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The Honorable Janet L. Yellen, Chair

Board of Governors  
Federal Reserve System

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Roger Ferguson: Please take your seats. Thank you very, very much. Thank you. And welcome to all of you to the 435<sup>th</sup> meeting of the Economic Club of New York. I am Roger Ferguson, chairman of the club which is now in its 107<sup>th</sup> year as the nation's leading nonpartisan forum for economic policy speeches. Throughout the long history of the Economic Club of New York we have had more than 1,000 guest speakers appear before us establishing a strong tradition of excellence which obviously we continue today. I would like to begin by recognizing the 211 members of our Centennial Society who have contributed their support to ensure a sound future for the club. Thanks to all of you Centennial members for helping the club to continue to fulfill its mission well into our second century. I would also like to welcome our special guests. We have students with us from Hofstra University, CUNY, and Manhattan College. Our members have made their attendance possible. We are pleased to welcome our speaker, Janet Yellen, who became Chair of the Board of Governors of the U.S. Federal Reserve System on February 3. Prior to her appointment as Fed Chair, Dr. Yellen served as Vice Chair of the Board of Governors. She is a Professor Emeritus at the University of California at Berkeley, and she formerly served as President and CEO of the Federal Reserve Bank of San Francisco and as chair of the Council of Economic Advisors. Dr. Yellen graduated summa cum laude from Brown University and received her PhD in Economics from Yale. Following her speech, two designated club members will ask questions. Chair Yellen, we are pleased to welcome you back to the Economic Club of New York. The floor is yours.

## The Honorable Janet L. Yellen

Thank you so much Roger. Nearly five years into the expansion that began after the financial crisis and the Great Recession, the recovery has come a long way. More than eight million jobs have been added to non-farm payrolls since 2009, almost the same number lost as a result of the recession. Led by a resurgent auto industry, manufacturing output has also nearly returned to its pre-recession peak. While the housing market still has far to go, it seems to have turned a corner.

It's a sign of how far the economy has come that a return to full employment is, for the first time since the crisis, in the medium-term outlooks of many forecasters. It is a reminder of how far we have to go that this long-awaited outcome is projected to be more than two years away.

Today I will discuss how my colleagues on the Federal Open Market Committee and I view the state of the economy and how this view is likely to shape our efforts to promote a return to maximum employment in the context of price stability. I will start with the FOMC's outlook which foresees a gradual return over the next two to three years of economic conditions consistent with its mandate.

While monetary policy discussions naturally begin with a baseline outlook, the path of the economy is uncertain, and effective policy must respond to significant unexpected twists and turns the economy may take. My primary focus today will be on how the FOMC's monetary

policy framework has evolved to best support the recovery through those twists and turns, and what this framework is likely to imply as the recovery progresses.

The FOMC's current outlook for continued, moderate growth is little changed from last fall. In recent months, some indicators have been notably weak, requiring us to judge whether the data are signaling a material change in the outlook. The unusually harsh winter weather in much of the nation has complicated this judgment, but my FOMC colleagues and I generally believe that a significant part of the recent softness was weather related.

The continued improvement in labor market conditions has been important in this judgment. The unemployment rate, at 6.7 percent, has fallen three-tenths of a percentage point since late last year. Broader measures of unemployment that include workers marginally attached to the labor force and those working part-time for economic reasons have fallen a bit more than the headline unemployment rate, and labor force participation which had been falling has ticked up this year.

Inflation, as measured by the price index for personal consumption expenditures, has slowed from an annual rate of about 2 ½ percent in early 2012 to less than 1 percent in February of this year. This rate is well below the Committee's 2 percent longer-run objective. Many advanced economies are observing a similar softness in inflation.

To some extent, the low rate of inflation seems due to influences that are likely to be temporary,

including a deceleration in consumer energy prices and outright declines in core import prices in recent quarters. Longer-run inflation expectations have remained remarkable steady, however. We anticipate that as the effect of transitory factors subside and labor market gains continue, inflation will gradually move back toward 2 percent.

In sum, the central tendency of FOMC participant projections for the unemployment rate at the end of 2016 is 5.2 to 5.6 percent, and for inflation the central tendency is 1.7 to 2 percent. If this forecast was to become a reality, the economy would be approaching what my colleagues and I view as maximum employment and price stability for the first time in nearly a decade. I find this baseline outlook quite plausible.

