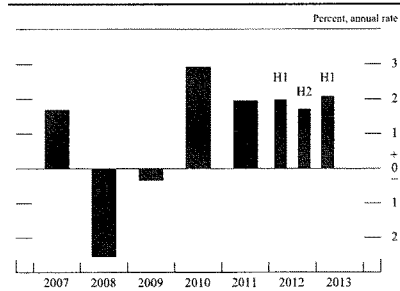
NOTE: The S&P/Case-Shiller and FHFA data extend through April 2013. The CoreLogic data extend through May 2013.  
SOURCE: CoreLogic; Federal Housing Finance Agency; S&P.

17. Mortgage interest rate and mortgage refinance index, 1990–2013



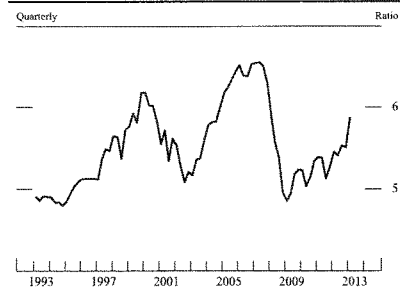
NOTE: The interest rate data are weekly through July 10, 2013. The refinance data are a seasonally adjusted 4-week moving average through July 5, 2013.  
SOURCE: For interest rate, Federal Home Loan Mortgage Corporation; for refinance index, Mortgage Bankers Association.

18. Change in real personal consumption expenditures, 2007–13



NOTE: The reading for 2013:H1 is the annualized May/Q4 change.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

19. Wealth-to-income ratio, 1993–2013



NOTE: The ratio is household net worth to disposable personal income.  
SOURCE: For net worth, Federal Reserve Board, flow of funds data; for income, Department of Commerce, Bureau of Economic Analysis.

**Mortgage interest rates increased but remained low by historical standards**

Mortgage interest rates have increased significantly in the past couple of months from record lows reached earlier this year (figure 17). However, rates are still low by historical standards, reflecting in part the Federal Reserve’s ongoing purchases of mortgage-backed securities (MBS) and highly accommodative overall stance of monetary policy. The spread between rates on conforming mortgages and yields on agency-guaranteed MBS has decreased slightly since the end of 2012.

Low mortgage rates, along with rising house prices, continued to facilitate a significant pace of refinancing for most of the first half of 2013, which has helped households reduce monthly debt service payments. However, refinancing remained difficult for households without solid credit ratings and those with limited home equity. Moreover, as mortgage rates moved higher, refinancing activity began to decrease sharply in May.

**Consumer spending has held up despite the drag from tax increases early this year**

Real consumption expenditures rose at an annual rate of about 2 percent over the first five months of this year, about the same as in the previous two years (figure 18). These increases have occurred despite higher taxes and have been supported by several factors. The gains this year in house prices and equity values have helped households recover some of the wealth lost during the recession; indeed, the ratio of household net wealth to income is estimated to have moved up sharply in the first quarter (figure 19). In recent months, indicators of consumer sentiment have become more upbeat as well (figure 20). Furthermore, in contrast to mortgage rates, interest rates on auto loans and credit cards have changed little, on balance, since the end of 2012. With interest rates low, the household debt service ratio—the ratio of required principal and interest payments

on outstanding household debt to disposable personal income—remained near historical lows (figure 21).

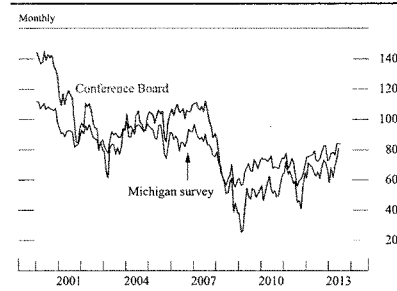
In addition, real disposable personal income has increased slightly, on balance, over the past year, as moderate gains in employment and wages have more than offset the implications for income of changes in tax policy.<sup>3</sup> And household purchasing power has been supported so far this year by low consumer price inflation. On balance, moderate increases in spending have outpaced disposable income growth, pushing the personal saving rate down to around 3 percent in recent months, close to the level that prevailed before the recession (figure 22).

**The financial conditions of households continued to improve slowly**

Although mortgage debt continued to contract amid still-tight credit conditions for some borrowers, consumer credit expanded at an annual rate of about 6 percent in the first quarter of 2013. Student loans, the vast majority of which are guaranteed or originated by the federal government and subject to minimal underwriting criteria, are estimated to have increased rapidly and now total nearly \$1 trillion, making them the largest category of consumer indebtedness outside of mortgages. Auto loans are also estimated to have increased at a robust pace. Stable collateral values and favorable conditions in the asset-backed securities market may have contributed to easier standards for such loans. In contrast, revolving consumer credit (primarily credit card lending) was little changed in the first

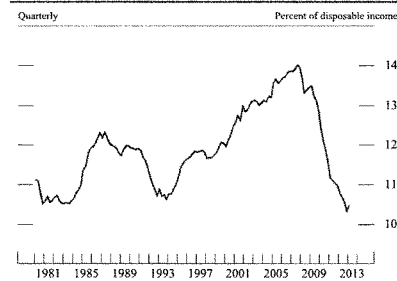
3. The income data have been quite volatile in recent months, reflecting both direct and indirect effects of the changes in tax policy this year. Personal income is reported to have surged late last year and then fallen back sharply early this year, as many firms apparently shifted dividend and employee bonus payments into 2012 in anticipation of higher marginal tax rates for high-income households this year. In addition, the rise in the payroll tax rate and a surge in personal income taxes at the beginning of the year pushed down disposable personal income in the first quarter.

20. Consumer sentiment indexes, 2000–13



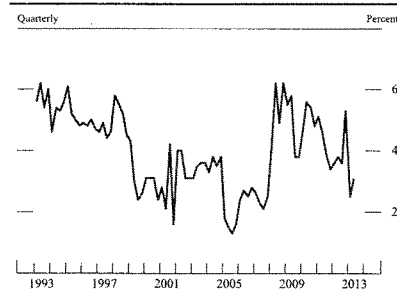
NOTE: The Conference Board series equals 100 in 1985. The Michigan survey series equals 100 in 1966 and is a preliminary estimate for July 2013.  
SOURCE: The Conference Board; Thomson Reuters/University of Michigan Surveys of Consumers.

21. Household debt service, 1980–2013



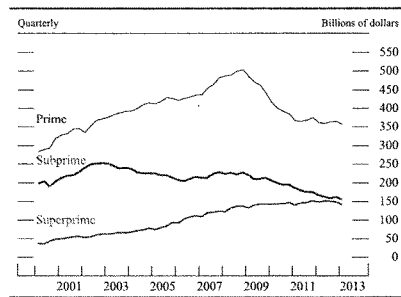
NOTE: Debt service payments consist of estimated required payments on outstanding mortgage and consumer debt.  
SOURCE: Federal Reserve Board, statistical release, "Household Debt Service and Financial Obligations Ratios."

22. Personal saving rate, 1993–2013



NOTE: The data are through 2013:Q2, which is the April–May average.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

23. Credit card balances, 2000–13

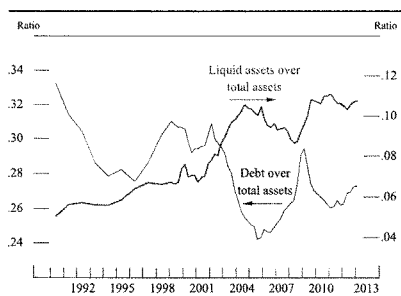


NOTE: Subprime refers to borrowers with Equifax Risk Scores lower than 660; prime, between 660 and 779; and superprime, greater than 779.  
SOURCE: Federal Reserve Bank of NY Consumer Credit Panel; Equifax.

quarter, and standards and terms on credit card loans appeared to remain tight, especially for consumers with less-than-pristine credit histories. For instance, spreads of interest rates on credit card loans over reference interest rates remained historically wide. Consequently, credit card debt extended to consumers with prime credit scores remained well below its pre-crisis levels, while debt extended to those with subprime credit scores—that is, Equifax Risk Scores below 660—continued to trend down (figure 23).

According to the most recent available data, indicators of distress for most types of household debt have declined since the end of 2012. For home mortgages, for example, the fraction of current mortgages becoming 30 or more days delinquent has now reached relatively low levels as a result of strict underwriting conditions for new mortgages as well as improved conditions in housing and labor markets. Measures of late-stage mortgage delinquency, such as the inventory of properties in foreclosure, also improved but remained elevated. Delinquency rates on student loans also remained high, likely reflecting in part the lack of underwriting on the federally backed loans that make up the bulk of the student loans outstanding.

24. Financial ratios for nonfinancial corporations, 1990–2013



NOTE: The data are annual through 1998 and quarterly thereafter.  
SOURCE: Compustat, © 2013 Standard & Poor's Financial Services LLC ("S&P"). All rights reserved. No further distribution or reproduction permitted.

**The financial conditions of nonfinancial firms continued to be strong . . .**

In the first quarter, the aggregate ratio of liquid to total assets for nonfinancial firms ticked up and remained near its highest level in 20 years, while the aggregate ratio of debt to assets was still well below its average over the same period (figure 24). Strong balance sheets, in turn, have contributed to solid credit quality: Bond default rates, as of June, stayed low by historical standards, and the delinquency rate on commercial and industrial (C&I) loans continued to fall in the first quarter from already low levels. However, over the first half of the year, the volume of nonfinancial corporate bonds that were upgraded by Moody's Investors Service was less than the volume downgraded.

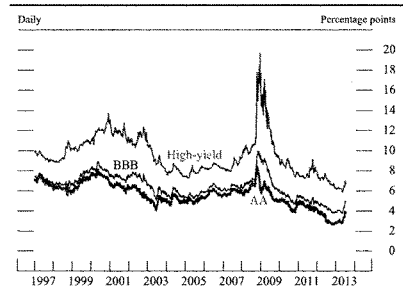
### ... and corporate bond and loan issuance remained robust

With corporate credit quality strong and interest rates near historically low levels through much of the first half of 2013 (figure 25), nonfinancial firms continued to raise funds, especially using longer-duration instruments. The pace of bond issuance by both investment- and speculative-grade nonfinancial firms remained extraordinarily brisk until interest rates rose significantly in May, while nonfinancial commercial paper (CP) outstanding was little changed (figure 26). C&I loans outstanding at commercial banks in the United States continued to expand during the first half of 2013 but at a slower pace than in the second half of 2012, when firms reportedly ramped up their C&I borrowing in part to make larger-than-usual dividend and bonus payments in advance of anticipated year-end tax hikes. A relatively large fraction of respondents to the April SLOOS indicated that, over the preceding three months, they had eased standards and pricing terms for C&I loans to firms of all sizes. Meanwhile, issuance of leveraged loans extended by nonbank institutions in the syndicated loan market was very elevated (figure 27), boosted by strong investor demand for these floating-rate instruments manifested through inflows to loan mutual funds and rapid growth of newly established collateralized loan obligations. More than two-thirds of the proceeds from such syndicated loan issuance, however, were reportedly used to repay existing debt.

### Borrowing conditions for small businesses improved, though demand for credit remained subdued

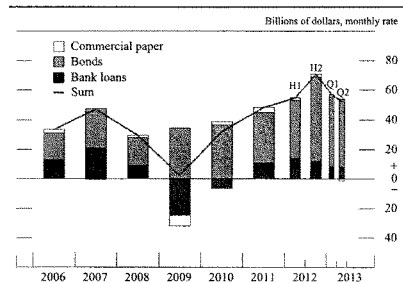
Some indicators of borrowing conditions for small businesses have improved since the end of 2012. According to the surveys conducted by the National Federation of Independent Business (NFIB) during the first half of 2013, the fraction of small businesses that found credit more difficult to obtain than three months prior declined on net. Recent

25. Corporate bond yields by securities rating, 1997–2013



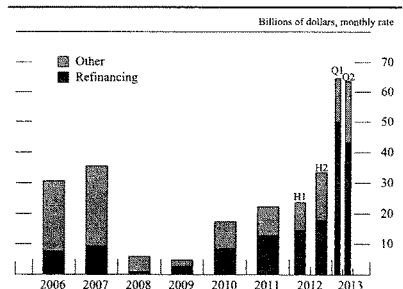
NOTE: The yields shown are yields on 10-year bonds.  
SOURCE: Derived from smoothed corporate yield curves using Merrill Lynch bond data.

26. Selected components of net financing for nonfinancial businesses, 2006–13



NOTE: The data for the components except bonds are seasonally adjusted.  
SOURCE: Federal Reserve Board, flow of funds data.

27. Leveraged loans extended by nonbank institutions, 2006–13



NOTE: Refinancing represents the portion of syndicated loan issuance reportedly being used to repay existing debt.  
SOURCE: Thomson Reuters LPC's LoanConnector.

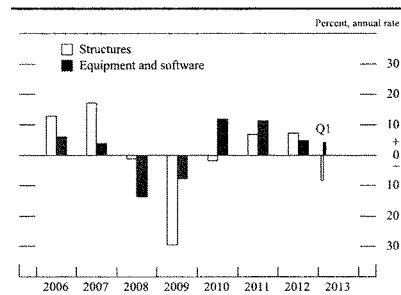
readings from the Federal Reserve's Survey of Terms of Business Lending indicate that the spreads charged by commercial banks on newly originated C&I loans with original amounts less than \$1 million—a large share of which likely consist of loans to small businesses—continued to edge down, though they remained elevated.<sup>4</sup> However, demand for credit from small firms apparently remained subdued compared with demand from large and middle-market firms. Relatively large fractions of respondents in recent NFIB surveys indicated that they did not have any borrowing needs, and the total dollar volume of business loans with original amounts of \$1 million or less outstanding at U.S. commercial banks was little changed in the first quarter.

#### However, business spending on capital investment has been rising at only a modest pace

Despite the large amount of business borrowing, businesses' capital investment has been rising only modestly. Real spending on equipment and software (E&S) increased at an annual rate of 4 percent in the first quarter after having risen at a similar, below-average pace in 2012 (figure 28); these increases likely reflect the tepid growth in business output over the past year. Shipments and orders of nondefense capital goods and other forward-looking indicators of business spending are consistent with further moderate gains in E&S spending in the spring and summer of this year.

Business investment in structures has also been relatively low so far this year, even apart from a sharp drop-off in expenditures on wind-power facilities following a tax-related burst of construction late last year. The level of investment in drilling and mining structures has stayed elevated, supported by high oil prices and the continued exploitation of new drilling technologies. However, investment in nonresidential buildings continues to be restrained by high vacancy

28. Change in real business fixed investment, 2006–13



SOURCE: Department of Commerce, Bureau of Economic Analysis.

4. Data releases for the Survey of Terms of Business Lending are available on the Federal Reserve Board's website at [www.federalreserve.gov/releases/e2/default.htm](http://www.federalreserve.gov/releases/e2/default.htm).

rates for existing properties, low commercial real estate (CRE) prices, and tight financing conditions for new construction. Indeed, banks' holdings of construction and land development loans have contracted every quarter since the first half of 2008.

Despite weak fundamentals, conditions in markets for CRE financing appeared to loosen somewhat. A moderate fraction of banks in the April SLOOS again reported having eased their lending standards on CRE loans, while a somewhat larger fraction continued to report some increase in demand for these loans. In addition, the pace of issuance of commercial mortgage-backed securities has stepped up, on balance, this year, but it remained well below its peak reached in 2007 (figure 29).

#### Foreign trade has been relatively weak

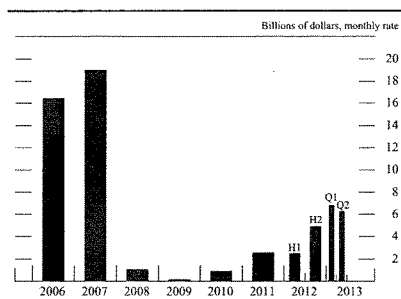
Export demand, which provided substantial support to domestic activity earlier in the recovery, has weakened since the middle of 2012, partly reflecting subdued foreign economic activity. Real exports of goods and services declined at an annual rate of 1 percent in the first quarter of 2013 (figure 30), though data for the first two months of the second quarter suggest that they rebounded. Exports to Japan have been particularly weak, but those to Canada continue to rise.

Real imports of goods and services edged down in the first quarter after falling substantially in the fourth quarter of 2012. Data for April and May suggest that imports recovered at a moderate pace in the second quarter. Although imports of non-oil goods and services rose, imports of oil declined further as U.S. oil production continued its climb of recent years.

Altogether, net exports were a neutral influence on the growth of real GDP in the first quarter of 2013, and partial data suggest that the same was the case in the second quarter.

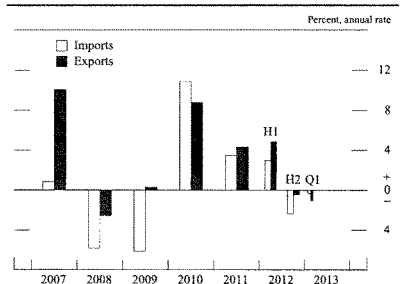
The current account deficit remained at about 2½ percent of GDP in the first quarter of 2013 (figure 31), a level little changed since 2009.

29. Commercial mortgage-backed securities issuance, 2006–13



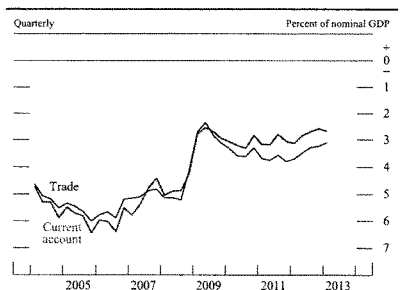
SOURCE: Harrison Scott Publications Commercial Mortgage Alert.

30. Change in real imports and exports of goods and services, 2007–13



SOURCE: Department of Commerce, Bureau of Economic Analysis.

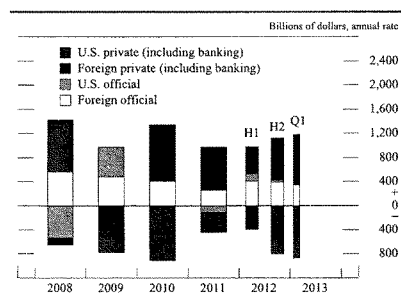
31. U.S. trade and current account balances, 2004–13



SOURCE: Department of Commerce, Bureau of Economic Analysis.

