

**Transcript of Chair Yellen's Press Conference
September 17, 2014**

CHAIR YELLEN. Good afternoon. The Federal Open Market Committee concluded its meeting earlier today and, as usual, released its monetary policy statement. The Committee also released a document describing the approach the Committee intends to take when, at some point in the future, it becomes appropriate to begin normalizing the stance of policy. Let me underscore that our release of this information is not meant to convey any change in the stance of policy. As you know, the FOMC's views on policy are conveyed in the policy statement, which I will now discuss before coming back to our normalization plans.

As indicated in our policy statement, the FOMC decided to make another reduction in the pace of its asset purchases. The Committee also maintained its forward guidance regarding the federal funds rate target and reaffirmed its view that a highly accommodative stance of monetary policy remains appropriate. Let me discuss the economic conditions that underpin these actions.

The economy is continuing to make progress toward the FOMC's objective of maximum sustainable employment. In the labor market, conditions have improved further in recent months. Although the pace of job growth has slowed some recently, job gains have averaged more than 200,000 per month over the past three months. The unemployment rate was 6.1 percent in August, two-tenths lower than the data available at the time of the June FOMC meeting. Broader measures of labor market utilization, such as the U-6 measure, have shown similar improvement, and the labor force participation rate has flattened out. These developments continue the trend of gradual progress toward our employment objective. But the labor market has yet to fully recover. There are still too many people who want jobs but cannot find them, too many who are working part time but would prefer full-time work, and too many who are not searching for a job but would be if the labor market were stronger. As noted in the

FOMC statement, “a range of labor market indicators suggests that there remains significant underutilization of labor resources.”

The Committee continues to see sufficient underlying strength in the economy to support ongoing improvement in the labor market. Although real GDP rose at an annual rate of only about 1 percent in the first half of the year, that modest gain reflected, in part, transitory factors, including a dip in net exports. Indeed, private domestic final demand—that is, spending by domestic households and businesses—grew about twice as fast as GDP. Indicators of spending and production for the third quarter suggest that economic activity is expanding at a moderate pace, and the Committee continues to expect a moderate pace of growth going forward.

Inflation has been running below the Committee's 2 percent objective, but with longer-term inflation expectations appearing to be well anchored and the economic recovery continuing, the Committee expects inflation to move gradually back toward its objective. Moreover, inflation has firmed some since earlier in the year, and the Committee believes that the likelihood of inflation running persistently below 2 percent has diminished. As is always the case, the Committee will continue to assess incoming data carefully to ensure that policy is consistent with attaining the FOMC's longer-run goals of maximum employment and inflation of 2 percent.

This outlook is reflected in the individual economic projections submitted in conjunction with this meeting by the FOMC participants, which, for the first time, go through 2017. As always, each participant's projections are conditioned on his or her own view of appropriate monetary policy. The central tendency of the unemployment rate projections is slightly lower than in the June projections and now stands at 5.9 to 6.0 percent at the end of this year.

Committee participants generally see the unemployment rate declining to its longer-run normal level over the course of 2016 and edging a bit below that level in 2017. The central tendency of

the projections for real GDP growth is 2.0 to 2.2 percent for 2014, down slightly from the June projections. Over the next three years, the projections for real GDP growth run somewhat above the estimates of longer-run normal growth. Finally, FOMC participants continue to see inflation moving gradually back toward 2 percent. The central tendency of the inflation projections is 1.5 to 1.7 percent in 2014, rising to 1.9 to 2 percent in 2017.

As I noted earlier, the Committee decided today to make another reduction in the pace of asset purchases. Two years ago, when the FOMC began this purchase program, the unemployment rate stood at 8.1 percent, and progress in lowering it was expected to be much slower than desired without additional policy accommodation. The intent of the program was to achieve a substantial improvement in the outlook for the labor market and to ensure that inflation was moving back toward the Committee's longer-run goal of 2 percent. In light of the cumulative progress toward maximum employment and the improvement in the outlook for labor market conditions since the inception of the program, and with the likelihood of inflation running persistently below 2 percent having diminished somewhat, we have reduced our pace of asset purchases again at this meeting. Starting next month, we will be purchasing \$15 billion of securities per month, down \$10 billion per month from our current rate. If incoming information broadly supports the Committee's expectation of ongoing improvement in the labor market and inflation moving back over time toward its 2 percent longer-run objective, the Committee will end this program at our next meeting.