Of course, if the economy obediently followed our forecasts, the job of central bankers would be a lot easier and their speeches would be a lot shorter. Alas, the economy is not often so compliant, so I will ask your indulgence for a few more minutes. Because the course of the economy is uncertain, monetary policymakers need to carefully watch for signs that it is diverging from the baseline outlook and then respond in a systematic way. Let me turn first to monitoring and discuss three questions I believe are likely to loom large in the FOMC's ongoing assessment of where we are on the path back to maximum employment and price stability.

The first question concerns the extent of slack in the labor market. One of the FOMC's objectives is to promote a return to maximum employment, but exactly what conditions are

consistent with maximum employment can be difficult to assess. Thus far in the recovery and to this day, there is little question that the economy has remained far from maximum employment, so measurement difficulties were not our focus.

But as the attainment of our maximum employment goal draws nearer, it will be necessary for the FOMC to form a more nuanced judgment about when the recovery of the labor market will be materially complete. As the FOMC's statement on longer-term goals and policy strategy emphasizes, these judgments are inherently uncertain and must be based on a wide range of factors.

I will refer to the shortfall in employment relative to its mandate-consistent level as labor markets slack, and there are a number of different indicators of this slack. Probably the best single indicator is the unemployment rate. At 6.7 percent, it is now slightly more than one percentage point above the 5.2 to 5.6 percent central tendency of the Committee's projections for the longer-run normal unemployment rate. This shortfall remains significant, and in our baseline outlook it will take more than two years to close.

Other data suggest that there may be more slack in labor markets than indicated by the unemployment rate. For example, the share of the workforce that is working part-time but would prefer to work full-time remains quite high by historical standards. Similarly, while the share of workers in the labor force who are unemployed and have been looking for work for more than

six months has fallen from its peak in 2010, it remains as high as any time prior to the Great Recession.

There is ongoing debate about why long-term unemployment remains so high and the degree to which it might decline in a more robust economy. As I argued more fully in a recent speech, I believe that long-term unemployment might fall appreciably if economic conditions were stronger.

The low level of labor force participation may also signal additional slack that is not reflected in the headline unemployment rate. Participation would be expected to fall because of the aging of the population, but the decline steepened in the recovery. Although economists differ over what share of those currently outside the labor market might join or rejoin the labor force in a stronger economy, my own view is that some portion of the decline in participation likely reflects labor market slack.

Lastly, economists also look to wage pressures to signal a tightening labor market. At present, wage gains continue to proceed at a historically slow pace in this recovery with few signs of a broad-based acceleration. As the extent of slack we see today diminishes, however, the FOMC will need to monitor these and other labor market indicators closely to judge how much slack remains and, therefore, how accommodative monetary policy should be.

A second question that's likely to figure heavily in our assessment of the recovery is whether inflation is moving back toward the FOMC's 2 percent longer-run objective, as envisioned in our baseline outlook. As the most recent FOMC statement emphasizes, inflation persistently below 2 percent could pose risks to economic performance. The FOMC strives to avoid inflation slipping too far below its 2 percent objective because at very low inflation rates adverse economic developments could more easily push the economy into deflation. The limited historical evidence with deflation shows that once it starts, deflation can become entrenched and associated with prolonged periods of very weak economic performance.

A persistent bout of very low inflation carries other risks as well. With the federal funds rates currently near its lower limit, lower inflation translates into a higher real value for the federal funds rate, limiting the capacity of monetary policy to support the economy. Further, with long-term inflation expectations anchored near 2 percent in recent years, persistent inflation well below this expected value increases the real burden of debt for households and firms, which may put a drag on economic activity.

I will mention two considerations that will be important in assessing whether inflation is likely to move back to 2 percent as the economy recovers. First, we anticipate that as labor market slack diminishes, it will exert less of a drag on inflation. However, during the recovery, very high levels of slack have seemingly not generated strong downward pressure on inflation. We must therefore watch carefully to see whether diminishing slack is helping return inflation to our

objective.

Second, our baseline projection rests on the view that inflation expectations will remain well anchored near 2 percent and provide a natural pull back to that level. But the strength of that pull in the unprecedented conditions we continue to face is something we must continue to assess.