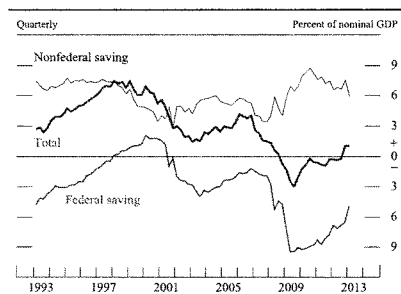


32. U.S. net financial inflows, 2008–13



NOTE: Negative numbers indicate a balance of payments outflow, generated when U.S. residents, on net, purchase foreign assets or when foreign residents, on net, sell U.S. assets. A negative number for "U.S. private" or "U.S. official" indicates an increase in foreign positions. U.S. official flows include the foreign currency acquired when foreign central banks draw on their swap lines with the Federal Reserve.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

33. Net saving, 1993–2013



NOTE: Nonfederal saving is the sum of personal and net business saving and the net saving of state and local governments.  
SOURCE: Department of Commerce, Bureau of Economic Analysis.

The current account deficit had narrowed substantially in late 2008 and early 2009 when U.S. imports dropped sharply, in part reflecting the steep decline in oil prices.

In the first quarter of 2013, the current account deficit continued to be financed by strong financial inflows, mostly from purchases of Treasury securities by both foreign official and foreign private investors (figure 32). Consistent with continued improvement in market sentiment, U.S. investors made further strong purchases of foreign securities, especially equities.

### National saving is very low

Net national saving—that is, the saving of U.S. households, businesses, and governments, net of depreciation charges—remains extremely low by historical standards (figure 33). In the first quarter of 2013, net national saving was 1 percent of nominal GDP, up from figures that averaged around zero over the past few years. As discussed earlier, the near-term federal deficit has narrowed because of fiscal policy changes and the economic recovery, and further declines in the federal budget deficit over the next few years should boost national saving somewhat. With the economy still weak and demand for investable funds limited, the low level of national saving is not constraining growth or leading to higher interest rates. However, if low levels of national saving persist over the longer run, they will likely be associated with both low rates of capital formation and heavy borrowing from abroad, limiting the rise in the standard of living for U.S. residents over time.

### Financial Developments

#### The expected path for the federal funds rate in 2014 and 2015 steepened . . .

Market-based measures of the expected future path of the federal funds rate moved higher over the first half of the year, as investors responded to somewhat better-than-

expected incoming economic data and to communications from Federal Reserve officials that were seen as suggesting a tighter stance of monetary policy than had been anticipated. The modal path of the federal funds rate—that is, the values for future federal funds rates that market participants see as most likely—derived from interest rate options shifted up considerably, especially around the June FOMC meeting, suggesting that investors may now expect the target funds rate to lift off from its current range significantly earlier than they expected at the end of 2012. However, a part of this increase may have reflected a rise in term premiums associated with increased uncertainty about the monetary policy outlook. According to a survey of primary dealers conducted shortly after the June FOMC meeting by the Open Market Desk at the Federal Reserve Bank of New York, dealers' expectations of the date of liftoff have moved up one quarter since the end of last year, to the second quarter of 2015.<sup>5</sup>

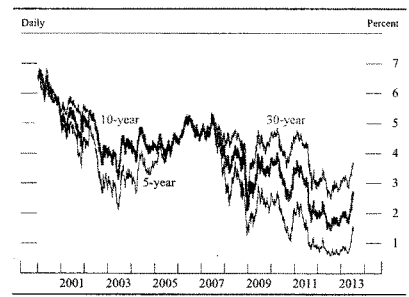
**... while yields on longer-term securities increased significantly but remained low by historical standards**

Reflecting the same factors, yields on longer-term Treasury securities and agency MBS are also substantially higher now than they were at the end of last year (figures 34 and 35). The rise in longer-term yields appears to have been amplified by a pullback from duration risk as well as technical factors, including rapid changes in trading strategies and positions that had been predicated on the continuation of very low rates and volatility. On balance, yields on 5-, 10-, and 30-year nominal Treasury securities have increased between 65 and 85 basis points, on net, to 1½ percent, 2½ percent, and 3¾ percent, respectively, since the end of last year.

Yields on 30-year agency MBS increased more than those on Treasury securities, rising about

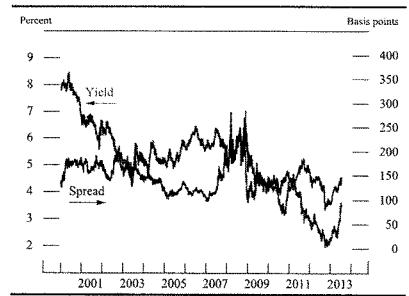
5. The results of the survey of primary dealers are available on the Federal Reserve Bank of New York's website at [www.newyorkfed.org/markets/primarydealer\\_survey\\_questions.html](http://www.newyorkfed.org/markets/primarydealer_survey_questions.html).

34. Yields on nominal Treasury securities, 2000–13



NOTE: The Treasury ceased publication of the 30-year constant maturity series on February 18, 2002, and resumed that series on February 9, 2006.  
SOURCE: Department of the Treasury.

35. Yield and spread on agency mortgage-backed securities, 2000–13



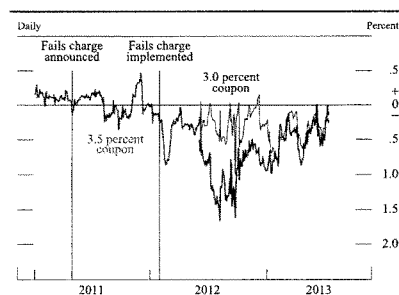
NOTE: The data are daily. Yield shown is for the Fannie Mae 30-year current coupon, the coupon rate at which new mortgage-backed securities would be priced at par, or face, value. Spread shown is to the average of the 5- and 10-year nominal Treasury yields.  
SOURCE: Department of the Treasury; Barclays.

1¼ percentage points, on net, since the end of 2012, to about 3½ percent. Agency MBS yields also rose significantly more than the yields on comparable nominal Treasury securities after adjusting for the effects of higher interest rates on the likelihood that borrowers will prepay their mortgages (the option-adjusted spread), likely reflecting investors' reassessment of the outlook for the Federal Reserve's MBS purchases as well as subsequent market dynamics.

Nonetheless, yields on longer-term securities continue to be low by historical standards. Those low levels reflect several factors, including subdued inflation expectations as well as still-modest economic growth prospects in the United States and other major developed economies. In addition, despite their recent rise, term premiums—the extra return investors expect to obtain from holding longer-term securities as opposed to holding and rolling over a sequence of short-term securities for the same period—remain small, reflecting both the FOMC's ongoing large-scale asset purchase program and strong demand for longer-term securities from global investors.

Indicators of market functioning in both the Treasury and agency MBS markets were generally solid over the first half of the year. In particular, the Desk's outright purchases of Treasury securities and agency MBS did not appear to have a material adverse effect on liquidity in those markets. For example, available data suggest bid-asked spreads in Treasury and agency MBS markets continued to be in line with recent averages, though some widening has been observed of late amid increased market volatility. In the Treasury market, auctions generally continued to be well received by investors. In the agency MBS market, settlement fails remained low, and implied financing rates in the "dollar roll" market—an indicator of the scarcity of agency MBS for settlement—have drifted up over the past six months, indicating reduced settlement pressures (figure 36).<sup>6</sup>

36. Dollar-roll-implied financing rates (front month), Fannie Mac 30-year, 2011–13



NOTE: The 3.0 percent coupon data series begins on June 1, 2012.  
SOURCE: J.P. Morgan.

6. Dollar roll transactions consist of a purchase or sale of agency MBS with the simultaneous agreement to sell

**Short-term funding markets continued to function well**

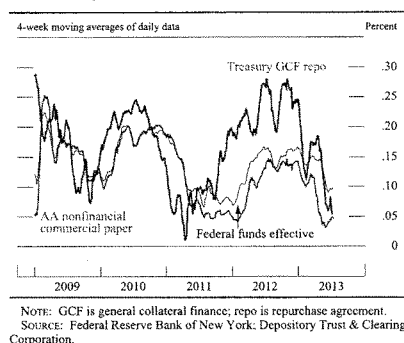
Conditions in short-term funding markets remained good, with many money market rates having edged down from already low levels since the end of 2012 to near the bottom of the ranges they have occupied since the zero-lower-bound period began (figure 37). In the market for repurchase agreements, bid-asked spreads and haircuts for most collateral types were reportedly little changed, while rates moved down slightly, on net, for general collateral finance repurchase agreements. Despite the high level of reserve balances and the substantially reduced volume of trading in the federal funds market since 2008, the effective federal funds rate has continued to be strongly correlated with these money market rates. Rates on asset-backed commercial paper (ABCP) also fell, and spreads on ABCP with European bank sponsors have generally converged back to those on ABCP with U.S. bank sponsors. Rates on unsecured financial CP for both U.S. and European issuers have remained low, even during the temporary flare-up of concerns about European financial stability surrounding the banking problems in Cyprus, while forward measures of funding spreads have continued to be narrow by historical standards.

**Broad equity price indexes increased further . . .**

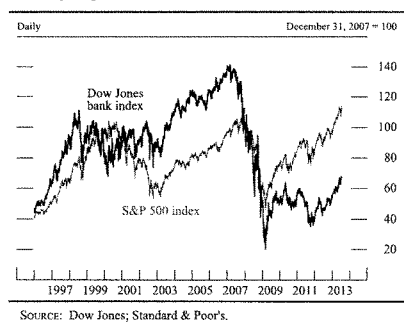
Broad equity price indexes notched substantial gains and reached record levels in nominal terms, boosted by improved market sentiment regarding the economic outlook, the FOMC's sustained highly accommodative monetary policy, and stable expectations about medium-term earnings growth (figure 38). Despite the increased volatility around the time of the June FOMC meeting, as of mid-July, broad measures of equity prices were 18 percent higher, on net, than their levels at the end of 2012. Nonetheless, the spread between the

or purchase substantially similar securities on a specified future date. The Committee directs the Desk to engage in these transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS purchases.

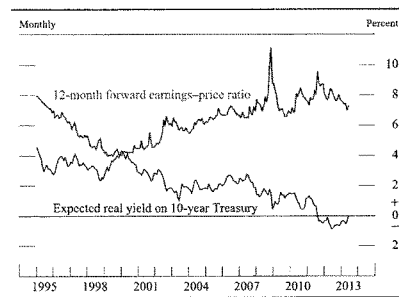
37. Overnight money market rates, 2009–13



38. Equity prices, 1996–2013



39. Market-implied equity premium, 1995–2013



NOTE: The expected real yield on 10-year Treasury is defined as the off-the-run 10-year Treasury yield less the Federal Reserve Bank of Philadelphia's Survey of Professional Forecasters' 10-year CPI inflation expectations.

SOURCE: Standard & Poor's; Thomson Reuters Financial; Federal Reserve Board; Federal Reserve Bank of Philadelphia.

12-month expected forward earnings–price ratio for the S&P 500 and a long-run real Treasury yield—a rough gauge of the equity risk premium—stayed very elevated by historical standards, suggesting that investors remain somewhat cautious in their attitudes toward equities (figure 39). Outside of the period surrounding the June FOMC meeting, implied volatility for the S&P 500 index, as calculated from option prices, generally remained near the bottom end of the range it has occupied since the onset of the financial crisis.

#### ... and market sentiment toward financial institutions continued to strengthen as credit quality improved

On average, the equity prices of domestic financial institutions have outperformed broader equity indexes since the end of last year. Improved investor sentiment toward the financial sector reportedly was driven by perceptions of reduced downside risk in the housing market as well as expectations of continued improvements in credit quality and of increased net interest margins as the yield curve steepened over the past few months. However, prices of real estate investment trust (REIT) shares underperformed, especially after interest rates started rising in May, partially reflecting a broader shift on the part of investors from income-oriented shares toward more cyclically sensitive issues. Shares of mortgage REITs were particularly affected by the sharp rise in Treasury and agency MBS yields.

Equity prices for large domestic banks have increased 24 percent since the end of 2012 (figure 38). However, they have yet to fully recover from the very depressed levels reached during the financial crisis. Standard measures of the profitability of bank holding companies (BHCs) edged down in the first quarter but remained in the upper end of their subdued post-crisis range. BHC profits were held down by modest noninterest income and a further narrowing of net interest margins. By contrast, profits were supported by additional reductions

in noninterest expenses and decreases in provisioning for loan losses, as indicators of credit quality improved further in every major asset class. Banks' allowances for loan and lease losses continued to trend down as charge-offs of bad loans once again exceeded provisions in the first quarter (figure 40).

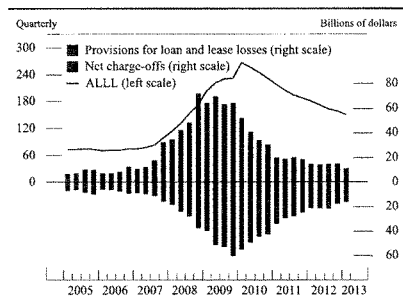
Risk-based capital ratios (based on current Basel I definitions) of the 25 largest BHCs decreased in the first quarter because of the adoption of the new market risk capital rule, while risk-based capital ratios at smaller BHCs edged up.<sup>7</sup> Nonetheless, BHCs of all sizes remained well capitalized by historical standards as they prepare for the transition to stricter Basel III requirements (see the box "Developments Related to Financial Stability"). Aggregate credit provided by commercial banks continued to increase in the first half of 2013 (figure 41).

#### M2 rose at a more moderate rate, but balances remain elevated

M2 has increased at an annual rate of about 4¼ percent since the end of 2012, notably slower than the pace registered last year. However, holdings of M2 assets—including their largest component, liquid deposits—remained elevated relative to what would have been expected based on historical relationships with nominal income and interest rates, likely due to investors' continued preference to hold safe and liquid assets. The monetary base—which is equal to the sum of currency and reserve balances—increased briskly over the first half of the year, driven mainly by the significant rise in reserve balances due to the Federal Reserve's asset purchases.

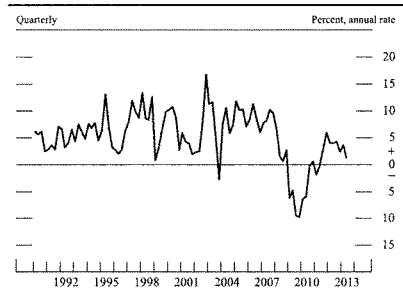
7. The new market risk capital rule requires banking organizations with significant trading activities to adjust their capital requirements to better account for the market risks of those activities. For more information on this change, see Board of Governors of the Federal Reserve System (2012), "Federal Reserve Board Approves Final Rule to Implement Changes to Market Risk Capital Rule," press release, June 7, [www.federalreserve.gov/newsevents/press/bcreg/20120607b.htm](http://www.federalreserve.gov/newsevents/press/bcreg/20120607b.htm).

40. Provisions and charge-offs, 2005–13



NOTE: ALLL is the allowance for loan and lease losses.  
SOURCE: Federal Reserve Board, Reporting Form FR Y-9C, "Consolidated Financial Statements for Bank Holding Companies."

41. Change in total bank credit, 1990–2013



NOTE: The data extend through 2013:Q2. The data are seasonally adjusted.  
SOURCE: Federal Reserve Board, Statistical Release H.8, "Assets and Liabilities of Commercial Banks in the United States."

## Developments Related to Financial Stability

As highlighted in previous *Monetary Policy Reports*, the Federal Reserve has devoted increased resources to monitoring potential risks to financial stability. In addition to new regulations to strengthen the financial system, comprehensive monitoring is necessary because the system will evolve in response to new regulations, and because market participants' risk tolerance and perceptions tend to vary with economic and financial conditions. The Federal Reserve's increased monitoring efforts focus on identifying financial vulnerabilities—features of the financial system that can transmit and amplify the effects of unforeseen adverse events. For example, vulnerabilities can arise through excess leverage, through excess maturity transformation—that is, financing long-term assets with short-term debts—and through the complexity and interconnectedness of financial institutions. In recent years, a stronger regulatory framework and an enhanced focus by the private sector on potential risks have contributed to significant reductions in vulnerabilities and a more resilient U.S. financial system. However, important challenges remain, and the Federal Reserve will monitor developments regarding ongoing and emerging financial vulnerabilities.

The financial strength of the banking sector continued to improve last year. Bank holding companies (BHCs) increased the proportion of common equity in their funding base, continuing a trend of recent years. For example, the ratio of tier 1 common equity to risk-weighted assets among the firms participating in the recent Comprehensive Capital Analysis and Review and the stress tests mandated by the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Dodd-Frank Act) has more than doubled since the first similar stress test in 2009 and totaled 11.3 percent at the beginning of this year.<sup>1</sup> These stress tests are regulatory tools that the Federal Reserve uses to help ensure that financial institutions have robust capital-planning processes and are able to maintain adequate capital even following an extended period of adverse economic conditions. Indeed, capital ratios maintained under the hypothetical “severely adverse” macroeconomic scenario specified in the most recent stress tests suggest that BHCs have become more resilient to possible adverse macroeconomic shocks.

The banking system has also improved its liquidity position relative to pre-crisis levels. For example,

large BHCs' holdings of cash and high-quality liquid securities have risen from less than 16 percent of total assets in 2007 to 24 percent in the first quarter of 2013. Further, firms have sharply reduced their dependence on wholesale short-term funding, which proved highly unreliable during the crisis.

In addition, the credit risk of banks' assets has generally declined as banks have tightened lending standards and as some borrowers—both households and nonfinancial firms—have strengthened their financial positions by refinancing their debt at lower interest rates. This improvement has also been aided by the rise in house prices and equity values amid the recovery in economic activity. Consistent with all of these improvements, premiums on BHC credit default swaps (CDS) have fallen by nearly one-half from their 2009 levels. Similarly, systemic risk measures for these firms—which assess the amount of financial stress that would be realized in the event of a sizable financial shock based on CDS premiums, stock prices, and correlations—have declined substantially.

The significant amount of funding channeled through the “shadow banking” sector contributed to the financial system's fragility before the financial crisis, largely because of that sector's reliance on wholesale short-term funds to finance longer-term assets. Activity in this sector contracted significantly in the wake of the crisis and has expanded only moderately since the post-crisis trough. The risks inherent in some forms of shadow banking have been addressed through tighter banking regulations that require more recognition of exposures to off-balance-sheet vehicles, such as asset-backed commercial paper conduits. Nonetheless, significant vulnerabilities associated with wholesale short-term funding remain.

While the extended period of low interest rates has contributed to improved economic conditions and increased resiliency in the financial sector, it could also lead investors to “reach for yield” through excessive leverage, duration risk, credit risk, or other forms of risk-taking. There are signs that the low level of interest rates, as well as improved investor sentiment, has contributed to a modest pickup in leverage and maturity transformation in some markets. However, the recent rise in interest rates and volatility may have led some investors to reevaluate their risk-taking behavior.