The Committee will continue its policy of reinvesting proceeds from maturing Treasury securities and principal payments from holdings of agency debt and MBS. The Committee's sizable holdings of longer-term securities should help maintain accommodative financial

conditions and promote further progress toward our objectives of maximum employment and inflation of 2 percent.

Regarding interest rates, the Committee reaffirmed its forward guidance “that it likely will be appropriate to maintain the current target 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 longer-term inflation expectations remain well anchored.” This judgment is based on the Committee’s assessment of realized and expected progress toward its objectives of maximum employment and 2 percent inflation—an assessment that is based on a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. Further, once we begin to remove policy accommodation, it is the Committee’s current assessment that, even after employment and inflation are near mandate-consistent levels, economic conditions may, for some time, warrant keeping the target federal funds rate below levels the Committee views as normal in the longer run.

This guidance is consistent with the paths for appropriate policy as reported in the participants’ projections. As I will explain in a moment, the FOMC now anticipates that it will continue to establish a target range, rather than a single point, for the federal funds rate when normalization begins, and the dots in the chart I’ve distributed now show, for each participant, the midpoint of this target range. Notably, although the central tendency of the unemployment rate in late 2016 is slightly below its estimated longer-run value, and the central tendency for inflation is close to our 2 percent objective, the median projection for the federal funds rate at the end of 2016, at 2.9 percent, remains nearly a percentage point below the longer-run value of 3¾ percent or so projected by most participants. Although FOMC participants provide a number

of explanations for the federal funds rate running below its longer-run normal level at that time, many cite the residual effects of the financial crisis, which, although slowly diminishing, are likely to continue to restrain household spending, constrain credit availability, and depress expectations for future growth in output and incomes. As these factors dissipate further, most participants expect the federal funds rate to move close to its longer-run normal level by the end of 2017.

Let me reiterate, however, that the Committee's expectations for the path of the federal funds rate are contingent on the economic outlook. If the economy proves to be stronger than anticipated by the Committee, resulting in a more rapid convergence of employment and inflation to the FOMC's objectives, then increases in the federal funds rate are likely to occur sooner and to be more rapid than currently envisaged. Conversely, if economic performance disappoints, increases in the federal funds rate are likely to take place later and to be more gradual.

Let me now turn to our statement on "Policy Normalization Principles and Plans." This statement is intended to provide information to the public about the eventual normalization process; it does not signal a change in the current or future stance of monetary policy. As is always the case in setting policy, the FOMC will determine the timing and pace of policy normalization so as to promote its statutory mandate of maximum employment and price stability.

Since the crisis, the Federal Reserve has been providing extraordinary accommodation using nontraditional tools of monetary policy. The FOMC's intention has always been to return to a more traditional approach, and throughout this period, the Committee has been preparing for the normalization process. In June 2011, the Committee set out some broad principles and some

more specific tactics for how it envisioned the normalization process to take place. In June 2013, we noted that conditions had changed significantly in ways not anticipated in June of 2011, including the size and composition of the Fed's balance sheet, and that some revision of those earlier plans was appropriate. The document released today reflects our updated plans, which, readers of our minutes will know, have been under discussion for the last few FOMC meetings. The new approach retains many broad objectives and principles from the original but also has some new elements.

As was the case before the crisis, the Committee intends to adjust the stance of monetary policy during normalization primarily through actions that influence the level of the federal funds rate and other short-term interest rates, not through active management of the balance sheet. The federal funds rate will serve as the key rate to communicate the stance of policy. To begin normalization, the Committee will raise its target range for the federal funds rate. The Committee expects that the effective federal funds rate may vary within the target range, and could even move outside of that range on occasion, but such movements should have no material effect on financial conditions or the broader economy.

The primary tool for moving the federal funds rate into the target range will be the rate of interest paid on excess reserves, or IOER. The Committee expects that the federal funds rate will trade below the IOER rate while reserves are so plentiful, as is the case at present. The Committee also intends to use an overnight reverse repurchase agreement facility, which, by transacting with a broad set of counterparties, will help ensure that the federal funds rate remains in the target range. I would like to emphasize that the overnight RRP facility will only be used to the extent necessary and will be phased out when no longer needed to help control the federal funds rate. In addition, the Committee will adjust the particular settings of these tools as needed,

and could deploy other supplementary tools as well, to ensure that we achieve our desired stance of policy.