Finally, the FOMC is well aware that inflation could also threaten to rise substantially above 2 percent. At present, I rate the chances of this happening as significantly below the chances of inflation persisting below 2 percent, but we must always be prepared to respond to such unexpected outcomes, which leads to my third question.

Myriad factors continuously buffet the economy, so the Committee must always be asking, “what factors may be pushing the recovery off track?” For example, over the nearly five years of the recovery, the economy has been affected by greater than expected fiscal drag in the United States and by spillovers from the sovereign debt and banking crises of some euro area countries. Further, our baseline outlook has changed as we’ve learned about the degree of structural damage to the economy wrought by the crisis and the subsequent pace of healing.

Let me offer an example of how these issues shape policy. Four years ago, in April 2010, the outlook appeared fairly bright. The emergency lending programs that the Federal Reserve implemented at the height of the crisis had been largely wound down, and the Fed was soon to

complete its first large-scale asset purchase program. Private sector forecasters polled in the April 2010 Blue Chip survey were predicting that the unemployment rate would fall steadily to 8.6 percent in the final quarter of 2011.

This forecast proved quite accurate. The unemployment rate averaged 8.6 percent in the fourth quarter of 2011. But this was not the whole story. In April 2010, Blue Chip forecasters not only expected falling unemployment, they also expected the FOMC to soon begin raising the federal funds rate. Indeed, they expected the federal funds rate to reach 1.3 percent by the second quarter of 2011.

By July 2010, however, with growth disappointing and the FOMC expressing concerns about softening in both growth and inflation, the Blue Chip forecast of the federal funds rate in mid-2011 had fallen to 0.8 percent, and by October the forecasters expected that the rate would remain in the range of zero to 25 basis points throughout 2011, as turned out to be the case. Not only did expectations of policy tightening recede, the FOMC also initiated a new \$600 billion asset purchase program in November 2010.

Thus, while the reductions in the unemployment rate through 2011 were roughly as forecasted in early 2010, this improvement only came about with the FOMC providing a considerably higher level of accommodation than originally anticipated. This experience was essentially repeated the following year. In April 2011, Blue Chip forecasters expected the unemployment rate to fall to

7.9 percent by the fourth quarter of 2012, with the FOMC expected to have already raised the federal funds rate to near 1 percent by mid-2012.

As it turned out, the unemployment rate forecast was once more remarkably accurate, but again this was associated with considerably more accommodation than anticipated. In response to signs of slowing economic activity, in August 2011 the FOMC for the first time expressed its forward guidance in terms of the calendar, stating that conditions would likely warrant exceptionally low levels for the federal funds rate at least through mid-2013. The following month the Committee added to accommodation by adopting a new balance sheet policy known as the maturity extension program.

Thus, in both 2011 and 2012, the unemployment rate actually declined by about as much as had been forecasted the previous year, but only after unexpected weakness prompted additional accommodative steps by the Federal Reserve. In both cases, I believe that the FOMC's decision to respond to signs of weakness with significant additional accommodation played an important role in helping to keep the projected labor market recovery on track.

These episodes illustrate what I described earlier as a vital aspect of effective monetary policy making: monitor the economy for signs that events are unfolding in a materially different manner than expected and adjust policy in response in a systematic manner. Now I will turn from the task of monitoring to the policy response.

Fundamental to modern thinking on central banking is the idea that monetary policy is more effective when the public better understands and anticipates how the central bank will respond to evolving economic conditions. Specifically, it's important for the central bank to make clear how it will adjust its policy stance in response to unforeseen economic developments in a manner that reduces or blunts potentially harmful consequences. If the public understands and expects policymakers to behave in this systematically stabilizing manner, it will tend to respond less to such developments.

Monetary policy will thus have an automatic stabilizer effect that operates through private sector expectations. It's important to note that tying the response of policy to the economy necessarily makes the future course of the federal funds rate uncertain. But by responding to changing circumstances, policy can be most effective at reducing uncertainty about the course of inflation and employment.

Recall how this worked during the couple of decades before the crisis – a period sometimes known as the Great Moderation. The FOMC's main policy tool, the federal funds rate, was well above zero, leaving ample scope to respond to the modest shocks that buffeted the economy during that period. Many studies confirmed that the appropriate response of policy to those shocks could be described with a fair degree of accuracy by a simple rule linking the federal funds rate to the shortfall or excess of employment and inflation relative to their desired values.