Securitization markets grew rapidly over the past year and a half, as investors reportedly increased their exposure to structured finance products in order to boost returns. New U.S. securitization issuance excluding agency residential mortgage-backed securities (MBS) was roughly \$500 billion (at an annual rate) in the first quarter, up sharply from the level a year ago but still well below the peak of over

1. Information on these stress tests and the Comprehensive Capital Analysis and Review is available on the Federal Reserve Board's website at [www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm](http://www.federalreserve.gov/bankinforeg/stress-tests-capital-planning.htm).

\$2 trillion reached before the crisis. Collateralized loan obligations and commercial mortgage-backed securities (CMBS) accounted for a substantial part of the increase. Dealer responses in the June Senior Credit Officer Opinion Survey on Dealer Financing Terms indicate that demand for funding of securitized products, such as non-agency residential MBS and CMBS, had increased, suggesting some investments were being funded with short-term debt.<sup>2</sup>

In addition, low Treasury yields likely boosted the pace of investment in corporate bond and loan funds and contributed to sizable issuance of high-yield bonds and syndicated leveraged loans this year. However, spreads of yields on corporate bonds relative to those on comparable-maturity Treasury securities were not unusually narrow by historical standards, and purchases generally do not appear to have been financed with leverage or short-term funding, which should limit the risk of a disorderly unwind. As Treasury yields have risen since the beginning of May, corporate bond funds have experienced substantial outflows and bond yields have risen, although spreads over Treasury securities have posted small mixed changes. For syndicated leveraged loans, underwriting standards, such as the number of covenants and required debt-to-earnings multiples, have been easing, and continued flows to loan funds suggest pressures in underwriting may continue. Banking supervisors are currently working on implementing new supervisory guidance on leveraged lending practices, which should help mitigate the potential for a buildup of vulnerabilities.<sup>3</sup>

Agency mortgage real estate investment trusts (agency REITs) are another area where investors have displayed a willingness to take on risk to achieve higher returns. Agency REITs purchase agency MBS, funded largely by relatively short-term repurchase agreements, and thus combine high leverage with extensive maturity transformation, creating the potential to disrupt MBS markets if, for instance, rates were to rise sharply. Amid the recent increase in interest rates and widening of MBS spreads, stock prices of agency REITs have fallen about 20 percent, and some of these firms have reportedly sold assets to offset the resulting increase in their leverage. To

date, sales by these agency REITs and other funds with similar positions reportedly have amplified the initial rise in rates and spreads, but market functioning has not been impaired.

At commercial banking firms, the low interest rate environment in recent years has been pressuring net interest margins, and some firms appear to have extended the duration of their securities holdings to boost profits. Supervisors have been working with banks on interest rate risk-management practices to ensure that the banks' practices comply with the interagency advisory that was issued in 2010.<sup>4</sup> Improved practices should make the banks more resilient to unexpected interest rate shocks. The low interest rates also appear to be pressuring profits among life insurance companies, and some insurers have added marginally more credit and liquidity risk to their asset portfolios.

The Federal Reserve has continued to make progress on financial reform. The Federal Reserve recently finalized its proposal to implement the Basel III capital requirements. The final rule promotes a stronger banking system by increasing the quantity and quality of required regulatory capital, which is accomplished by setting a new tier 1 common equity capital ratio of 4.5 percent of risk-weighted assets (RWA), a capital conservation buffer of 2.5 percent of RWA, and strict eligibility criteria for regulatory capital instruments. In addition, the rule contains a supplementary minimum leverage ratio and a countercyclical capital buffer for large and internationally active banking organizations. Furthermore, the Federal Reserve is working this year toward finalization of additional rules that would implement sections 165 and 166 of the Dodd-Frank Act, a broad set of enhanced prudential standards for BHCs with total assets of \$50 billion or more and systemically important nonbank financial companies designated by the Financial Stability Oversight Council (FSOC). The rules relating to resolution planning and stress testing are already completed, and the Federal Reserve is working to finalize rules for capital requirements, liquidity requirements, single-counterparty credit limits, an early remediation regime, and risk-management requirements. The FSOC recently designated two nonbank financial firms, and it has proposed the designation of a third firm, which has requested a hearing before the council.

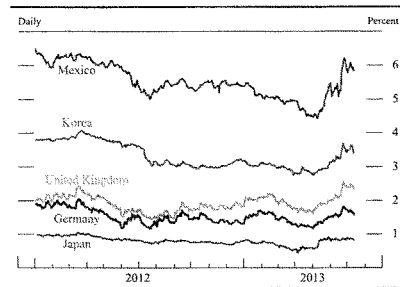
2. The survey is available on the Federal Reserve Board's website at [www.federalreserve.gov/econresdata/releases/scos.htm](http://www.federalreserve.gov/econresdata/releases/scos.htm).

3. See Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation (2013), "Interagency Guidance on Leveraged Lending," Supervision and Regulation Letter SR 13-3 (March 21), [www.federalreserve.gov/bankinforeg/srletters/sr1303.htm](http://www.federalreserve.gov/bankinforeg/srletters/sr1303.htm).

4. See Board of Governors of the Federal Reserve System, Division of Banking Supervision and Regulation (2010), "Interagency Advisory on Interest Rate Risk," Supervision and Regulation Letter SR 10-1 (January 11), [www.federalreserve.gov/boarddocs/srletters/2010/sr1001.htm](http://www.federalreserve.gov/boarddocs/srletters/2010/sr1001.htm).

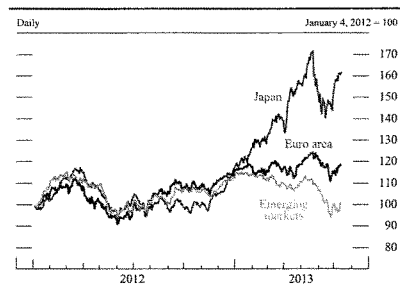


42. 10-year nominal benchmark yields, 2012–13



SOURCE: Bloomberg.

43. Equity indexes for selected foreign economies, 2012–13



SOURCE: For emerging markets, Morgan Stanley Emerging Markets MEXF Capital Index; for the euro area, Dow Jones Euro STOXX Index; for Japan, Tokyo Stock Exchange (TOPIX); all via Bloomberg.

### International Developments

#### Foreign bond yields have risen and asset prices have declined, on net, especially in emerging market economies

Foreign benchmark sovereign yields have moved somewhat higher, on net, since the beginning of the year (figure 42). Rates moved lower in March and April, in part reflecting weak incoming data on activity; anticipation of the Bank of Japan's (BOJ) asset purchase program may have also contributed to declining Japanese government bond (JGB) yields early in the year. Since early May, however, as with U.S. Treasury securities, sovereign yields have risen worldwide, as investors responded to better-than-expected U.S. economic data and to Federal Reserve communications about monetary policy. Sovereign yields are up, on net, in Europe, Japan, and Canada and have increased substantially in Korea, Mexico, and other emerging market economies (EMEs).

Equity indexes in the major advanced foreign economies (AFEs) rose earlier in the year (figure 43), especially in Japan, where stock prices continued to soar as Prime Minister Abe's ambitious stimulus program began to take shape. However, since mid-May, equity prices have declined on net. Corporate bond issuance eased somewhat in June as rates climbed higher, but year-to-date issuance totals are still strong relative to recent years. Since the start of the year, sovereign and corporate credit spreads have narrowed slightly. Financial stresses in Europe have remained well below their highs last year despite banking problems in Cyprus and political tensions in several other European countries.

The significantly higher interest rates in EMEs have been accompanied by sharp moves in other EME financial markets. Since mid-May, stock prices have declined and credit spreads have widened markedly. EME bond and equity funds have also experienced sizable outflows, as investors reassessed the economic outlook in

these economies as well as the returns on EME assets relative to those in advanced economies.

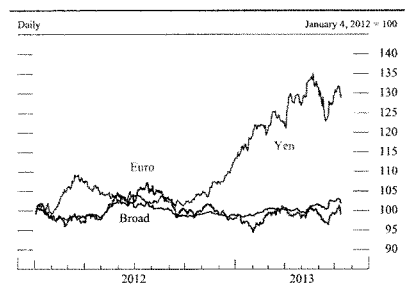
The improved sentiment toward the U.S. economic outlook and anticipation of less-accommodative monetary policy have pushed the U.S. dollar higher against a broad set of currencies since the end of 2012 (figure 44). In particular, the dollar has appreciated sharply against the Japanese yen, on net, as the BOJ adopted a more accommodative monetary policy stance.

#### Activity in the advanced foreign economies remained subdued despite a pickup . . .

Activity in the AFEs improved to a still-muted pace in the first half of 2013 (figure 45), supported in part by stronger exports and the easing in financial stresses in Europe. The euro-area economy shrank further in the first quarter, but the pace of contraction moderated as consumption stabilized. In the United Kingdom, real GDP resumed growing, at a 1¼ percent pace, in the first quarter; retail sales and the purchasing managers index (PMI) suggest that growth firmed in the second quarter. First-quarter activity accelerated in Japan, reflecting a strong rebound of exports and a pickup in consumption. Canadian growth also firmed in the first quarter, and the labor market notched solid employment gains through the second quarter.

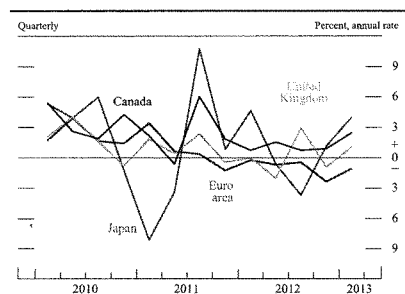
With activity weak and inflationary pressures low, several foreign central banks took additional steps to support their economies. (See the box “The Expansion of Central Bank Balance Sheets” for a broader overview of central bank actions.) The European Central Bank (ECB) and the Reserve Bank of Australia lowered their main policy rates, and the ECB stated after its July meeting that it will keep key policy rates low “for an extended period.” The Bank of England extended its Funding for Lending Scheme until January 2015 and increased banks’ incentives to lend to small and

44. U.S. dollar exchange rate against broad index and selected major currencies, 2012–13



NOTE: The data are in foreign currency units per dollar.  
SOURCE: Federal Reserve Board, Statistical Release H.10, “Foreign Exchange Rates.”

45. Real gross domestic product growth in selected advanced foreign economies, 2010–13



SOURCE: For Canada, Statistics Canada; for the euro area, Eurostat; for Japan, Cabinet Office of Japan; for the United Kingdom, Office for National Statistics.

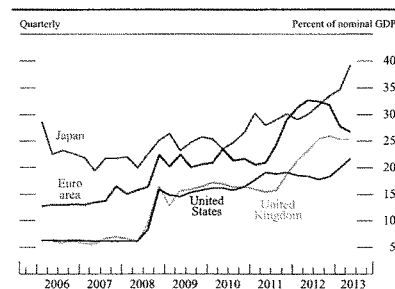
## The Expansion of Central Bank Balance Sheets

The severity of the recession associated with the global financial crisis led central banks in some of the advanced economies to take policy measures that drove short-term market interest rates nearly to zero. As the recession dragged on, however, several major central banks—including the Federal Reserve, the Bank of England (BOE), the Bank of Japan (BOJ), and the European Central Bank (ECB)—sought to provide further economic stimulus through the adoption of unconventional policies that aimed to reduce longer-term interest rates and ease financial conditions more generally. These policies, which included purchases of longer-term assets and repurchase operations with extended terms to maturity, left the central banks with balance sheets of unprecedented size. Total assets of the Federal Reserve rose from about 6 percent of gross domestic product (GDP) (around \$870 billion) in the summer of 2007 to 22 percent of GDP (\$3.5 trillion) as of June 2013. As shown in figure A, the assets of the BOE, BOJ, and ECB also increased markedly relative to the sizes of their economies. This box offers some detail on the circumstances and policies that led to the balance sheet expansions for these central banks.

Like the Federal Reserve, the BOE began its asset purchases relatively soon after the advent of the global financial crisis. Also like the Federal Reserve, the goals of the BOE's purchases were to help lower longer-term interest rates and to ease financial conditions more broadly, thereby providing further support for economic growth. During its initial program, between March 2009 and January 2010, the BOE bought £200 billion (14 percent of GDP) of longer-term assets, mostly U.K. government bonds, with commercial

paper and corporate bonds making up the residual. The BOE resumed purchases in October 2011 as the economy continued to struggle amid spillovers from the euro-area financial crisis. Total securities holdings are currently near £375 billion, or almost 25 percent of GDP, and account for nearly all of the BOE's balance sheet.

A. Central bank assets in selected advanced economies, 2006–13



NOTE: For the United Kingdom, the series starts in 2006:Q2. For the euro area, 2013:Q2 assets are as of the end of May. For each economy, 2013:Q2 assets are divided by 2013:Q1 GDP.

SOURCE: For the euro area, European Central Bank and Eurostat; for Japan, Bank of Japan and Cabinet Office of Japan; for the United Kingdom, Bank of England and Office for National Statistics; for the United States, Federal Reserve Board and Bureau of Economic Analysis.

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Compared with the Federal Reserve or the BOE, initially the BOJ did not expand its balance sheet as much during the crisis, but more recently it has laid out plans for substantial asset purchases. By late 2010, with entrenched deflation and GDP still well below its pre-crisis peak, the BOJ announced its Asset Purchase Program of about ¥35 trillion (about 7 percent of GDP) and later expanded the size of the program to ¥101 trillion by the end of 2012. But in January of this year, the BOJ announced plans to begin a series of open-ended asset purchases in pursuit of its now-higher 2 percent inflation target. And, finally, in April the BOJ announced that it would enter a new phase of monetary easing, accelerating asset purchases to double the monetary base within two years in pursuit of its inflation target. The BOJ also substantially extended the maturity of its Japanese government bond (JGB) purchases. All maturities, including 40-year bonds, are eligible, and the average maturity of JGB purchases has risen from slightly less than 3 years to about 7 years. To date, asset purchases have increased the size of the BOJ's balance sheet to almost 40 percent of GDP. The BOJ expects its balance sheet to reach approximately 60 percent of 2012 GDP by the end of 2014.

In contrast to the other central banks, the ECB has taken a different approach to balance sheet expansion but, nonetheless, one that has offered support to economic activity. The ECB has conducted very few outright purchase operations. The main exception was the Securities Markets Programme, terminated in late 2012, under which the ECB holdings reached almost €220 billion in peripheral sovereign debt in January 2012 (about 2.5 percent of euro-area GDP). Instead, its substantial balance sheet expansion has been driven primarily by loans to banks and, in

particular, longer-term refinancing operations (LTROs), which have maturities of one month or longer. In the fall of 2008, departing from its past practice of offering banks a fixed amount of loans at interest rates determined by auction, the ECB announced it would provide unlimited collateralized loans to banks at a fixed rate. The size of the ECB's balance sheet increased about €0.5 trillion (almost 6 percent of the GDP of the euro area) to about €2 trillion (around 22 percent of euro-area GDP) in 2008 and remained near that level until mid-2011. Severely deteriorating financial conditions in Europe led the ECB in December 2011 to announce LTROs with maturities of three years. Banks drew a bit more than €1 trillion under these LTROs, pushing the ECB's balance sheet to over 30 percent of GDP. The stated aim of the LTROs was to provide liquidity to the financial system rather than to ease monetary policy. However, insofar as the LTROs helped pushed down bank funding costs and sovereign yields in vulnerable European countries and alleviated financial stresses more generally, they likely provided some support to economic activity as well. By the same token, the ECB's latest program, Outright Monetary Transactions (OMT), is focused on reducing the currency risk premium embedded in European sovereign bonds, which has the benefit of easing financial conditions generally but especially in countries with high sovereign spreads. To this point, no purchases have been made under the OMT program. Even so, its availability as a backstop appears to have helped ease financial stresses in Europe, which, in turn, has likely reduced the downward pressure on the economy.

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medium-sized businesses. In April, the BOJ announced a sharp rise in its purchases of JGBs and other assets, as well as an extension of the maturity of the JGBs that it purchases.

Authorities in some AFEs also eased fiscal policy in response to still-subdued activity. The Japanese parliament approved a fiscal stimulus package worth about 2 percent of GDP, with the bulk of the spending directed to infrastructure projects. European authorities postponed deadlines for several euro-area countries, including France and Spain, to reduce fiscal deficits below 3 percent of GDP.

#### **. . . while growth slowed in the emerging market economies**

Aggregate real GDP growth in the EMEs picked up in the fourth quarter of 2012 despite the weakness in Europe and the United States, led by a strong performance of the Chinese economy. However, EME growth slowed considerably in the first quarter, in part as a step-down in Chinese growth weighed on activity in the rest of emerging Asia and on the commodity-dependent economies of South America. Recent indicators of exports, industrial production, and PMIs suggest that EME activity remained subdued in the second quarter. Amid concerns about economic growth and lack of inflationary pressures, the central banks of several countries in Asia and Latin

America further eased monetary policy over the first half of the year. However, more recently, concerns about reversal of capital inflows and currency depreciation pressures are giving EME central banks pause about further rate cuts, and a few have begun to raise rates.

In China, macroeconomic data for the second quarter indicate that growth continued to be modest by the standards of recent years. Although retail sales rose slightly faster in April and May than in the subdued first quarter, fixed investment increased at roughly its first-quarter pace.

Activity also cooled across Latin America. In Mexico, growth had already slowed in the second half of last year, weighed down by weaker U.S. manufacturing activity. Growth slowed further in the first quarter, as exports declined and domestic demand weakened. In response, the Bank of Mexico reduced its policy rate for the first time since mid-2009. Mexican activity appears to have remained subdued in the second quarter. Brazilian real GDP growth stepped down a little in the first quarter, extending the lackluster performance of the past two years. Indicators of economic activity for the second quarter, including industrial production and exports, have been mixed. Unlike many of its EME counterparts, Brazil's central bank raised its policy rate to combat rising inflation.