Turning now to our plans regarding the Fed's balance sheet, the Committee intends to reduce securities holdings in a gradual and predictable manner, primarily by ceasing to reinvest repayments of principal on securities held in the System Open Market Account. Regarding the timing for ceasing reinvestments, the Committee now expects this to occur after the initial increase in the target range for the federal funds rate. The Committee currently does not anticipate selling agency mortgage-backed securities as part of the normalization process, although limited sales might be warranted in the longer run to reduce or eliminate residual holdings. The timing and pace of such sales would be communicated to the public in advance. It's the Committee's intention that the Federal Reserve will, in the longer run, hold no more securities than necessary to implement monetary policy efficiently and effectively, and that these securities will primarily consist of Treasury securities.

As I stated earlier, today's release of the Committee's updated normalization plans is in no way intended to signal a change in the stance of monetary policy. Rather, it is meant simply to provide information about how the Committee envisions the normalization process in light of the changes in economic and financial circumstances that have occurred since we put forth our original plans more than three years ago. That said, conditions could change further, and we will learn about our tools during normalization. The Committee has agreed that it is prepared to make additional adjustments to its normalization plans if warranted by economic and financial developments.

Thank you. Let me stop there. I'll be happy to take your questions.

STEVE LIESMAN. Thank you. Chair Yellen, there was some debate going into this meeting about the phrase “considerable time,” and whether it would remain in the statement. I want to know if you could tell me just a couple things about it. First, was it debated at the FOMC as to whether or not it should be included? And, I’m sorry, we’ve been over this before, but what does it mean timewise? And that’s just two questions. I have just a couple more here. Is the statement a form of forward guidance? And, finally, how do you square this idea of a date when you and others on the FOMC have continuously said that you’re data dependent to the point where, if the data were to turn, would it not necessarily be a considerable time until you raise rates? Thank you.

CHAIR YELLEN. So, of course, the Committee discussed its forward guidance today, and it discusses what the appropriate forward guidance is at every meeting. This is part of our assessment of economic conditions and the appropriate stance of monetary policy. In terms of what the term “considerable time” means, the Committee decided that, based on its assessment of economic conditions, that characterization remains appropriate, and it was comfortable with it. I think if you look, for example, at the projections of individual participants that are revealed in the SEP—well, that’s the view of each participant, and, again, I’d emphasize, not a Committee collective view—there is relatively little change in the assessment of the outlook by participants between this meeting and the assessment in June. So the outlook is little changed—a slight decline in the anticipated path of the unemployment rate and a very slight uptick in the inflation projection, but really quite minimal. So, the outlook hasn’t changed that much from June, and the Committee felt comfortable with this characterization.

Now, you said, “Isn’t this calendar-based guidance?” I want to emphasize that there is no mechanical interpretation of what the term “considerable time” means. And, as I’ve said

repeatedly, the decisions that the Committee makes about what is the appropriate time to begin to raise its target for the federal funds rate will be data dependent. And in my opening comments just now, I again emphasized something I've said previously, which is that if the pace of progress in achieving our goals were to quicken, if it were to accelerate, it's likely that the Committee would begin raising its target for the federal funds rate sooner than is now anticipated and might raise—might then raise the federal funds rate at a faster pace. And the opposite is also true, if the projection were to change. So there is no fixed mechanical interpretation of a time period.

I think it would not be accurate to describe the Committee's guidance about the timing of the federal funds rate and when it will move above zero as being calendar based. The Committee has started with a broad general statement of what determines how long it will keep the federal funds rate target at zero. It has said that it will be looking at the actual and projected pace at which the gaps between our employment and inflation, and our goals for those variables, are closing. And then what the Committee does at each meeting is—after saying that the assessment will take into account many different indicators and take into account inflation pressures and other things—it goes on to provide at that meeting its assessment of the implications of its view of the data at that time. And that assessment really hasn't changed over the last several meetings. The Committee, based on its assessment at each meeting, has felt comfortable saying that, based on its assessment of those factors, it considers that it will be likely appropriate to maintain the current target range for a considerable time after the asset purchase program ends, especially if inflation remains below the 2 percent objective. So I wouldn't describe that as—I know “considerable time” sounds like it's a calendar concept, but it is highly conditional, and it's linked to the Committee's assessment of the economy.