The famous Taylor rule provides one such formula. The idea that monetary policy should react in a systematic manner in order to blunt the effects of shocks has remained central in the FOMC's policymaking during this recovery. However, the application of this idea has been more challenging. With the federal funds rate pinned near zero, the FOMC has been forced to rely on two less familiar policy tools – the first one being forward guidance regarding the future setting of the federal funds rate and the second being large-scale asset purchases.

There are no time-tested guidelines for how these tools should be adjusted in response to changes in the outlook. As the episodes recounted earlier illustrate, the FOMC has continued to try to adjust its policy tools in a systematic manner in response to new information about the economy. But because both the tools and the economic conditions have been unfamiliar, it's also been critical that the FOMC communicate how it expects to deploy its tools in response to material changes in the outlook.

Let me review some important elements in the evolution of the FOMC's communication framework. When the FOMC initially began using its unconventional tools, policy communication was relatively simple. In December 2008, for example, the FOMC said it expected that conditions would warrant keeping the federal funds rate near zero for some time. This period before the liftoff in the federal funds rate was described in increasingly specific and, as it turned out, longer periods over time – “some time” became “an extended period” which was

later changed to mid-2013, then late 2014, then mid-2015.

This fixed, calendar-based guidance had the virtue of simplicity, but it lacked the automatic stabilizer property of communication that would signal how and why the stance of policy and forward guidance might change as developments unfolded, and as we learned about the extent of the need for accommodation.

More recently, the Federal Reserve, and I might add, other central banks around the world, have sought to incorporate this automatic stabilizer feature in their communications. In December 2012, the Committee reformulated its forward guidance, stating it anticipated that the federal funds rate would remain near zero at least as long as the unemployment rate remained above 6 ½ percent, inflation over the period between one and two years ahead was projected to be no more than half a percentage point above the Committee's objective, and longer-term inflation expectations continued to be well anchored.

This guidance emphasize to the public that it could count on a near-zero federal funds rate at least until substantial progress in the recovery had been achieved, however long that might take. When these thresholds were announced, the unemployment rate was reported to be 7.7 percent and the Committee projected that the 6 ½ percent threshold would not be reached for another 2 ½ years - in mid-2015. The Committee emphasized that these numerical criteria were not triggers for raising the federal funds rate, and Chairman Bernanke stated that ultimately any decision to

begin removing accommodation would be based on a wide range of indicators.

Our communications about asset purchases have undergone a similar transformation. The initial asset purchase programs had fixed time and quantity limits, although those limits came with a proviso that they might be adjusted. In the fall of 2012, the FOMC launched its current purchase program, this time explicitly tying the course of the program to evolving economic conditions.

When the program began, the rate of purchases was \$85 billion per month, and the Committee indicated that purchases would continue providing that inflation remained well behaved, until there was a substantial improvement in the outlook for the labor market. Based on the cumulative progress toward maximum employment since the initiation of the program and the improvement in the outlook for the labor market, the FOMC began reducing the pace of asset purchases last December, stating that if incoming information broadly supports the Committee's expectation of ongoing improvement in labor market conditions and inflation moving back toward its longer-term objective, the Committee will likely reduce the pace of asset purchases in further measured steps at future meetings.

Purchases are currently proceeding at a pace of \$55 billion per month. Consistent with my theme today, however, the FOMC statement underscores that purchases are not on a pre-set course. The FOMC stands ready to adjust the pace of purchases as warranted should the outlook change materially.

At our most recent meeting in March, the FOMC reformulated its forward guidance for the federal funds rate. While one of the main motivations for this change was that the unemployment rate might soon cross the 6 ½ percent threshold, the new formulation is also well suited to help the FOMC explain policy adjustments that may arise in response to changes in the outlook. I should note that the change in forward guidance did not indicate a change in the Committee's policy intentions, but instead was made to clarify the Committee's thinking about policy as the economy continues to recover.

The new guidance provides a general description of the framework that the FOMC will apply in making decisions about the timing of liftoff. Specifically, in determining how long to maintain the current target range of zero to 25 basis points for the federal funds rate, the Committee will assess progress, both realized and expected, towards its objectives of maximum employment and 2 percent inflation.