## PART 2 MONETARY POLICY

*With unemployment still well above normal levels and inflation below its longer-run objective, the Federal Open Market Committee (FOMC) has continued its highly accommodative monetary policy this year by maintaining its forward guidance with regard to the target for the federal funds rate and continuing its program of large-scale asset purchases.*

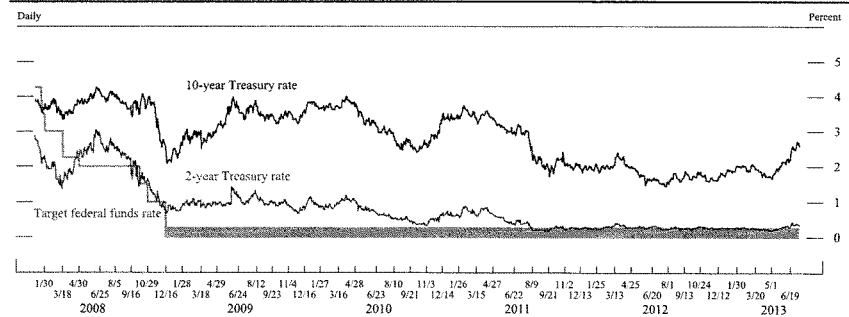
### To foster the attainment of maximum employment and price stability, the FOMC kept in place its forward guidance on the path of the federal funds rate . . .

With unemployment still elevated and declining only gradually, and inflation having moved further below the Committee's 2 percent longer-run objective, the FOMC has maintained its highly accommodative monetary policy stance this year. Because the target range for the federal funds rate remains at its effective lower bound, the Committee has been relying mainly on its forward guidance about the future path of the federal funds rate and on its program of large-scale asset purchases to make progress toward its mandated objectives.

With regard to the federal funds rate, the Committee has continued to indicate its expectation that the current exceptionally

low target range of 0 to ¼ percent will be appropriate at least as long as the unemployment rate remains above 6½ percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored (figure 46). In determining how long to maintain its target range for the federal funds rate, the Committee has stated that it would also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The FOMC also has reiterated that a highly accommodative stance of monetary policy would remain appropriate for a considerable time after the asset purchase program ends and the economic recovery strengthens. Moreover, the Committee has indicated that when it decides to begin

46. Selected interest rates, 2008–13



NOTE: The 2-year and 10-year Treasury rates are the constant-maturity yields based on the most actively traded securities. The dates on the horizontal axis are those of regularly scheduled Federal Open Market Committee meetings.  
SOURCE: Department of the Treasury; Federal Reserve Board.

to remove policy accommodation, it would take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

**. . . and maintained its policy of large-scale asset purchases . . .**

To sustain downward pressure on longer-term interest rates, support mortgage markets, and help make broader financial conditions more accommodative, the FOMC has continued its large-scale asset purchases; the Committee also has maintained its practices of reinvesting principal payments it receives on agency debt and agency-guaranteed mortgage-backed securities (MBS) in new agency MBS and of rolling over maturing Treasury securities at auction. Over the first half of this year, purchases of longer-term securities totaled \$510 billion, with the Committee purchasing additional agency MBS at a pace of \$40 billion per month and longer-term Treasury securities at a pace of \$45 billion per month. The Committee reconfirmed at each meeting during the first half of 2013 that it would continue purchasing Treasury and agency MBS until the outlook for the labor market has improved substantially in a context of price stability.

In determining the size, pace, and composition of its asset purchases, the Committee has taken account of the likely efficacy and costs of such purchases. As noted in the minutes of the March FOMC meeting, most participants saw asset purchases as having a meaningful effect in easing financial conditions—for example, keeping longer-term interest rates, including mortgage rates, lower than they would be otherwise—and so supporting economic growth.<sup>8</sup> FOMC participants generally judged that these benefits outweighed the likely costs and risks of additional purchases. However, the Committee has continued to monitor those

8. See Board of Governors of the Federal Reserve System (2013), “Minutes of the Federal Open Market Committee, March 19–20, 2013,” press release, April 10, [www.federalreserve.gov/newsevents/press/monetary/20130410a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20130410a.htm).

costs and risks, including possible effects on financial stability, security market functioning, the smooth withdrawal of monetary accommodation when it eventually becomes appropriate, and the Federal Reserve’s net income.<sup>9</sup>

**. . . while providing additional information about potential adjustments to its asset purchases**

During the first half of 2013, the FOMC took various steps to provide greater clarity regarding its thinking about possible adjustments in the pace of asset purchases and the eventual cessation of those purchases. In its statement after the March meeting, the Committee added that the size, pace, and composition of its asset purchases would reflect the extent of progress toward its economic objectives, in addition to the likely efficacy and costs of such purchases.<sup>10</sup> And in May, to highlight its willingness to adjust the flow of purchases in light of incoming information, the Committee noted that it was prepared to increase or reduce the pace of its purchases to maintain appropriate policy accommodation as the outlook for the labor market or inflation changed.<sup>11</sup>

At the June FOMC meeting, Committee participants generally thought it would be helpful to provide greater clarity about the Committee’s approach to decisions about its asset purchase program and thereby reduce investors’ uncertainty about how it might

9. For further discussion of these issues, see the box “Efficacy and Costs of Large-Scale Asset Purchases” in Board of Governors of the Federal Reserve System (2013), *Monetary Policy Report* (Washington: Board of Governors, February), [www.federalreserve.gov/monetarypolicy/mpr\\_20130226\\_part2.htm](http://www.federalreserve.gov/monetarypolicy/mpr_20130226_part2.htm).

10. See Board of Governors of the Federal Reserve System (2013), “Federal Reserve Issues FOMC Statement,” press release, March 20, [www.federalreserve.gov/newsevents/press/monetary/20130320a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20130320a.htm).

11. See Board of Governors of the Federal Reserve System (2013), “Federal Reserve Issues FOMC Statement,” press release, May 1, [www.federalreserve.gov/newsevents/press/monetary/20130501a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20130501a.htm).

react to future economic developments. In choosing to provide this clarification, the Committee made no changes to its approach to monetary policy. Against this backdrop, Chairman Bernanke, at his postmeeting press conference, described a possible path for asset purchases that the Committee would anticipate implementing if economic conditions evolved in a manner broadly consistent with the outcomes the Committee saw as most likely.<sup>12</sup> The Chairman noted that such economic outcomes involved continued gains in labor markets, supported by moderate growth that picks up over the next several quarters, and inflation moving back toward its 2 percent objective over time. If the economy were to evolve broadly in line with the Committee's expectations, the FOMC would moderate the pace of purchases later this year and continue to reduce the pace of purchases in measured steps until purchases ended around the middle of next year, at which time the unemployment rate would likely be in the vicinity of 7 percent, with solid economic growth supporting further job gains and inflation moving back toward the FOMC's 2 percent target.

In emphasizing that the Committee's policy was in no way predetermined, the Chairman noted that if economic conditions improved faster than expected, the pace of asset purchases could be reduced somewhat more quickly. Conversely, if the outlook for the economy or the labor market became less favorable, inflation did not move over time toward the Committee's 2 percent longer-term objective, or financial conditions were judged to be inconsistent with further progress in the labor markets, reductions in the pace of purchases could be delayed or the pace increased for a time. The Chairman also drew a strong distinction between the asset purchase program and the forward guidance regarding the target for the federal funds rate, noting that the Committee anticipates that there

will be a considerable period between the end of asset purchases and the time when it becomes appropriate to increase the target for the federal funds rate.

### **The Committee's large-scale asset purchases led to a significant increase in the size of the Federal Reserve's balance sheet**

As a result of the Committee's large-scale asset purchase program, Federal Reserve assets have increased significantly since the end of last year (figure 47). The par value of the System Open Market Account's (SOMA) holdings of U.S. Treasury securities increased about \$300 billion to \$2 trillion, and the par value of its holdings of agency debt and MBS increased about \$270 billion, on net, to \$1.3 trillion.<sup>13</sup> These asset purchases accounted for nearly all of the increase in total assets of the Federal Reserve and were accompanied by a significant rise in reserve balances over the period. As of July 10, the SOMA's holdings of Treasury and agency securities constituted 56 percent and 36 percent, respectively, of the \$3.5 trillion in total Federal Reserve assets. By contrast, balances of facilities established during the financial crisis declined further from already low levels.<sup>14</sup>

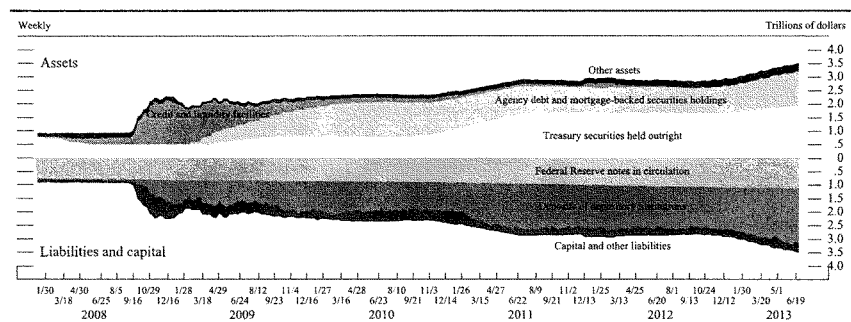
13. The difference between changes in the par value of SOMA holdings and the amount of purchases of securities since the end of 2012 reflects, in part, lags in settlements.

14. The outstanding amount of dollars provided through the temporary U.S. dollar liquidity swap arrangements with foreign central banks decreased \$7 billion to about \$1 billion because of the improvement in offshore U.S. dollar funding markets. During the financial crisis, the Federal Reserve created several special lending facilities to support financial institutions and markets and strengthen economic activity. These facilities were closed by 2010; however, some loans made under the Term Asset-Backed Securities Loan Facility, which is closed to new lending, remain outstanding and will mature over the next two years. Other programs supported certain specific institutions in order to avert disorderly failures that could have resulted in severe dislocations and strains for the financial system as a whole and harmed the U.S. economy. While the loans made by the Federal Reserve under these programs have been repaid, the Federal Reserve will continue to receive cash flows generated from assets remaining in the

12. See Ben S. Bernanke (2013), "Transcript of Chairman Bernanke's Press Conference," June 19, [www.federalreserve.gov/mediacenter/files/FOMCpresconf20130619.pdf](http://www.federalreserve.gov/mediacenter/files/FOMCpresconf20130619.pdf).



47. Federal Reserve assets and liabilities, 2008–13



NOTE: The data extend through July 10, 2013. Credit and liquidity facilities consists of primary, secondary, and seasonal credit; term auction credit; central bank liquidity swaps; support for Maiden Lane, Bear Stearns, and AIG; and other credit facilities, including the Primary Dealer Credit Facility, the Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility, the Commercial Paper Funding Facility, and the Term Asset-Backed Securities Loan Facility. Other assets includes unamortized premiums and discounts on securities held outright. Other liabilities includes reverse repurchase agreements, the U.S. Treasury General Account, and the U.S. Treasury Supplementary Financing Account. The dates on the horizontal axis are those of regularly scheduled Federal Open Market Committee meetings.

SOURCE: Federal Reserve Board, Statistical Release H.4.1, "Factors Affecting Reserve Balances," [www.federalreserve.gov/releases/h41/](http://www.federalreserve.gov/releases/h41/).

Interest income on the SOMA portfolio continued to support a substantial sum of remittances to the Treasury Department. In the first quarter, the Federal Reserve provided more than \$15 billion of such distributions to the Treasury.<sup>15</sup> The Federal Reserve has also released detailed transactions data on open market operations and discount window operations with a two-year lag in compliance with the Dodd–Frank Wall Street Reform and Consumer Protection Act of 2010.

#### The Committee also reviewed the principles for policy normalization

During its May and June meetings, the FOMC reviewed the Federal Reserve's principles for the eventual normalization of the stance of monetary policy, which initially were published in the minutes of the Committee's June 2011

portfolios established in connection with such support, principally the portfolio of Maiden Lane LLC.

15. The *Quarterly Report on Federal Reserve Balance Sheet Developments* for the first quarter is available on the Federal Reserve Board's website at [www.federalreserve.gov/monetarypolicy/quarterly-balance-sheet-developments-report.htm](http://www.federalreserve.gov/monetarypolicy/quarterly-balance-sheet-developments-report.htm).

meeting.<sup>16</sup> The Committee's discussion included various aspects of those principles—the size and composition of the SOMA portfolio in the longer run, the use of a range of reserve-draining tools, the approach to sales of securities, the eventual framework for policy implementation, and the relationship between the principles and the economic thresholds in the Committee's forward guidance on the federal funds rate. Meeting participants, in general, continued to view the broad principles set out in 2011 as still applicable. Nonetheless, they agreed that many of the details of the eventual normalization process would likely differ from those specified two years ago, that the appropriate details would depend in part on economic and financial developments between now and the time when it becomes appropriate to begin normalizing monetary policy, and that the Committee would need to provide additional information about its intentions as that time approaches. Participants continued

16. See Board of Governors of the Federal Reserve System (2011), "Minutes of the Federal Open Market Committee, June 21–22, 2011," press release, July 12, [www.federalreserve.gov/newsevents/press/monetary/20110712a.htm](http://www.federalreserve.gov/newsevents/press/monetary/20110712a.htm).

to think that the Federal Reserve should, in the long run, hold predominantly Treasury securities. Most, however, now anticipated that the Committee would not sell agency MBS as part of the normalization process, although some indicated that limited sales might be warranted in the longer run to reduce or eliminate residual holdings.

**The Federal Reserve continued to test tools that could potentially be used to manage reserves**

As part of the Federal Reserve's ongoing program to ensure the readiness of tools to manage reserves, the Federal Reserve conducted a series of small-scale transactions with eligible counterparties. During the first half of 2013, the Federal Reserve conducted four repurchase agreement (repo) operations and three reverse repurchase agreement (reverse repo) operations. Operation sizes ranged between \$0.2 and \$2.8 billion using all eligible collateral types. While the repo transactions

were conducted only with primary dealers, two of the reverse repo operations were open to the expanded set of eligible counterparties, which include not only primary dealers, but also banks, government-sponsored enterprises, and money market funds.<sup>17</sup> In addition, the Federal Reserve Board conducted three operations for 28-day term deposits under the Term Deposit Facility (TDF). These operations included two competitive single-price TDF auctions totaling \$3 billion in deposits and an offering with a fixed-rate, full-allotment format, which totaled \$10 billion in deposits.

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17. To prepare for the potential need to conduct large-scale reverse repo transactions, the Federal Reserve Bank of New York is developing arrangements with an expanded set of counterparties with which it can conduct these transactions. These counterparties are in addition to the existing set of primary dealer counterparties with which the Federal Reserve can already conduct reverse repos. The list of the expanded set of counterparties is available on the Federal Reserve Bank of New York's website at [www.newyorkfed.org/markets/expanded\\_counterparties.html](http://www.newyorkfed.org/markets/expanded_counterparties.html).

## PART 3

### SUMMARY OF ECONOMIC PROJECTIONS

The following material appeared as an addendum to the minutes of the June 18–19, 2013, meeting of the Federal Open Market Committee.

In conjunction with the June 18–19, 2013, Federal Open Market Committee (FOMC) meeting, meeting participants—the 7 members of the Board of Governors and the 12 presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2013 through 2015 and over the longer run.<sup>18</sup> Each participant’s assessment was based on information available at the time of the meeting plus his or her judgment of appropriate monetary policy and assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant’s judgment of the value to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of

further shocks to the economy. “Appropriate monetary policy” is defined as the future path of policy that each participant deems most likely to foster outcomes for economic activity and inflation that best satisfy his or her individual interpretation of the Federal Reserve’s objectives of maximum employment and stable prices.

Overall, FOMC participants projected that, under appropriate monetary policy, the pace of economic recovery would gradually pick up over the 2013–15 period, and inflation would move up from recent very low readings but remain subdued (table 1 and figure 1). Almost all of the participants projected that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would be running at or a little below the Committee’s 2 percent objective in 2015.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over the next few

18. Although President Pianaletto was unable to attend the June 18–19, 2013, FOMC meeting, she submitted economic projections.

Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, June 2013  
Percent

Variable	Central tendency <sup>1</sup>				Range <sup>2</sup>			
	2013	2014	2015	Longer run	2013	2014	2015	Longer run
Change in real GDP.....	2.3 to 2.6	3.0 to 3.5	2.9 to 3.6	2.3 to 2.5	2.0 to 2.6	2.2 to 3.6	2.3 to 3.8	2.0 to 3.0
March projection.....	2.3 to 2.8	2.9 to 3.4	2.9 to 3.7	2.3 to 2.5	2.0 to 3.0	2.6 to 3.8	2.5 to 3.8	2.0 to 3.0
Unemployment rate.....	7.2 to 7.3	6.5 to 6.8	5.8 to 6.2	5.2 to 6.0	6.9 to 7.5	6.2 to 6.9	5.7 to 6.4	5.0 to 6.0
March projection.....	7.3 to 7.5	6.7 to 7.0	6.0 to 6.5	5.2 to 6.0	6.9 to 7.6	6.1 to 7.1	5.7 to 6.5	5.0 to 6.0
PCE inflation.....	0.8 to 1.2	1.4 to 2.0	1.6 to 2.0	2.0	0.8 to 1.5	1.4 to 2.0	1.6 to 2.3	2.0
March projection.....	1.3 to 1.7	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 2.0	1.4 to 2.1	1.6 to 2.6	2.0
Core PCE inflation <sup>3</sup> .....	1.2 to 1.3	1.5 to 1.8	1.7 to 2.0		1.1 to 1.5	1.5 to 2.0	1.7 to 2.3	
March projection.....	1.5 to 1.6	1.7 to 2.0	1.8 to 2.1		1.5 to 2.0	1.5 to 2.1	1.7 to 2.6	

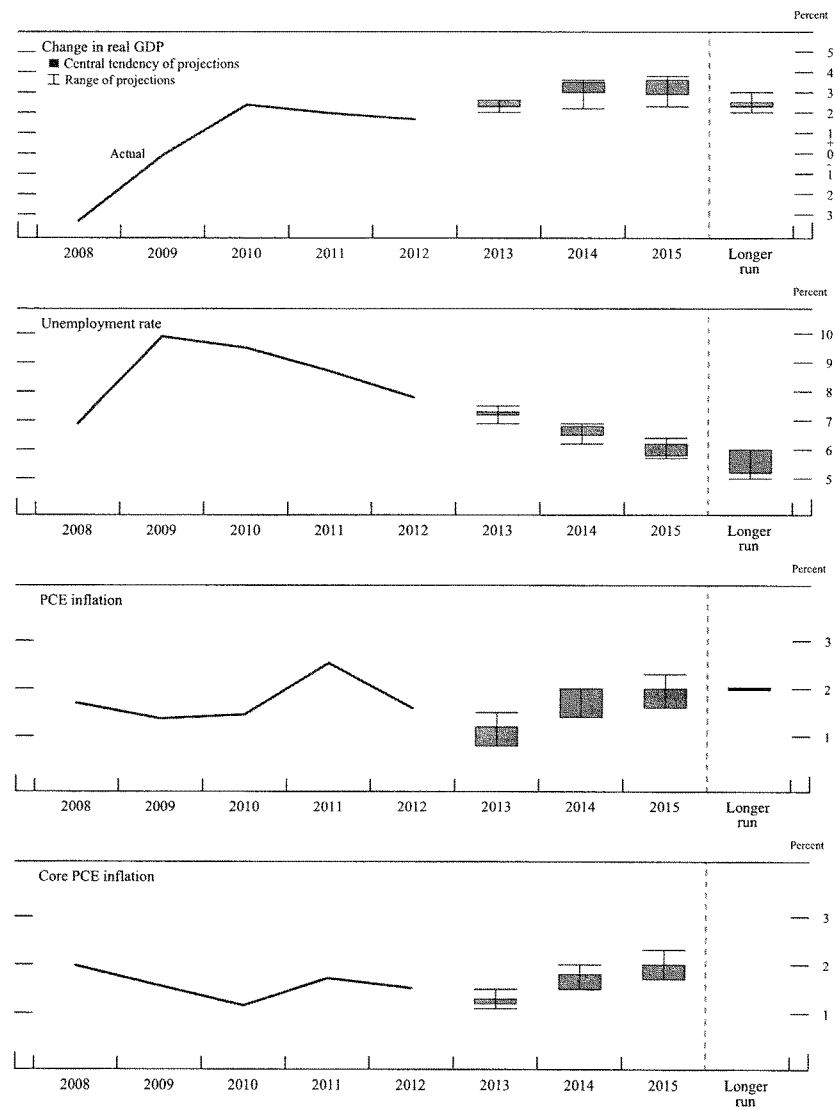
NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant’s projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant’s assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The March projections were made in conjunction with the meeting of the Federal Open Market Committee on March 19–20, 2013.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.