HOWARD SCHNEIDER. Thank you. Howard Schneider with Reuters. Thank you. So if you would help us, I mean, square the circle a little bit—because having kept the guidance the same, having referred to significant underutilization of labor, having actually pushed GDP projections down a little bit, yet the rate path gets steeper and seems to be consolidating higher—so if it's data dependent, what accounts for the faster projections on rate increases if the data aren't moving in that direction?

CHAIR YELLEN. Well, the growth projections for 2014 are down a little bit, but the unemployment path is also marginally lower. So while the projected path of the labor market—unemployment and other measures of the labor market—of course is partly dependent on the growth outlook, it isn't totally dependent on the growth outlook. And the Committee assesses that the labor market is continuing to improve, and you see a small reduction in the path of the unemployment this year and then over the rest of the projection period.

So, if you ask me—you asked me, “Why has the projected funds rate path moved up?” Well, you know, each participant knows the reason they wrote down what they did. But, as a guess, I would hazard—first, I would say, there is relatively little upward movement in the path, and I would view it as broadly in line with what one would expect with a very small downward reduction in the path for unemployment and a very slight upward change in the projection for inflation. So, most participants, in deciding on the path, I think, look at, as our guidance says, how large is the gap between performance of the labor market and that associated with our maximum employment objective, how large is the gap between inflation and our 2 percent objective, how fast will those gaps change. And you see in the projections very modest reductions in the size of those gaps and modest—very small change of a slightly faster pace at which those gaps would change. I would describe the change in the projections, both for the

economy and the path of rates, as quite modest. But the fact that they move does illustrate the data-dependence principle that I think is really so important for market participants to keep in mind, that what we do will depend on how the data unfold. There is uncertainty about that. And as expectations and the actual performance of the economy change, you should expect to see movements in the dots.

I think it's also notable that the further you go out in the projection period, the wider the set of dots. You see a big range out in 2017, and that reflects, in part, different forecasts by different members of the Committee about how rapid progress will be. What you don't see in the dot—so-called dot plot is also the uncertainty that each individual, each participant, sees around their own projection. So things will depend on how the economy evolves. That will change over time, and there's a good deal of uncertainty associated with it.

CHRIS CONDON. Thank you, Madam Chair. Chris Condon, Bloomberg News. Madam Chair, the economy has been growing now for five years, and some economists believe the expansion will last another five years. Why, in your view, is economic growth not creating more inflation in wages and in PCE? Is this all about remaining slack in the labor market, or are there other forces at play?

CHAIR YELLEN. Well, to my mind, the very slow pace of wage increases does reflect slack in the labor market. We had a very deep recession, as is perhaps to be expected in the aftermath of a very significant financial crisis. We've faced headwinds in the economy recovering, so the recovery has been slow. Growth has been positive, and it's lasted for five years. But it's nevertheless been slow relative to past recoveries that have not been associated with financial crises. And while unemployment has come way down from the slightly over 10 percent level it reached, at 6.1 percent, it remains significantly above the level that most

FOMC participants would regard as consistent with normal in the longer run, 5.2 to 5.5 percent. So there is significant underutilization of labor resources. We continue to discuss whether or not the unemployment rate itself is an adequate measure of how much underutilization of labor resources there really is. And, as I went into detail in Jackson Hole and won't repeat all of that there, there are other ways in which we see underutilization—high levels that have come down only very marginally of part-time employment for economic—or involuntary part-time employment, perhaps some remaining shortfall of labor force participation as a result of cyclical factors. And so, I think there still is—and the statement says it—“significant underutilization of labor resources” and a very modest pace of wage increases that's picked up very little, I see as essentially a reflection of that.

JON HILSEN RATH. Jon Hilsenrath from the *Wall Street Journal*. Chair Yellen, I want to come back to the interest rate projections that the Fed put out today. The public, I think, would be enlightened by knowing a bit more about where you stand in relation to these projections. And with that in mind, and in the name of transparency, I wonder if you could describe to us whether you're at the low end of those projections, within the central tendency, or at the high end. I also want to ask you about a San Francisco Fed paper that came out recently, which suggested that market expectations have been running below the Fed's own projections. So I wanted to ask you if you see that as well, and whether it's at all troubling that market expectations might not be aligned with the central—with what the Fed put out today.