In other words, the larger the shortfall of employment or inflation from their respective objectives, and the slower the projected progress toward those objectives, the longer the current target range for the federal funds rate is likely to be maintained. This approach underscores the continuing commitment of the FOMC to maintain the appropriate degree of accommodation to support the recovery. The new guidance also reaffirms the FOMC's view that decisions about liftoff should not be based on any one indicator, but that it will take into account a wide range of

information on the labor market, inflation, and financial developments.

Along with this general framework, the FOMC provided an assessment of what that framework likely implies for the path of policy under our baseline outlook. At present, the Committee anticipates that economic and financial conditions will likely warrant maintaining the current range for the federal funds rate for a considerable time after the asset purchase program ends, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal, and provided that longer-term inflation expectations remain well anchored.

Finally, the Committee began explaining more fully how policy may operate in the period after liftoff, indicating its expectation that economic conditions may, for some time, warrant keeping short-term interest rates below levels the Committee views as likely to prove normal in the longer run. FOMC participants have cited different reasons for this view, but many of the reasons involve persistent effects of the financial crisis and the possibility that the productive capacity of the economy will grow more slowly, at least for a time, than it did on average before the crisis. The expectation that the achievement of our economic objectives will likely require low real interest rates for some time is again not confined to the United States but is shared broadly across many advanced economies. Of course, this guidance is a forecast and will evolve as we gain further evidence about how the economy is operating in the wake of the crisis and ensuing recession.

In summary, the policy framework I've described reflects the FOMC's commitment to systematically respond to unforeseen economic developments in order to promote a return to maximum employment in a context of price stability. It is very welcome news that a return to these conditions has finally appeared in the medium-term outlook of many forecasters. But it will be much better news when this objective is reached. My colleagues on the FOMC and I will stay focused on doing the Federal Reserve's part to promote this goal. Thank you.

## QUESTION AND ANSWER PERIOD

ROGER FERGUSON: Thank you very much Chair Yellen. And now, as is our tradition, two of our club members will conduct a question and answer session. They are vice chair Abby Joseph Cohen, Senior Investment Strategist at Goldman Sachs, and Marty Feldstein, Professor of Economics at Harvard University and a trustee of the club. Abby, the first question is yours.

ABBY JOSEPH COHEN: Roger, thank you. And, Madam Chair, thank you again on behalf of everyone here for your decision to give this important presentation today in New York. Very clear and cogent remarks and yet another example of straightforward communication from the Federal Reserve. Thank you for that. For my first question, I'd like to go back to the problem you discussed earlier, and that is the vexing and long-lasting nature of unemployment in the United States following the financial crisis. We see that beneath the national data which are improving, there is a very wide dispersion in labor market performance. Big differences, for

example by geography, in what some cities and some states are doing far better than others, and also a very dramatic difference by education. Much depends upon how much education and vocational training a worker may have. What is the role of the Federal Reserve in addressing these aspects of unemployment? What other government policies might be helpful? And what other private actions might be helpful in finally getting unemployment back down to more comfortable levels?

THE HONORABLE JANET L. YELLEN: Thank you Abby. I think you're absolutely right that the recovery in the labor market has been exceptionally slow. The financial crisis, I think, left us with a lot of headwinds that the economy has been struggling to overcome. So we have indeed had a disappointingly slow recovery and our consistent expectations for a pickup in growth have been dashed over a number of years. And the labor market is behaving in some perplexing ways and showing patterns that are novel. I agree with the points that you mentioned, and I mentioned some in my own remarks. Part-time employment that's involuntary is remarkably high in comparison with any past recovery. The length of unemployment spells is higher than we have seen during the post-War period, and labor force participation, as I mentioned, has declined a lot. I think for our part you asked what role can the Federal Reserve play? And it is, as I emphasized, to continue to use monetary policy and to adjust it in light of changing economic circumstances as we have over all these years during the recovery to foster healing of the labor market, a return to so-called full employment. And I think that's the best contribution that we can make. I do think we are seeing very meaningful progress, although

clearly we're not, the goal has not been achieved at this point. You asked me also what role the public and private sector can play. I think that we all know that there are problems in the labor market that run deeper than merely a weak economy. They're not just cyclical problems. We have seen a rise in inequality and pressure on wages at the middle and below of the income spectrum rising, skill gaps in wages, at least going back to the mid-1980s. And economists, of course, debate exactly what the causes are of those unsettling labor market trends. And there are a lot of ideas that have been put forward, skill bias, technological change, trends in the global economy, and institutional changes. I think almost on anybody's list of what the private and public sector can do to address those disturbing trends would be greater training and education. And clearly there's a great deal that the public can do and also I see state and local governments and private individuals obviously making their own decisions about training, are responding to those differentials in ways that I think will be helpful over time.