2. The range for a variable in a given year includes all participants’ projections, from lowest to highest, for that variable in that year.

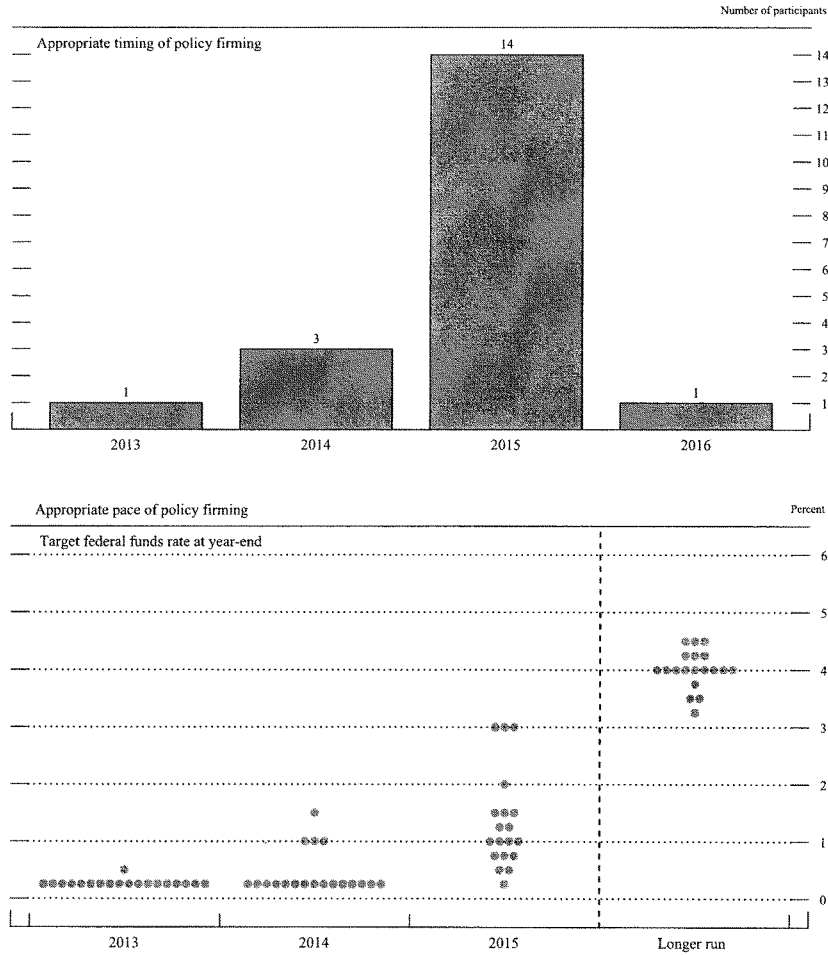
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2013–15 and over the longer run



Note: Definitions of variables are in the general note to table 1. The data for the actual values of the variables are annual.

Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In March 2013, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2013, 2014, 2015, and 2016 were, respectively, 1, 4, 13, and 1. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percentage point) of an individual participant's judgement of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

years to support continued progress toward maximum employment and a gradual return toward 2 percent inflation. Moreover, all participants but one judged that it would be appropriate to continue purchasing both agency mortgage-backed securities (MBS) and longer-term Treasury securities at least until later this year.

A majority of participants saw the uncertainty associated with their outlook for economic growth and the unemployment rate as similar to that of the past 20 years. An equal number of participants also indicated that the risks to the outlook for real gross domestic product (GDP) growth and the unemployment rate were broadly balanced. Some participants, however, continued to see downside risks to growth and upside risks to unemployment. A majority of participants indicated that the uncertainty surrounding their projections for PCE inflation was similar to historical norms, and nearly all considered the risks to inflation to be either broadly balanced or weighted to the downside.

#### *The Outlook for Economic Activity*

Participants projected that, conditional on their individual assumptions about appropriate monetary policy, the economy would grow at a faster pace in 2013 than it had in 2012. They also generally judged that growth would strengthen further in 2014 and 2015, in most cases to a rate above their estimates of the longer-run rate of output growth. Most participants noted that the high degree of monetary policy accommodation assumed in their projections, continued improvement in the housing sector and the accompanying rise in household net worth, and the absence of further fiscal tightening should result in a pickup in growth; however, they pointed to the foreign economic outlook as an ongoing downside risk.

The central tendency of participants' projections for real GDP growth was 2.3 to 2.6 percent for 2013, 3.0 to 3.5 percent for

2014, and 2.9 to 3.6 percent for 2015. Most participants noted that their projections were little changed since March, with the downward revisions to growth in 2013 reflecting the somewhat slower-than-anticipated growth in the first half. The central tendency for the longer-run rate of growth of real GDP was 2.3 to 2.5 percent, unchanged from March.

Participants anticipated a gradual decline in the unemployment rate over the forecast period; a large majority projected that the unemployment rate would not reach their estimates of its longer-run level before 2016. The central tendencies of participants' forecasts for the unemployment rate were 7.2 to 7.3 percent at the end of 2013, 6.5 to 6.8 percent at the end of 2014, and 5.8 to 6.2 percent at the end of 2015. These projections were slightly lower than in March, with participants reacting to recent data indicating that the unemployment rate had declined by a little more than they had previously expected. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail under appropriate monetary policy and in the absence of further shocks to the economy was 5.2 to 6.0 percent, the same as in March. Most participants projected that the unemployment rate would converge to their estimates of its longer-run normal rate in five or six years, while some judged that less time would be needed.

As shown in figures 3.A and 3.B, the distributions of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate were relatively narrow for 2013. Their projections for economic activity were more diverse for 2014 and 2015, reflecting their individual assessments of appropriate monetary policy and its economic effects, the likely rate of improvement in the housing sector and households' balance sheets, the domestic implications of foreign economic developments, the prospective path for U.S. fiscal policy, the extent of structural dislocations to the labor market, and a

number of other factors. The dispersion of participants' projections for 2015 and for the longer run was little changed relative to March; there was some reduction in the upper ends of the distributions in 2013 and 2014 for both real GDP growth and the unemployment rate.

### *The Outlook for Inflation*

All participants marked down their projections for both PCE and core PCE inflation in 2013, reflecting the low readings on inflation so far this year. Participants generally judged that the recent slowing in inflation partly reflected transitory factors, and their projections for inflation under appropriate monetary policy over the period 2014–15 were only a little lower than in March. Participants projected that both headline and core inflation would move up but remain subdued, with nearly all projecting that inflation would be equal to, or somewhat below, the FOMC's longer-run objective of 2 percent in each year. Specifically, the central tendency of participants' projections for overall inflation, as measured by the growth in the PCE price index, moved down to 0.8 to 1.2 percent in 2013 and was 1.4 to 2.0 percent in 2014 and 1.6 to 2.0 percent in 2015. The central tendency of the forecasts for core inflation shifted down slightly in 2013 and 2014, to 1.2 to 1.3 percent and 1.5 to 1.8 percent, respectively; the central tendency in 2015 was little changed and broadly similar to that of headline inflation. In discussing factors likely to return inflation to near the Committee's inflation objective of 2 percent, several participants noted that the reversal of transitory factors currently holding down inflation would cause inflation to move up a little in the near term. In addition, many participants viewed the combination of stable inflation expectations and diminishing resource slack as likely to lead to a gradual pickup in inflation toward the Committee's longer-run objective.

Figures 3.C and 3.D provide information on the diversity of participants' views about

the outlook for inflation. The range of participants' projections for overall and core inflation in 2013 shifted down, while those ranges narrowed in 2014–15. The distributions for core and overall inflation in 2015 remained concentrated near the Committee's longer-run objective, and all participants continued to project that overall inflation would converge to the FOMC's 2 percent goal over the longer run.

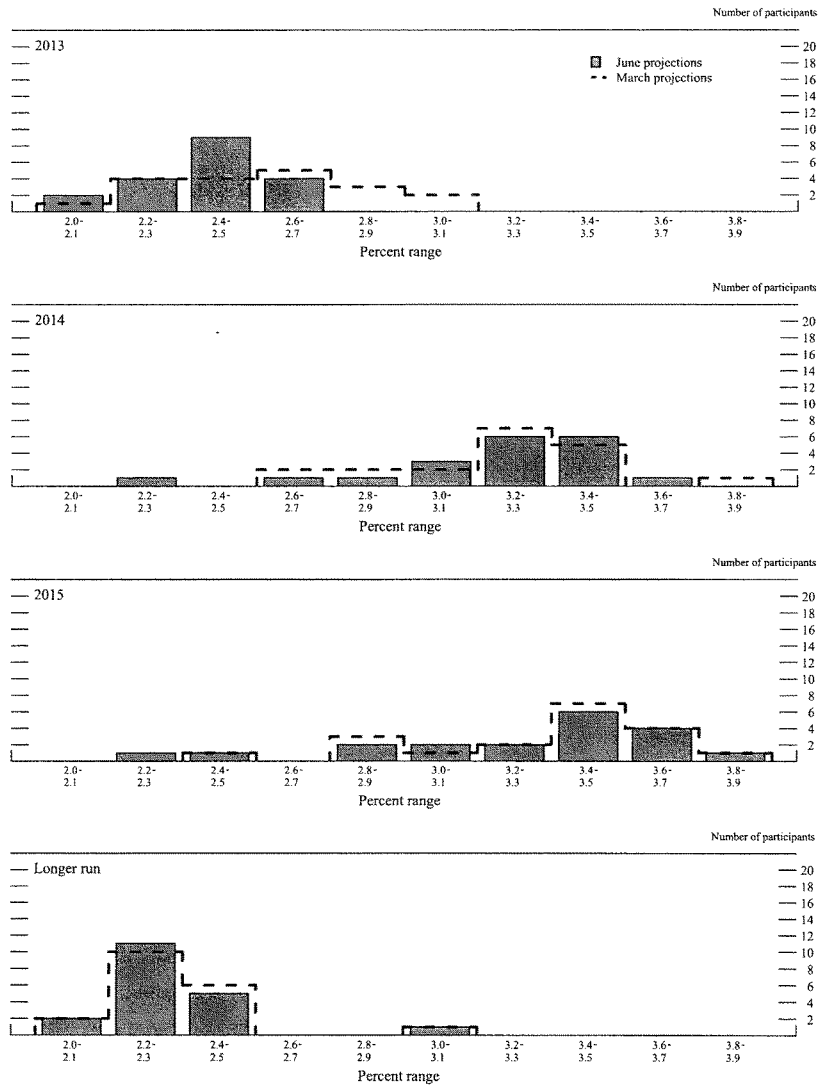
### *Appropriate Monetary Policy*

As indicated in figure 2, most participants judged that exceptionally low levels of the federal funds rate would remain appropriate for a couple of years. In particular, 14 participants thought that the first increase in the target federal funds rate would not be warranted until sometime in 2015, and one judged that policy firming would likely not be appropriate until 2016. Four participants judged that an increase in the federal funds rate in 2013 or 2014 would be appropriate.

All of the participants who judged that raising the federal funds rate target would become appropriate in 2015 also projected that the unemployment rate would decline below 6½ percent during that year and that inflation would remain near or below 2 percent. In addition, most of those participants also projected that a sizable gap between the unemployment rate and the longer-run normal level of the unemployment rate would persist until 2015 or later. Three of the four participants who judged that policy firming should begin in 2013 or 2014 indicated that, in their judgment, the Committee would need to act relatively soon in order to keep inflation near the FOMC's longer-run objective of 2 percent and to keep longer-run inflation expectations well anchored.

Figure 3.E provides the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2013 to 2015 and over the longer run. As

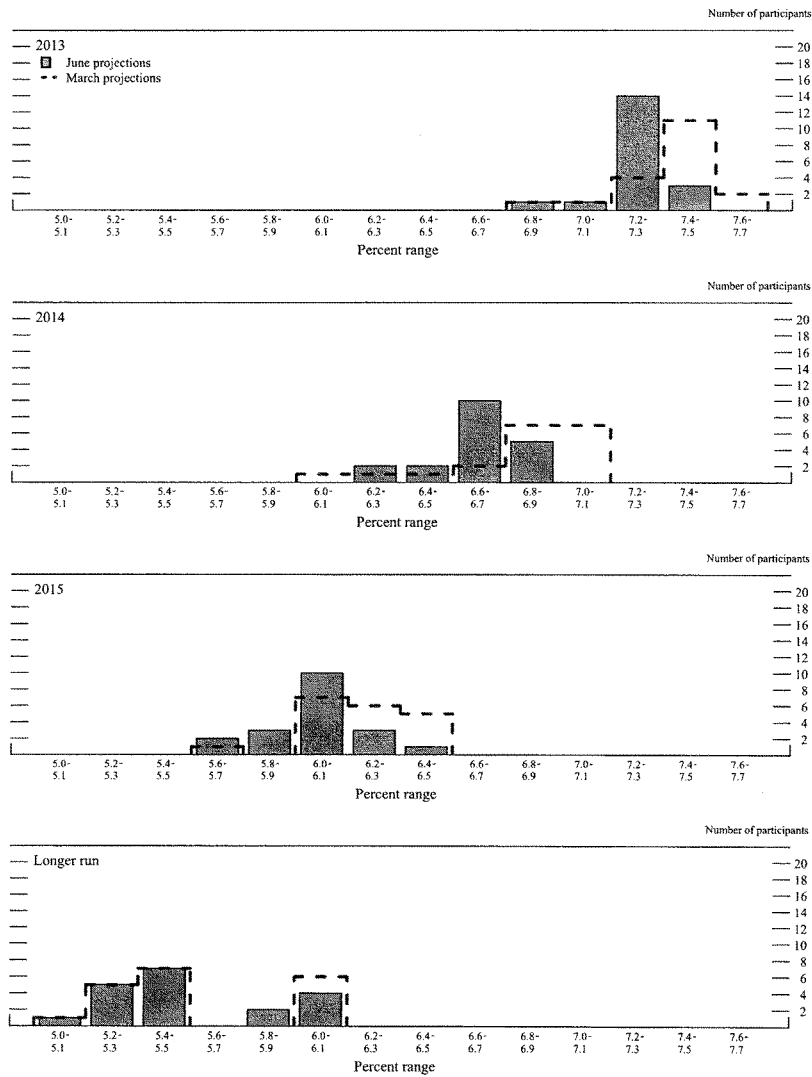
Figure 3.A. Distribution of participants' projections for the change in real GDP, 2013–15 and over the longer run



Note: Definitions of variables are in the general note to table 1.

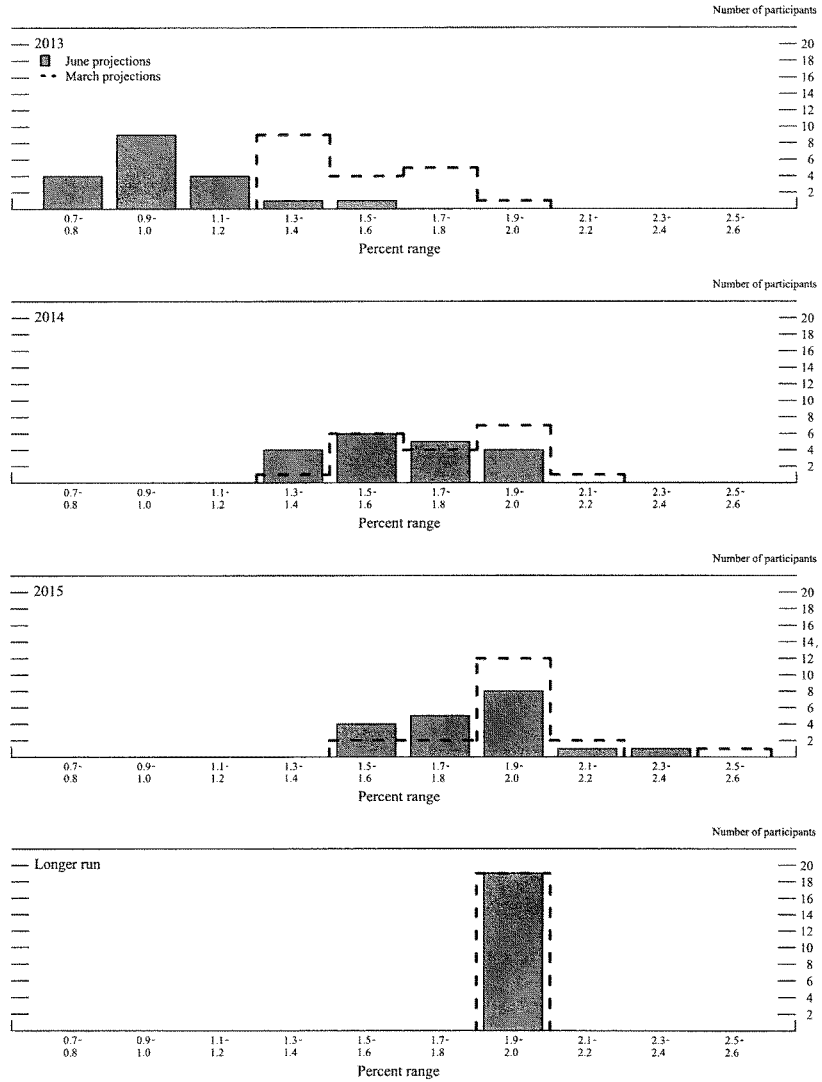


Figure 3.B. Distribution of participants' projections for the unemployment rate, 2013–15 and over the longer run



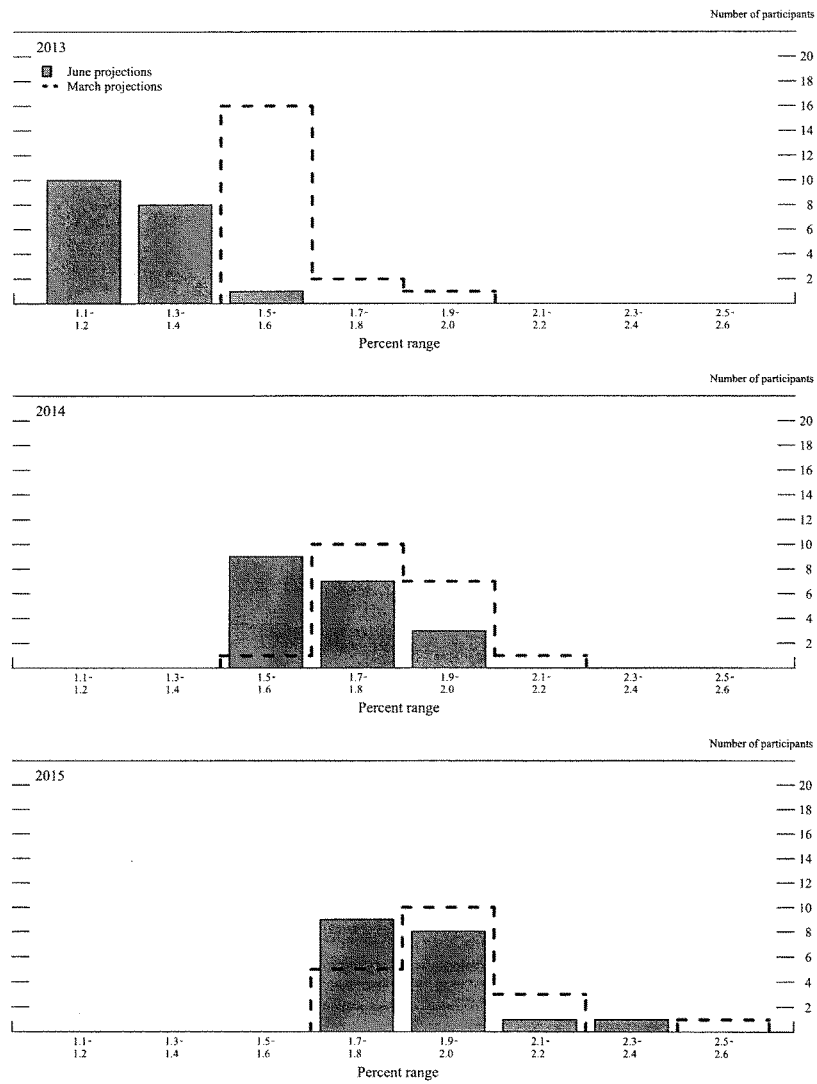
Note: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2013–15 and over the longer run



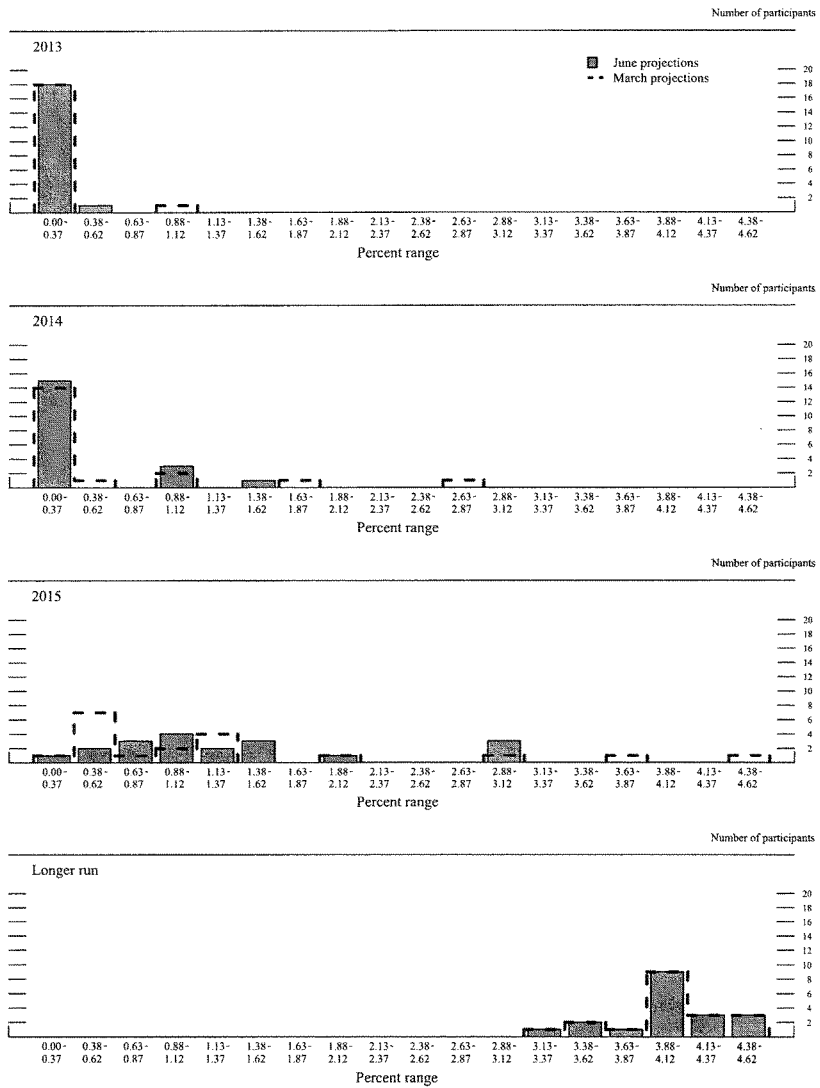
Note: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2013-15



Note: Definitions of variables are in the general note to table 1.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2013--15 and over the longer run



Note: The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

previously noted, most participants judged that economic conditions would warrant maintaining the current low level of the federal funds rate at least until 2015. Among the four participants who saw the federal funds rate leaving the effective lower bound earlier, their projections for the federal funds rate at the end of 2014 ranged from 1 to 1½ percent; however, the median for all participants remained at the effective lower bound. Views on the appropriate level of the federal funds rate at the end of 2015 varied, with the range of participants' projections a bit narrower than in the March Summary of Economic Projections and the median value unchanged at 1 percent.

All participants saw the appropriate target for the federal funds rate at the end of 2015 as still well below their assessments of its expected longer-run value. Estimates of the longer-run target federal funds rate ranged from 3¼ to 4½ percent, reflecting the Committee's inflation objective of 2 percent and participants' individual judgments about the appropriate longer-run level of the real federal funds rate in the absence of further shocks to the economy.

Participants also described their views regarding the appropriate path of the Federal Reserve's balance sheet. Given their respective economic outlooks, all participants but one judged that it would be appropriate to continue purchasing both agency MBS and longer-term Treasury securities. About half of these participants indicated that it likely would be appropriate to end asset purchases late this year. Many other participants anticipated that it likely would be appropriate to continue purchases into 2014. Several participants emphasized that the asset purchase program was effective in supporting the economic expansion, that the benefits continued to exceed the costs, or that continuing purchases would be necessary to achieve a substantial improvement in the outlook for the labor market. A few participants, however, indicated that the Committee could best foster its dual objectives and limit the potential costs of the

program by slowing, or stopping, its purchases at the June meeting.

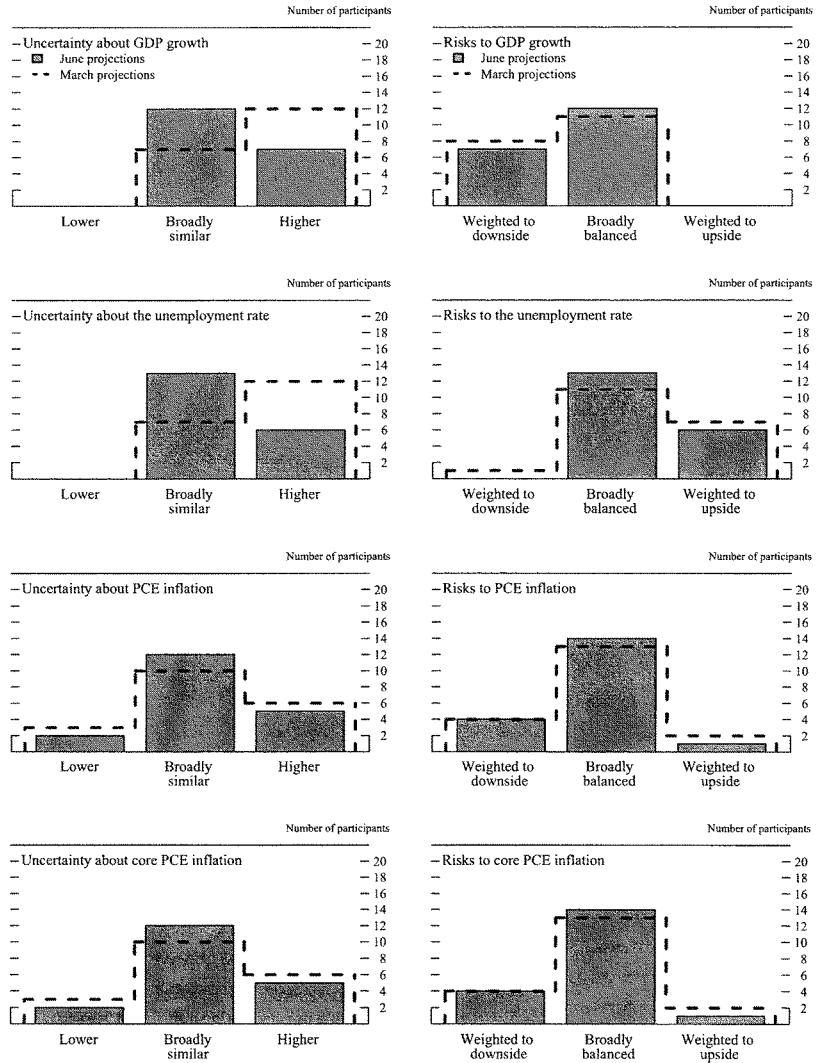
Key factors informing participants' views of the appropriate path for monetary policy included their judgments regarding the values of the unemployment rate and other labor market indicators that would be consistent with maximum employment; the extent to which the economy fell short of maximum employment and the extent to which inflation was running below the Committee's longer-term objective of 2 percent; and the implications of alternative policy paths for the likely extent of progress, over the medium term, in returning employment and inflation to mandate-consistent levels. A couple of participants noted that persistent headwinds and somewhat slower productivity growth since the end of the recession made their assessments of the longer-run normal level of the federal funds rate, and thus of the appropriate path for the federal funds rate, lower than would otherwise be the case.

#### *Uncertainty and Risks*

A majority of participants reported that they saw the levels of uncertainty about their projections for real GDP growth and unemployment as broadly similar to the norm during the previous 20 years, with the remainder generally indicating that they saw higher uncertainty about these economic outcomes (figure 4).<sup>19</sup> In March, a similar number of participants had seen the level of uncertainty about real GDP growth and the unemployment rate as above average. A majority of participants continued to judge that the risks to their forecasts of real GDP

19. Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1993 through 2012. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Figure 4. Uncertainty and risks in economic projections



Note: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table I.

growth and unemployment were broadly balanced, with the remainder generally indicating that they saw the risks to their forecasts for real GDP growth as weighted to the downside and for unemployment as weighted to the upside. The main factors cited as contributing to the uncertainty and balance of risks about economic outcomes were the limits on the ability of monetary policy to offset the effects of adverse shocks when short-term interest rates are near their effective lower bound, as well as challenges with forecasting the path of fiscal policy and economic and financial developments abroad.

Participants reported little change in their assessments of the level of uncertainty and the balance of risks around their forecasts for overall PCE inflation and core inflation. Fourteen participants judged the levels of uncertainty associated with their forecasts for those inflation measures to be broadly similar to, or lower than, historical norms; the same number saw the risks to those projections as broadly balanced. A few participants highlighted the likely role played by the Committee's adoption of a 2 percent inflation goal or its commitment to maintaining accommodative monetary policy as contributing to the recent stability of longer-term inflation expectations and, hence,

Table 2. Average historical projection error ranges  
Percentage points

Variable	2013	2014	2015
Change in real GDP <sup>1</sup> . . . . .	±1.0	±1.6	±1.8
Unemployment rate <sup>1</sup> . . . . .	±0.4	±1.2	±1.8
Total consumer prices <sup>2</sup> . . . . .	±0.8	±1.0	±1.0

NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1993 through 2012 that were released in the summer by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

1. Definitions of variables are in the general note to table 1.  
2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

the relatively low level of uncertainty. Four participants saw the risks to their inflation forecasts as tilted to the downside, reflecting, for example, risks of disinflation that could arise from adverse shocks to the economy that policy would have limited scope to offset in the current environment. Conversely, one participant saw the risks to inflation as weighted to the upside, citing the present highly accommodative stance of monetary policy and concerns about the Committee's ability to shift to a less accommodative policy stance when it becomes appropriate to do so.

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## Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.0 to 4.0 percent in the current year, 1.4 to 4.6 percent

in the second year, and 1.2 to 4.8 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.2 to 2.8 percent in the current year and 1.0 to 3.0 percent in the second and third years.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.

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## ABBREVIATIONS

ABCP	asset-backed commercial paper
AFE	advanced foreign economy
BHC	bank holding company
BOJ	Bank of Japan
C&I	commercial and industrial
CP	commercial paper
CPI	consumer price index
CRE	commercial real estate
Desk	Open Market Desk
ECB	European Central Bank
EME	emerging market economy
E&S	equipment and software
FOMC	Federal Open Market Committee; also, the Committee
GDP	gross domestic product
JGB	Japanese government bond
MBS	mortgage-backed securities
Michigan survey	Thomson Reuters/University of Michigan Surveys of Consumers
NFIB	National Federation of Independent Business
PCE	personal consumption expenditures
PMI	purchasing managers index
REIT	real estate investment trust
repo	repurchase agreement
reverse repo	reverse repurchase agreement
SEP	Summary of Economic Projections
SLOOS	Senior Loan Officer Opinion Survey on Bank Lending Practices
SOMA	System Open Market Account
S&P	Standard & Poor's
TDF	Term Deposit Facility

**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Bachus:**

**Chairman Bernanke, you have stated that in the future, depending on the strength of the economy, you will begin to exit from your quantitative easing programs. Once assets cease being purchased, the Fed is left with a massively expanded balance sheet. The Fed's pre-financial crisis balance sheet was \$300 billion, and by the time you end your asset purchases it will be over \$3 trillion. This brings with it several questions.**

- **Can these securities be returned to the private market without damaging the economy?**

The Federal Reserve conducts monetary policy at all times to foster its longer-term objectives of maximum employment and stable prices, and this principle will guide the process of normalizing the size and composition of the Federal Reserve's balance sheet. The Federal Reserve expects that the process of normalization will be gradual and conducted in a manner that is open and transparent to all market participants. However, if there are signs that this process is proving disruptive to financial markets or having adverse effects on the economy, the Federal Reserve can make adjustments as appropriate. It is important to recognize that the Federal Reserve need not sell large volumes of longer-term securities to normalize the size of its balance sheet. Instead, much of the adjustment can occur slowly as existing securities mature over time. Indeed, as I noted in a press conference following the June 2013 FOMC meeting, a strong majority of FOMC participants now expect that the FOMC will not sell agency mortgage-backed securities during the process of normalizing policy.

- **Can the securities be sold without incurring substantial losses?**

As noted above, the adjustment in the size of the Federal Reserve's balance sheet can be accomplished without sales of longer-term securities. As a result, the Federal Reserve can normalize the size of the balance sheet without sustaining substantial capital losses. Even if the Federal Reserve were to sell some portion of its longer-term securities holdings gradually over time, capital losses on the sales of these securities would likely be modest and more than offset by positive earnings on its remaining securities holdings. For example, the Congressional Budget Office (CBO) recently projected that remittances from the Federal Reserve to the Treasury will amount to about \$510 billion from 2013 until the end of their projection period in 2023, even with an assumption of sales of longer-term securities and associated realized capital losses.<sup>1</sup> Such remittances would greatly exceed the average annual amount seen prior to the crisis.

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<sup>1</sup> See "Updated Budget Projections: Fiscal Years 2013 to 2023" released by the CBO in May 2013. Also, see Carpenter et al. (2013), "The Federal Reserve's Balance Sheet and Earnings: A Primer and Projections," Finance and Economics Discussion Papers 2013-01, Board of Governors of the Federal Reserve System (U.S.), for additional information on the effects of different interest rate assumptions and exit strategies on Federal Reserve income.

- **What will be the inflation effects of returning these securities to the private market?**

Various estimates suggest that the Federal Reserve's expanded holdings of longer-term securities have put significant downward pressure on longer-term interest rates. The normalization of the Federal Reserve's balance sheet would thus be expected to remove some of this downward pressure on longer-term interest rates. As I noted in a speech earlier this year, as the economy improves and the Federal Reserve begins to gradually normalize the size of the balance sheet, longer-term interest rates can be expected to increase over time. Indeed, the current term structure of interest rates suggests that investors currently anticipate that longer-term interest rates will increase gradually in coming years to more normal levels. All else equal, higher interest rates will tend to put some downward pressure on inflation. Of course, when the economy has recovered more fully, a somewhat higher level of longer-term interest rates will be consistent with maintaining maximum employment and keeping inflation close to the FOMC's long-run target of 2 percent with stable long-run inflation expectations.