MARTY FELDSTEIN: Thank you very much for a very clear statement. As you've indicated, the Fed has the two goals of low unemployment and price stability. And because inflation is now very, very low, Fed policy is focused on reducing slack in the labor market and raising inflation to about 2 percent. But at some point a stronger economy may bring higher inflation rates. Would the Fed be willing to raise the fed funds interest rate above the rate of inflation if the inflation rate begins rising above say 2 ½ percent even if there is still slack in the labor market?

THE HONORABLE JANET L. YELLEN: So let me emphasize that our commitment is two-sided. We don't want to see inflation run persistently below our 2 percent target. And we also don't want to see inflation run persistently above our 2 percent target. The FOMC, about two years ago, wanted to make very clear that we have a very strong commitment to a 2 percent longer-run inflation goal. And we, for the first time, issued a clear statement that 2 percent is our longer-run inflation goal and we remain committed to it. This continues to be the case. So although with inflation running at around 1 percent, at this point, as I mentioned, I think the risk is greater that we should be worrying about inflation undershooting our goal and getting inflation back up to 2 percent. Of course, the FOMC absolutely will be committed to protecting inflation if it threatens to rise persistently above 2 percent as well. And, you know, I hope it's completely clear that while monetary policy is very accommodative at this point and I focused on the need to keep it so or to adjust it to make sure that the recovery remains on track, as the recovery proceeds and healing occurs, it's obvious that we will need to tighten monetary policy to avoid overshooting our target. And we are very focused on that. This is a judgment call that the Federal Reserve needs to make in every expansion. Overshooting that goal, we have learned in past episodes and past recoveries can be very costly to reverse, that's something we don't want to happen. And so, yes, we will remain very focused on removing accommodation when the right time has come, and I feel very confident that we have the tools to do that and also the commitment and will. And by making our objective of 2 percent longer-run inflation very clear, we did that in order to be transparent and to give the public a way to hold us accountable for achieving that goal.

ABBY JOSEPH COHEN: Madam Chair, the Federal Reserve has been doing its difficult work during the global financial crisis and the aftermath really in a global context. And as we look at the current and forward situation, the two largest economies in the world – that of the United States and the eurozone – seem to have some very significant differences. There are differences, for example, in the pace of economic growth, both cyclical and perhaps the long-term growth prospects in which the United States seems to be in better condition. And there also seems to be big differences in the condition of bank balance sheets. In Europe there has been the spillover of the sovereign debt crisis and some other factors. How do these differences in growth and the current health of the financial system in the two regions complicate Fed policy with regard to two different things; number one, the decision on policies related to economic stimulus, but also policies related to supervision and regulation?

THE HONORABLE JANET L. YELLEN: So I completely agree that some of the economic challenges facing Europe and the United States are quite different. And because we are seeing differences in economic situations around the globe, it is likely that the process of removing accommodation will take place at different paces in different parts of the world and this will be a challenging situation. Over the last year or so, we have been very focused on potential spillovers of policies and challenges that these differences in the pace, likely pace of normalization of policies, pose for developing economies, for emerging market economies, in a world where global capital flows respond to small shifts in policy and expectations about policy. We have