- **What effects will the sale of these securities have on the market's ability to absorb other private sales of securities?**

As noted above, the normalization of the Federal Reserve's balance sheet can be accomplished without asset sales. That said, once the size of the Federal Reserve's balance sheet has returned to normal, the private sector will hold a larger volume of longer-term Treasury and agency mortgage-backed securities than would otherwise be the case. The Federal Reserve's securities holdings consist entirely of Treasury and agency securities; these securities are highly liquid and actively traded in global fixed-income markets. As a result, it seems likely that markets will be able to absorb this additional supply of longer-term Treasury and agency mortgage-backed securities without adversely affecting the capacity of the market to absorb new private-sector issues. Moreover, it's important to recognize that the normalization of the Federal Reserve's balance sheet will involve both a reduction in its holdings of longer-term securities and a corresponding reduction in its liabilities (principally reserves). Thus, the normalization of the size of the Federal Reserve's balance sheet will not increase the size of the balance sheet of the private sector overall: On net, the private sector will hold more longer-term securities but will hold lower amounts of reserves and other Federal Reserve liabilities. As a result, the normalization of the Federal Reserve's balance sheet will not increase the total magnitude of financial assets financed by the private sector, so market participants should be able to continue to absorb new issues of private securities. Of course, the Federal Reserve will be monitoring financial markets and the economy carefully during the normalization process and can make adjustments as appropriate.

**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Bachus:**

**1. The Federal Reserve has used a 6.5% unemployment rate as a threshold for an exit from stimulative monetary policy. Can you provide more detail on the timing of this exit? You have mentioned in the past your concern over the labor force participation rate. How much weight in your calculation do you give this figure, and do you have a particular number in mind with respect to labor force participation?**

First, the timing of our exit from an accommodative stance of monetary policy will be determined by the evolution of the state of the economy. As the Committee indicated in the statement released on September 18, 2013, with respect to its asset-purchase program:

The Committee will closely monitor incoming information on economic and financial developments in coming months and will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. In judging when to moderate the pace of asset purchases, the Committee will, at its coming meetings, assess whether incoming information continues to support the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-run objective. Asset purchases are not on a preset course, and the Committee's decisions about their pace will remain contingent on the Committee's economic outlook as well as its assessment of the likely efficacy and costs of such purchases.

Similarly, with respect to the future path of the federal funds rate, the Committee indicated in the same statement:

[T]he Committee decided to keep the target range for the federal funds rate at 0 to 1/4 percent and currently anticipates that this exceptionally low range for the federal funds rate will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored. In determining how long to maintain a highly accommodative stance of monetary policy, the Committee will also consider other information, including additional measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. When the Committee decides to begin to remove policy accommodation, it will take a balanced approach consistent with its longer-run goals of maximum employment and inflation of 2 percent.

As you noted, and as the Committee indicated in its statement, the 6-1/2 percent level of the unemployment rate is a threshold, not a trigger; accordingly, when that level of the

unemployment is reached, it will become appropriate for the Committee to consider the full range of evidence regarding the optimal time to begin raising the funds rate.

With regard to your second question, as I have indicated on many occasions, including at my press conference on September 18, the Committee will examine a broad range of indicators, including those pertaining specifically to the labor market. With regard to the labor market, we are looking for a broad pattern of improvement. The labor-force participation rate is one indicator of developments in that market, but far from the only one we will inspect.

**2. The unemployment rate is steadily dropping, but GDP is still below the Fed's forecasts. Are you concerned about slowing GDP, even though it is not part of the dual mandate? Does the FOMC anticipate further stimulus if it sees a continued slowing in GDP growth?**

Maximum employment is part of the Federal Reserve's dual mandate, and the FOMC's communications have emphasized the importance of labor market conditions for our decisions about both the future path of the federal funds rate and our large-scale asset purchases. But improvements in the labor market that are not supported by overall economic growth might not be sustainable. Thus, the prospects for GDP growth certainly do factor into our deliberations about the outlook for the labor market. Indeed, in my June press conference in which I provided greater clarity about the FOMC's approach to decisions about our asset purchase program, I cited solid economic growth supporting further job gains as being among the conditions I would expect to see when we cease our asset purchases.

**3. In the past, when other central banks have purchased assets through quantitative easing, they have eventually sold those assets back to the market. Originally, this was the Federal Reserve Board's plan as well. How will asset sales, if any, be a part of a more immediate exit from quantitative easing? What impact will delayed asset sales have on future interest rates?**

The FOMC continues to anticipate that it will not permanently hold the securities that it has acquired through its large-scale asset purchases. As indicated in the minutes of the FOMC's meeting on June 18 and 19, 2013, Committee participants generally continued to view the broad exit strategy principles set out in the minutes of the Committee's June 2011 meeting as still applicable. In particular, participants continued to think that the Federal Reserve should, in the long run, hold predominantly Treasury securities. As of this June, however, most participants anticipated that the FOMC would not sell agency mortgage-backed securities (MBS) as part of the policy normalization process; instead, the Committee's holdings of MBS would decline over time after the Committee ends its policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities (MBS) in new MBS. Some participants indicated that limited sales might be warranted in the longer run to reduce or eliminate residual holdings. Avoiding or postponing sales of MBS likely would mean that the Federal Reserve's holdings of MBS would decline less rapidly than would otherwise be the case; the less rapid decline should, all else constant, help maintain downward pressure on longer-term interest rates, including mortgage rates, somewhat longer than otherwise.

**4. There have been concerns that the Federal Reserve's balance sheet has grown too large. Has an upper limit been established regarding a percentage of GDP to the FRB's balance sheet or will quantitative easing be applied when deemed necessary regardless of the size of the balance sheet?**

The Committee has not set an upper limit for the Federal Reserve's balance sheet as a percentage of GDP. The Committee has indicated that it will continue its purchases of Treasury and agency mortgage-backed securities, and employ its other policy tools as appropriate, until the outlook for the labor market has improved substantially in a context of price stability. The Committee also has indicated that it is prepared to increase or reduce the pace of its purchases to maintain appropriate policy accommodation as the outlook for the labor market or inflation changes, and that in determining the size, pace, and composition of its asset purchases, it will continue to take appropriate account of the likely efficacy and costs of such purchases as well as the extent of progress toward its economic objectives.

**5. How has forward guidance issued from other central banks, such as the European Central Bank or the Bank of England, altered your current course of action? Will continued easing or tightening from foreign central banks impact your decisions?**

On July 4, the Governing Council of the European Central Bank (ECB) issued forward guidance stating that it "expects the key ECB interest rates to remain at present or lower levels for an extended period of time." The FOMC issued similar forward guidance (using "extended period") from March 2009 through June 2011. On August 7 the Monetary Policy Committee (MPC) of the Bank of England (BOE) announced that it intends to keep its policy rate at the current level of 0.5 percent at least until the unemployment rate has fallen to a threshold of 7 percent, subject to three "knockout" conditions under which that guidance would cease to hold. The knockout conditions are: (1) in the MPC's view, it is more likely than not, that CPI inflation 18 to 24 months ahead will be 0.5 percentage points or more above the 2 percent target; (2) medium-term inflation expectations no longer remain sufficiently well anchored; and (3) the BOE's Financial Policy Committee judges that the stance of monetary policy poses a significant threat to financial stability that cannot be contained by the substantial range of mitigating policy actions available. (The MPC also stated that it will not reduce-but may increase-the stock of assets purchased and held by the BOE at least until the unemployment rate has fallen to 7 percent, subject to the same three "knockout conditions.") The MPC's forward guidance about interest rates is similar to the rate guidance that the FOMC began releasing in December 2012. The FOMC's rate guidance says that the Committee anticipates that its current 0 to 1/4 percent target range for the federal funds rate "will be appropriate at least as long as the unemployment rate remains above 6-1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee's 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored."

The FOMC's dual mandate is to promote maximum employment and price stability in the United States. To the extent that economic and financial developments abroad affect-or seem likely to affect-the U.S. economy, the FOMC would take them into account in making decisions

about the appropriate settings of monetary policy in the United States. To date, however, the forward guidance issued by the ECB and the BOE has not had an appreciable effect on the U.S. economic outlook.

**6. What foreign triggers (e.g. slowing Chinese growth, European sovereign debt issues, or conflict in the Middle East) would cause a delay in the tapering off of asset purchases or cause interest rates to be raised more quickly?**

U.S. exports have increased considerably over the course of the economic recovery and we certainly hope to see further gains. Slower growth abroad would have negative consequences for U.S. economic growth. There are some downside risks from abroad. A number of important emerging market economies have experienced financial turbulence as improving economic growth in advanced economies has sparked an increase in interest rates and some reversal of capital flows, which could lead to more adverse outcomes than are currently anticipated. Chinese growth slowed earlier this year and the Chinese authorities appear to have accepted that the economy is undergoing needed structural change and transitioning to a somewhat lower, although still very strong rate of growth. There is some risk that the Chinese economy could slow more sharply, which would have repercussions for many other emerging market economies. The economic situation in Europe has been improving and euro-area authorities continue to move slowly toward implementation of banking union. However, as the recent Cyprus crisis earlier this year illustrates, financial factors could still disrupt the economic recovery in Europe. Borrowing costs remain high in peripheral countries. There is also a risk that the implementation of banking union may run into more delays. In addition, the unrest in Egypt and Syria poses a risk for oil prices, as these are major transit routes for oil.

The FOMC's dual mandate is to promote maximum employment and price stability in the United States. To the extent that economic and financial developments abroad affect-or seem likely to affect-the U.S. economy, the FOMC would take them into account in making decisions about the appropriate settings of monetary policy in the United States. If, for example, a pronounced economic downturn abroad were to result in declining U.S. exports, a slowdown growth of output and employment in the U.S., and downward pressure on prices, highly accommodative monetary policy would remain appropriate longer than would otherwise be the case. In contrast, if foreign developments were to strengthen the U.S. economic recovery and put upward pressure on U.S. inflation, a somewhat earlier or more rapid reduction in policy accommodation could be appropriate. In either case, a foreign shock that seemed likely to have only transitory effects on the U.S. economy would be unlikely to result in an appreciable change in U.S. monetary policy.



BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM  
WASHINGTON, D. C. 20551

BEN S. BERNANKE  
CHAIRMAN

September 9, 2013

The Honorable Daniel T. Kildee  
House of Representatives  
Washington, D.C. 20515

Dear Congressman:

Thank you for your letter dated July 17, 2013, concerning the fiscal challenges facing some municipalities today.

The Federal Reserve regularly monitors the fiscal situations of local and state governments, along with conditions in municipal bond markets. We recognize the difficulties confronting many local and state governments in putting together their budgets, staffing their workforces, funding their pensions, and providing resources for infrastructure. Moreover, constraints on state and local spending have added to the headwinds restraining the pace of the economic recovery since the last recession.

Consistent with the mandate that the Congress has given the Federal Reserve, we have put in place a highly accommodative monetary policy in order to help promote a stronger recovery in the overall U.S. economy with price stability. Importantly, a stronger overall economy should help improve the fiscal situations of municipalities as rising incomes and decreasing unemployment boost the revenues of state and local governments and reduce the demands on their social benefit programs.

In the Federal Reserve Act, the Congress severely limited the authority of the Federal Reserve to lend directly to, or provide other forms of aid for, specific municipal or state governments. This limitation was established to support the fundamental principle of the independence of the central bank. We believe that is an important principle and would not seek a new role in this regard. Indeed, our misgiving about assuming such a role is that these are essentially political decisions reserved for fiscal policymakers in the Congress and the Administration to address.

The Federal Reserve is committed to its statutory mandate of promoting maximum employment in the context of price stability and financial stability. A return to a stronger economy should help to substantially lessen the fiscal strains affecting many municipal governments.

Sincerely,

A handwritten signature in black ink, appearing to be "B. Bernanke", written over a horizontal line.



**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Mulvaney:**

**1. Mr. Chairman, when you appeared before the Committee, we discussed the possibility of an environment where remittances from the Federal Reserve cease for an extended period of time. You stated that such an environment “won’t affect our ability to do monetary policy.” However, I also asked how such a circumstance would affect day-to-day operations. Specifically, I asked about where the money would come from to run the Federal Reserve if the combined earnings were negative for an extended period of time. In response to my question, you stated that it comes “from the balance sheet.”**

**If the Federal Reserve’s balance sheet is not providing enough combined earnings to cover all its expenses, including any amount needed to equate surplus to capital paid-in, how does the Federal Reserve pay its bills? I understand the accounting principles behind the use of deferred assets, but in a net negative cash flow position, where does the money actually come from to pay the Federal Reserve’s obligations?**

From an accounting perspective, the Federal Reserve pays its obligations by crediting the accounts that depository institutions hold at the Reserve Banks. The Federal Reserve would continue to meet its obligations in this manner, even in a scenario in which a Reserve Bank’s earnings were insufficient to provide for the costs of operations, payments of dividends, and reservation of an amount necessary to equate surplus with capital paid-in. In such a case, remittances to the Treasury would be suspended and a deferred asset would be recorded that represented the amount of net earnings the Reserve Bank would need to realize before remittances to the Treasury resumed. The deferred asset would be reduced in periods when Federal Reserve earnings exceeded expenses. It is important to note that an outcome in which the Federal Reserve would need to book a deferred asset as a result of negative net earnings is highly unlikely. Prior to the crisis, the Federal Reserve regularly generated net earnings of about \$25 billion per year. With the expansion of the Federal Reserve’s balance sheet over recent years, Federal Reserve remittances to the U.S. Treasury have increased sharply. Last year alone, the Federal Reserve remitted \$82 billion to the U.S. Treasury. Moreover, the CBO projects that cumulative Federal Reserve remittances over the period 2013-2023 will amount to about \$510 billion, an average annual pace well above pre-crisis norms, and also that projected Federal earnings will substantially exceed projected expenses in each year.<sup>1</sup>

**2. What are the components (sources of cash) of the combined earnings of the Federal Reserve? What are the components of its expenses and other obligations (uses of cash)?**

The components of the Federal Reserve’s combined earnings and expenses are presented in the annual audited financial statements, which are available at [http://www.federalreserve.gov/monetarypolicy/bst\\_fedfinancials.htm](http://www.federalreserve.gov/monetarypolicy/bst_fedfinancials.htm). Information regarding sources and uses for cash are provided in, or may be derived from, the audited combined statements of condition, income, changes in capital, and accompanying notes to the financial statements.

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<sup>1</sup> See “Updated Budget Projections: Fiscal Years 2013 to 2023” released by the CBO in May 2013.

Most of the combined earnings of the Federal Reserve come from interest earnings on securities held in the System Open Market Account (SOMA). As the Federal Reserve's balance sheet has expanded in recent years, the income derived from the balance sheet has also grown, with the interest earnings on SOMA holdings remaining the primary source of combined earnings, accounting for more than 90 percent of total net income. During the period from 2008-2012, the Reserve Banks remitted approximately 95 percent of their net income to the U.S. Treasury.

The Federal Reserve's expenses and cash outflows are small relative to total earnings. The primary components of Federal Reserve expenses are interest expense paid on the account balances that depository institutions hold at Reserve Banks and operating expenses incurred to fulfill the Federal Reserve's mission. Interest on depository institutions' account balances has been paid since October 2008, but this expense category has remained at relatively low levels because the interest rate paid on these balances has been at 1/4 percentage points since December 2008. Interest expense paid on depository institutions' account balances and Reserve Bank operating expenses have amounted to about 10 percent of Reserve Banks' net earnings for the year ended December 31, 2012. The interest expense category will increase at some point when the Federal Reserve begins to normalize the stance of monetary policy. However, the CBO projects that Federal Reserve expenses will remain modest relative to its earnings over the coming years.

**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Pittenger:**

- 1. When was the last time the Fed used Regulation D for monetary policy?**
- 2. How many times has the Fed used Regulation D for monetary policy?**
- 3. Can you provide a justification for retaining Regulation D?**
- 4. What methods of managing monetary policy does the Fed have, other than Regulation D?**
- 5. If Congress were to eliminate the six limit transfer under Regulation D, what concerns would the Fed raise?**

**Response to questions 1-5**

The Federal Reserve Act (FRA) directs the Federal Reserve to conduct monetary policy to foster a dual mandate of maximum employment and price stability and provides the Federal Reserve with the authority to utilize a range of tools to achieve that mandate. One important tool provided for in the FRA is reserve requirements.

Reserve requirements provide a stable and predictable demand for reserve balances. In implementing monetary policy, the Federal Reserve then adjusts the supply of reserve balances so as to maintain the level of the federal funds rate close to the target level set by the Federal Open Market Committee (FOMC). The Federal Reserve operated in this way over the last several decades before the financial crisis, and the stable demand for reserves created by reserve requirements was central to the daily implementation of monetary policy over this entire period.

Over recent years, the Federal Reserve has found it necessary to utilize nontraditional monetary policy tools to foster its macro objectives. In current circumstances, reserve balances far exceed the level of reserve requirements and the level of reserve requirements thus plays only a minor role in the daily implementation of monetary policy. However, as discussed in the minutes of the June 2011 FOMC meeting, the FOMC will eventually take steps to normalize the size and composition of the Federal Reserve's balance sheet and return to the usual mechanisms for targeting the federal funds rate.

The FRA specifies that reserve requirements can be applied only to narrow classes of liabilities of depository institutions—principally transaction accounts and nonpersonal time deposits. In order to abide by this statutory requirement, the Federal Reserve has developed precise regulatory definitions of transaction deposits and nonpersonal time deposits.

These definitions are laid out in Regulation D and include the distinctions between transaction accounts (which are subject to reserve requirements) and savings deposits (which are not subject to reserve requirements). An important element of the regulatory definition of a “savings deposit” is the six-withdrawal limit. While this limit is sometimes criticized as unnecessarily

restrictive and burdensome, the Federal Reserve must have a way of defining transaction deposits and savings deposits in order to impose reserve requirements in the manner envisioned in the FRA. Absent a binding limitation on withdrawals from savings deposits, banks could provide checking and other transaction services through savings deposits rather than transaction accounts and completely avoid reserve requirements. The resulting decline in required reserves could have adverse implications for monetary policy implementation.

In 2008, the Congress granted the Federal Reserve the authority to pay interest on required and excess reserve balances held by depository institutions. As discussed in previous testimony by Federal Reserve officials and in the minutes of the April 2008 FOMC meeting, this authority could allow the Federal Reserve to conduct monetary policy without reserve requirements. The Federal Reserve will consider a range of possible operating regimes once the size and composition of the Federal Reserve's balance sheet has been normalized. While policymakers might ultimately conclude that it is desirable to reduce reserve requirements to zero, it would be premature at this stage to implement changes in statute or regulation that would limit the effectiveness of reserve requirements.

**6. The Fed has made a number of regulatory changes that have facilitated transfers in some instances. Hasn't this already weakened the rule for purposes of monetary policy?**

The Federal Reserve made one regulatory change in 2009 that eliminated the distinction previously drawn in Regulation D between transfers made by check or debit card, and other convenient transfers like preauthorized or automatic transfers. Prior to 2009, Regulation D limited the number of "convenient" transfers and withdrawals that could be made from savings deposits to not more than six per month. Within that limit of six per month, not more than three of the transfers or withdrawals could be made by check, debit card, or other similar order made by the depositor and payable to third parties. In 2009, the Federal Reserve eliminated the sublimit on check and debit card transfers so that all convenient transfers from savings deposits would be subject to the same numeric limit. The Federal Reserve did not, however, raise the overall limit of six per month on convenient transfers from savings deposits. The elimination of the sublimit did not weaken the Federal Reserve's capacity to distinguish between transaction accounts and saving deposit accounts for the assessment of reserve requirements because the six per-month limitation on convenient transfers or withdrawals from saving deposit accounts provides the needed distinction.

**7. How do central banks in other countries conduct monetary policy without a Regulation D type of requirement?**

Some central banks have been able to implement monetary policy without reserve requirements. In these countries, banks' demand for reserves often stems from the need to maintain working balances at the central bank to facilitate payments. While the Federal Reserve could consider moving to such a system at some point in the future, the unique features of the U.S. banking system raise some important questions about how such a system would operate in the United States. For example, with thousands of depository institutions managing their balances at

the Federal Reserve each day to facilitate daily payments flows, the aggregate demand for reserves could be quite volatile and that, in turn, could complicate the implementation of monetary policy.

Some central banks that rely on reserve requirements to implement monetary policy may be able to avoid a limitation on savings accounts withdrawals similar to that in Regulation D if the statutory authority for reserve requirements in those countries extends to a relatively broad set of depository institution liabilities. For example, reserve requirements are an important part of the framework for monetary policy implementation for the European Central Bank (ECB). In contrast to the statutory authority for reserve requirements in the United States, the ECB is able to impose reserve requirements on very broad array of depository institution liabilities including essentially all bank deposits and debt securities. As a result, depositories are not able to avoid reserve requirements simply by shifting balances from transaction accounts to savings accounts. In the Euro area, the statutory authority for the ECB to apply reserve requirements against a very broad set of depository institution liabilities thus has the benefit of allowing for a much simpler regulatory framework for deposit reporting than in the United States.

**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Rothfus:**

**1. Mr. Chairman, just last week, you highlighted the persistent anemic nature of the current economic recovery noting that the June unemployment rate of 7.6% “probably understates the weakness of the labor market.” You previously indicated that the Federal Reserve would keep interest rates effectively at zero until unemployment falls to 6.5%. How does your new perspective that the unemployment rate understates the weaknesses of the labor market change this policy and the timeline for how the Fed’s quantitative-easing program will be tapered and then halted?**

Promoting maximum employment is part of the Fed’s dual mandate, and the FOMC’s communications have emphasized that improvements in labor market conditions and in the outlook for the labor market are important for the Committee’s decisions about both our large-scale asset purchases and the future path of the federal funds rate. With respect to its asset purchase program, the Committee has indicated that it will continue its purchases of Treasury and agency mortgage-backed securities until the outlook for the labor market has improved substantially in a context of price stability. If the Committee were to conclude that the labor market conditions associated with a given level of unemployment were weaker than it had previously thought, then, holding other things equal, a lower level of unemployment would be necessary to satisfy the FOMC’s criteria for ending asset purchases. That said, the unemployment rate is only one of many indicators of labor market conditions that the FOMC considers, and the FOMC has not established a specific unemployment rate that it would require before ceasing to purchase assets.

With respect to its target for the federal funds rate, the FOMC has indicated in its post-meeting statements that its current 0 to 1/4 percent target range for the federal funds rate “will be appropriate at least as long as the unemployment rate remains above 6 1/2 percent, inflation between one and two years ahead is projected to be no more than a half percentage point above the Committee’s 2 percent longer-run goal, and longer-term inflation expectations continue to be well anchored.” Importantly, the guidance is couched in terms of thresholds, not triggers. While the FOMC does not anticipate increasing its target for the federal funds rate before one of the thresholds is crossed, it may leave its target unchanged after one or both is crossed. Consequently, if the FOMC concluded that the labor market situation was weak despite an unemployment rate that had fallen below 6 1/2 percent, and inflation remained low, it might leave its target range for the federal funds rate at its current low level.

**2. Mr. Chairman, the last time you testified before this Committee, you discussed the impact of the low interest rate environment on seniors who are living on fixed incomes. While you admitted that low interest rates were stressful for those living on fixed incomes, you were quick to pivot and widen the discussion to include all savers, including those still working or those hoping for home price appreciation.**

**Today, I want to ask you solely about those retirees who are living on fixed incomes, whose limited investments are predominantly in bonds, CDs, and savings accounts, and who are not as concerned about home price appreciation as they are about their diminished income.**

**According to research published by a former colleague of yours at the Council of Economic Advisers, if interest rates were at their normal level of 4%, the average senior would see \$9,500 more in the pocket every year. And if rates were 6 percent, the average senior would earn \$15,800 more per year. Can you acknowledge that for this group of seniors, the Fed's loose monetary policy has been particularly harmful? And, do you believe this harm to seniors is merely a necessary byproduct of your loose monetary policy?**

Congress established for the FOMC the goals of maximum employment and price stability. In response to the most severe recession since the Great Depression, the Committee has pursued a very accommodative monetary policy to stimulate the economy and put citizens back to work. The severe recession, sluggish recovery, low inflation, and accommodative monetary policy have all contributed to the low level of interest rates. The low level of interest rates has reduced the incomes of individuals whose income depends heavily on interest earnings. If the Committee were to tighten monetary policy before it was appropriate to do so, interest rates and interest incomes would rise, but as a result, the economic recovery would slow or reverse, and the unemployment rate would rise further above levels consistent with maximum employment.

**3. Mr. Chairman, during the financial crisis, the Federal Reserve provided liquidity to virtually every corner of the financial markets. Much of that was done ad hoc. And the inconsistency of the government's response - rescuing Bear Stearns, letting Lehman fail, and then rescuing AIG - added uncertainty and panic in the markets.**

**Dodd-Frank is supposed to end "Too Big to Fail" and prohibit bailouts. Based on hearings that our Committee has conducted, I think that is debatable. But Dodd-Frank also directed the Federal Reserve to undertake a rulemaking, in consultation with the Treasury, to establish policies and procedures for emergency liquidity, if necessary, to be provided to the financial system on a broad base, and not for a bailout. Section 1101 of Dodd-Frank specifically requires an open and public rulemaking, so that the policies and procedures for how the Federal Reserve provides liquidity in a future emergency will be transparent and well understood.**

**Now, three years later, the Fed has still not done this. So, do you think it is important for the Federal Reserve to be subject to open and transparent rules for providing emergency liquidity, so we can avoid uncertainty and panic in the event of a future freezing up of the credit markets? If so, how do you justify the Fed's three-year delay in writing these basic rules and restrictions?**

The Dodd Frank Act imposed numerous requirements upon the Board for rulemakings, both on its own as well as in consultation with other agencies, as well as requirements for process changes and development, studies, consultations, and reports. The Board has taken its obligations under the Dodd Frank Act very seriously. As of last month, the Board had completed 27 final rulemakings, 12 proposed rulemakings, and 12 studies and reports (on its own or jointly with other agencies). The Board has undertaken substantial work both internally and with other agencies where required on other Dodd Frank Act requirements, including on the policies and

procedures intended to implement the Dodd Frank Act amendments to section 13(3). The Board expects to issue a proposal for public comment on the section 13(3) policies and procedures shortly.

**4. Mr. Chairman, during your recent appearance before our Committee, you stated that the sort of extraordinary measures that the Federal Reserve has implemented in response to the financial crisis are “not unprecedented” and that “many central banks” have in fact used “similar tools” to address their own economic problems. You then cited both Japan and the United Kingdom as examples of countries that have dramatically expanded the size of their balance sheets - specifically, in excess of 300 percent within a four-year time period - without suffering “any kind of negative consequences.”**

**Can you please expound on this answer? In particular, can you specify what actions these countries took that led to such an increase and during what time period? What have been the consequences of those actions, both positive and negative?**

The Bank of Japan (BOJ) was the first major central bank to adopt policies leading to substantial expansion of its balance sheet. In March 2001, facing an economy in recession and entrenched deflation, the BOJ announced it would expand the level of banks' reserves and increase its purchases of long-term Japanese government bonds. The implementation of this quantitative easing policy (QEP), which was maintained until March 2006, was followed by a decline in interest rates, arguably helping to ease deflationary pressures. There has been some debate over whether QEP also entailed some costs. With the BOJ acting as the market maker by providing ample liquidity to banks, interbank money markets were replaced by central bank lending, raising some concern regarding the flow of credit by financial institutions to the non-financial sector. However, there is no evidence that this restricted the ability of banks to make loans, and money markets recovered smoothly after QEP ended.

In response to the global financial crisis, several major foreign central banks used tools which also resulted in dramatic expansion of their balance sheets. Most notably, the Bank of England (BOE) initiated an Asset Purchase Facility (APF) in January 2009. Through the APF, the BOE has purchased £375 billion (equivalent to 24 percent of 2012 U.K. GDP) of high-quality assets—mostly longer-term U.K. government bonds—by the creation of central bank reserves. Largely as a result of this program, the BOE's balance sheet rose nearly 3 1/2 times over four years starting in September 2008. Although the APF is ongoing and thus it is too early to express a final judgment, there is ample empirical evidence that the BOE has been fairly successful in lowering interest rates while keeping inflation expectations well-anchored. As noted in the Monetary Policy Report (see figure 47), the BOJ and the European Central Bank have also significantly expanded their balance sheets in recent years, albeit through different means. In addition, several major foreign central banks, starting with the Bank of Canada, have introduced forward guidance on the future path of policy rates, which can put downward pressure on long-term interest rates and thus provide additional monetary stimulus.



More recently, the BOJ initiated a policy of “quantitative and qualitative easing” that is aimed at achieving a target of 2 percent consumer price inflation at the earliest possible time, with a time horizon of about two years. The BOJ plans to double the monetary base over that period. Although it is still early, the new policy does appear to have boosted the economy and helped to combat deflationary expectations.

**Questions for The Honorable Ben Bernanke, Chairman, Board of Governors of the Federal Reserve System, from Representative Stivers:**

**1. Financial Stability Oversight Council Section 1101**

**The Dodd-Frank Act prohibited bailouts. It also directed the Federal Reserve to undertake a rulemaking, in consultation with the Treasury, to establish policies and procedures for emergency liquidity, if necessary, to be provided on a broad base to financial markets, but not for a bailout. Section 1101 of Dodd-Frank specifically requires an open and public rulemaking, so that the policies and procedures for how the Federal Reserve provides liquidity in a future emergency will be transparent and well understood. That section required that the rules be established, “as soon as practicable” after the date of enactment of Dodd-Frank, which was July 21, 2010. Has the Federal Reserve adopted, or even proposed, the rules required under Section 1101?**

The Dodd Frank Act imposed numerous requirements upon the Board for rulemakings, both on its own as well as in consultation with other agencies, as well as requirements for process changes and development, studies, consultations, and reports. The Board has taken its obligations under the Dodd Frank Act very seriously. As of last month, the Board had completed 27 final rulemakings, 12 proposed rulemakings, and 12 studies and reports (on its own or jointly with other agencies). The Board has undertaken substantial work both internally and with other agencies where required on other Dodd Frank Act requirements, including on the policies and procedures intended to implement the Dodd Frank Act amendments to section 13(3). The Board expects to issue a proposal for public comment on the section 13(3) policies and procedures shortly.

**2. Role of Financial Stability Oversight Council**

**a. In various public statements, FRB Board of Governors members have worried about the potential for money market funds to destabilize “wholesale funding” of large banks (e.g., Governor Tarullo in his statement before the Senate Banking Committee on July 11, 2013). If this is the case, why doesn’t the FRB directly regulate bank holding company reliance on short term financing instead of insisting that the Securities and Exchange Commission make fundamental changes to money market funds?**

The Federal Reserve is working on multiple fronts to regulate bank holding company reliance on short-term financing. The proposed Enhanced Prudential Standards implementing section 165 of the Dodd-Frank Act and the proposed Liquidity Coverage Ratio are two specific proposals that would require firms to hold highly liquid assets to mitigate risks associated with a reliance on short-term wholesale funding. Additionally, the Federal Reserve, along with the OCC and FDIC, is working with our international colleagues to further develop the Net Stable Funding Ratio, which would provide further incentives for firms to utilize more stable funding sources. These actions should mitigate or reduce banks’ reliance on short-term financing.

The risks that MMFs present to the overall economy would remain, however, as most of the funding provided by MMFs to private firms and institutions goes to foreign entities over which

U.S. banking regulators have limited or no jurisdiction. For example, in August 2013, about 80 percent of all private financing provided by MMFs--that is, financing excluding lending to the U.S. Department of the Treasury, U.S. government agencies, U.S. government-sponsored enterprises, and state and local governments--went to foreign entities. Because losses on dollar-denominated instruments issued by foreign firms could quickly trigger runs on the MMFs that hold them, such losses could have serious spillover effects in the U.S. short-term funding markets. For that reason, the Federal Reserve engaged through the FSOC, working with the SEC and other agencies, on measures that would enhance the resiliency of MMFs and mitigate their continued vulnerability to destabilizing runs.

**b. Are there any ways that money market funds reduce systemic risk, such as by diversifying the financial system, reducing maturity transformation, and reducing dependence on the “Too Big to Fail” banks?**

The mutual fund model does offer some potential to reduce systemic risk, insofar as a mutual fund's portfolio risks are dispersed over a broad group of investors who hold equity shares, rather than being concentrated on the balance sheet of a large financial institution that finances itself with debt or deposits. But money market funds as currently structured do not fulfill that potential, because MMF risks historically have not been borne by their shareholders. Prospectuses warn investors that “it is possible to lose money” by investing in MMF shares, but instead sponsors have absorbed losses in almost every case in which MMFs have lost money. This practice fosters complacency among investors during normal times and probably attracts highly risk-averse investors to MMFs who do not believe that they bear risks. The 2013 AFP Liquidity Survey of institutional investors, for example, found that 37 percent of respondents expected support to be forthcoming from an MMF sponsor if a fund suffers losses, 14 percent of respondents expected the U.S. government to provide “adequate capital” for MMFs in a crisis, and just 34 percent expected that they themselves might lose some principal.

Hence, MMF risks in practice have not been dispersed over a large group of investors, but instead have been concentrated on a relatively small group of firms that sponsor the funds, which include large bank holding companies. Importantly, however, sponsor support is voluntary and not contractually guaranteed, so uncertainty about sponsor support during periods of market stress can drive rational investors to redeem their shares immediately when they suspect that sponsors no longer have the capacity or desire to provide such support.

Thus, an important goal for any such structural reform of MMFs--and a prerequisite for mitigating their vulnerability to runs--is to clarify who really bears the risks present in MMF portfolios.

MMFs do not reduce maturity transformation; instead, these funds perform maturity transformation by offering shares that investors may redeem on demand while also investing in relatively longer-term instruments, such as term CP and term repo. In the event of shareholder redemptions in excess of an MMF's available liquidity, a fund may be forced to sell less-liquid assets to meet redemptions. In times of stress, such sales may cause funds to suffer losses that

must be absorbed by the fund's remaining investors, reinforcing incentives to run from troubled MMFs.

### **3. Floating NAV pushing assets to "Too Big to Fail" banks**

**If, as a result of regulatory restrictions, money market funds do not exist going forward, or their assets under management are substantially reduced, where will those assets move, and will there be a consequent reduction or increase in systemic risk in the financial markets?**

Cash-management alternatives to MMFs and potential shifts towards these alternatives are discussed in the "Report of the President's Working Group on Financial Markets: Money Market Fund Reform Options" (October 2010), the FSOC's "Proposed Recommendations Regarding Money Market Mutual Fund Reform" (November 2012), and the SEC's release regarding its proposed rule for money market fund reform (available at [www.sec.gov/rules/proposed/2013/33-9408.pdf](http://www.sec.gov/rules/proposed/2013/33-9408.pdf); see, in particular, pp. 283-301).

### **4. Gating**

**a. The FSOC, in a Dodd-Frank Section 120 proceeding initiated last year, circulated a proposal to recommend to the Securities Exchange Commission (SEC) that money market funds be required to convert to a floating NAV. The SEC recently proposed a floating NAV, although it is narrower than the FSOC request. Can you provide any data or evidence supporting the proposition that requiring money market mutual funds to convert to a floating NAV would prevent a flight to safety by investors in the money markets, as we saw during the 2008 financial crisis?**

Analysis and discussion of the advantages of a floating NAV are available in a variety of places, including for example, the "Report of the President's Working Group on Financial Markets: Money Market Fund Reform Options" (October 2010), the FSOC's "Proposed Recommendations regarding Money Market Mutual Fund Reform" (November 2012), and the SEC's release regarding its proposed rule for money market fund reform (available at [www.sec.gov/rules/proposed/2013/33-9408.pdf](http://www.sec.gov/rules/proposed/2013/33-9408.pdf); see, in particular, pp. 47-61).

**b. The other option in the SEC's recent Release is that Boards of Directors of money market mutual funds be given authority to impose "gates" - that is, temporary restrictions on redemptions from money market mutual funds, in circumstances where there may be a danger that shareholders could be treated unequally because some investors redeem before others. Are you aware that a Putnam institutional prime fund successfully imposed gates in 2008 at the same time that The Reserve Fund "broke the buck"? In your assessment, would "gates" be more effective in stopping a "run" than a floating NAV?**

We are aware that the Putnam Prime Money Market Fund closed and halted redemptions amid the widespread run on MMFs in September 2008. However, Putnam's experience provides little

insight into how proposals for standby liquidity fees and gates would affect markets during periods of stress. Putnam's investors in 2008 would not have anticipated the fund's decision to halt redemptions, since that generally was not permitted at the time, and therefore investors would not have been motivated to redeem shares before redemptions were halted. In contrast, rules that cause MMFs to impose fees or gates in a crisis could prompt rapid withdrawals during periods of stress as investors try to redeem shares while they still can. Indeed, these incentives could generate runs that otherwise would not have occurred.

In addition, the broader effects of the Putnam fund's closure, which occurred on September 17, 2008, were mitigated by the announcements two days later of the Treasury's Temporary Guarantee Program for Money Market Funds and the Federal Reserve's Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility (AMLF), which stabilized the MMF industry, as well as the merger of the Putnam fund into a Federated prime MMF on September 24, which gave Putnam investors access to their cash.