seen that these shifting expectations have imposed some difficulties for emerging markets particularly in managing policies. In the case of Europe, obviously the European situation is one with very high unemployment. There's been a return to growth but it's proceeding at a very modest pace at this point. There are challenges that we don't face in the United States across the euro area of readjusting competitiveness across countries and shifting current account balances among the countries in the euro area. And I think Europe is being held back by adjustments in their banking sector and problems in the banking sector that I think we have a much stronger banking sector in the United States. You asked specifically about banks, bank balance sheets, and supervision in regulation. We have been very focused, both the Federal Reserve and other regulators in the United States and globally working with our colleagues to strengthen the financial system in the aftermath of the crisis to make banking organizations stronger and to more broadly reduce systemic risks so that we are at less risk of a financial crisis. And I do believe that we're making very meaningful progress in that task. There's much more and higher quality capital and more liquidity in the U.S. banking system. We have raised capital standards very meaningfully, particularly for the largest and most systemic firms. And as my colleagues and I have mentioned, there may be some further changes that we will put into effect to raise capital standards. The large firms and banking organizations generally are well on the track to meeting those higher capital standards. And my perception of the situation in the banking industry at this point is banks look to lend, they want to provide credit, and they're supporting the recovery. In Europe I think the situation is different but they have made very meaningful progress I think in trying to form a banking union that will be a pillar of strengthened European

and euro area economy. They are working very closely with us to enhance capital standards and to move forward with us to maintain a level playing field in terms of capital standards and regulations. I think their economy, however, at this point is somewhat more constrained by the need of banking organizations to build capital. They have made quite a bit of progress, I think, toward forming a banking union and the ECB as you know is in the process of conducting an asset quality review and stress tests. Those were steps that were very important for us some years ago, I think, in putting our banking organizations on the road to health and recovery, and I think they will be equally important in Europe as well.

MARTY FELDSTEIN: Thank you for the answer that you gave to my previous question about inflation. I found the answer very, very reassuring. I want to stick with the subject of inflation and ask how you will decide, how the Federal Reserve will decide, that the risk of inflation, that is the risk of overshooting the 2 percent goal is high enough to warrant a significantly positive real fed funds rate. That is, how will you make sure that you are ahead of the curve, not behind the curve? Alan Krueger of Princeton suggested that the short-term unemployment rate, that is the unemployment rate for those out of work for less than six months, might provide a good early indicator. And I wonder if you agreed with that, and if not, what you would look at to try to anticipate inflation going above the 2 percent goal?

THE HONORABLE JANET L. YELLEN: Well, we will certainly be looking at a wide variety of indicators pertaining to the labor market and of course directly to the performance of inflation,

inflation pressures, and inflation expectations. And one measure, as I noted in my speech, of labor market slack is wage pressures that can translate into price pressures and be an early warning indicator of impending uptick in inflation although the relationship between wage inflation and price inflation has been less close and less reliable in recent years. There is, you know, I indicated in my remarks that one of the questions about the economy we will be focused on pertains to the labor market and trying to assess just how much slack there is and what the impact of the labor market is on inflationary pressures. And as you mentioned Alan Krueger's work, there is a line of research that suggests that it is mainly short-term unemployment rather than long-term unemployment that has an impact on inflation. So it is conceivable if that line of thinking is right, that even with unemployment high – short-term unemployment low, long-term unemployment high – if that line of thinking is correct. So we could see that even with the unemployment rate high by historical standards, inflationary pressures would actually be rising because the long-term unemployed according to that reasoning are placing less downward pressure on inflation. Now I think it's premature frankly to jump to that conclusion, that that argument is correct, and I've made some arguments in other remarks that I've given about why I think that the long-term unemployed are likely to move back more actively into the labor force and into the job market and exert pressure on wages and prices as the labor market strengthened. But clearly we will have to watch unfolding evidence and evaluate it with an open mind and very carefully in the months ahead to make the assessments that will be necessary. And I mentioned that there can be surprises, and one of the surprises we could see, I wouldn't rule out, it's not what I think is most likely but would not rule out the possibility that inflation could rise to levels

where we would need to address it before we might expect at this point. So that is something we will be quite attentive to. It is not my, it is not what I anticipate will happen, but again the purpose of my remarks today is to emphasize that there can be a lot of twists and turns. We need to be alert to what is happening in the economy and to respond to what we see happening and not a fixed idea that we perhaps held at some earlier time about what will come to pass.

ROGER FERGUSON: Well, thank you Chair Yellen, for those very insightful remarks and also the answers to the questions. Thank you Abby, and thank you Martin, for the questions. The next meeting of the club will be here at the Marriott. It will be on Monday, April 28, and the speaker will be former chairman of the Federal Reserve System, Alan Greenspan. So thank you for coming today and please enjoy your lunch. Thank you very much.