CHAIR YELLEN. So, with respect to identifying myself, the Committee has had discussions during the years that we have been providing these forecasts of the participants to the public as to whether or not it's desirable from the standpoint of Committee functioning to identify who's who in these pictures. And thus far, while occasionally an individual will indicate

in a speech what their personal views are, we have not yet decided that it would be a desirable thing for the point of view of our decisionmaking process to identify individuals. We have a subcommittee on communications that's now chaired by Vice Chair Fischer, and they will be considering the SEP and whether or not some changes are appropriate. But until and unless there is some change in the Committee stance on this, I don't want to identify myself.

You asked, second, about the San Francisco Fed paper that did point to a notable divergence between market views and the views of the Committee. I'd say that there have been any number of different analyses of this topic, there are many different survey measures and interpretations of what the market thinks. And I don't frankly think it's completely clear that there is a gap. There are different views on whether or not such a gap exists. To the extent that there is a gap, one reason for it could be that markets and participants have different views on the evolution of economic conditions. For example, I think I'd note that when the Committee participants write down their forecast for the federal funds rate, they are showing the funds rate path that they consider most likely. Their economic forecasts are of the conditions that they think are the most likely ones. You don't see the full range of possibilities there. And the path for the funds rate is the path that each individual thinks is most likely. Market participants, understanding that there are a range of possible outcomes, with upside and downside possibilities, are doing something slightly different, I think, when they're determining market prices. They are taking into account the possibility that there can be different economic outcomes, including—even if they're not very likely—ones in which outcomes will be characterized by low inflation or low growth and the appropriate path of rates will be low.

So, differences in probabilities of different outcomes can explain part of that. We, you know, want to learn, we—market participants may have different views on the economy than the

Committee does, and that's something we want to try to infer and learn market views, in part from information of this type. What I can say is that it is important for market participants to understand what our likely response or reaction function is to the data, and our job is to try to communicate as clearly as we can the way in which our policy stance will depend on the data, and I promise to try to do that.

YLAN MUI. Hi, Ylan Mui, *Washington Post*. My question is about the new exit principles. You guys say that you don't plan to end reinvestments until after the first rate hike. Can you give us a little bit of a sense of what are the conditions you're going to be looking for when you eventually begin to end the reinvestments? It sounds like tapering the reinvestments is also on the table. What might go into your decision on whether or not to end them altogether, whether or not to taper them? And do you have a general timeline for how long you think it will take to shrink the balance sheet once you actually start?

CHAIR YELLEN. Okay. All good questions. So, I think the Committee would—will be focused on—we intend to use the path of short-term interest rates as our key tool of policy. And, of course, market participants will be very focused, as we are, on what is the appropriate timing and pace of interest rate increases when that time comes. And I think the Committee would like to feel that it has successfully begun the normalization process and that we're successfully communicating with markets about how that process will be playing out over time. And I think when the Committee is comfortable that that process is established, is working well, and we're comfortable with the outlook, that they will begin the process of ceasing—or possibly tapering—but eventually ceasing reinvestments.

So, we say that it will depend on economic and financial conditions, but we want to make sure normalization is successfully under way. If we were only to shrink our balance sheet by

ceasing reinvestments, it would probably take—to get back to levels of reserve balances that we had before the crisis—I'm not sure we will go that low, but we've said that we will try to shrink our balance sheet to the lowest levels consistent with the efficient and effective implementation of policy—it could take to the end of the decade to achieve those levels.

BINYAMIN APPELBAUM. You said a few moments ago that there is perhaps some remaining shortfall of labor force participation as a result of cyclical factors. This seems consistent with a recent paper by some members of your staff finding that labor force participation is unlikely to recover. Is that now the “house” view that slack essentially consists of unemployment plus part-time workers who want full-time work, and that labor force participation is basically out of the equation?

And the second question—in the statement of exit principles, you said that the Committee will act as soon as economic conditions warrant. There had been an idea in circulation at some point that you might stay lower for longer as a means of compensating for some of the damage done during the recession. Is this an indication that that debate has been settled, and that that idea is off the table?

CHAIR YELLEN. I'm sorry. Just remind me, what was the first question? The first question—

BINYAMIN APPELBAUM. The first question was—

CHAIR YELLEN. Please.

BINYAMIN APPELBAUM. The first question was, has the labor force participation—

CHAIR YELLEN. Ah, labor force participation—

BINYAMIN APPELBAUM. —been removed from the slack equation?

CHAIR YELLEN. So the recent Brookings paper by the Fed economists clearly indicates, and I said this at Jackson Hole, that there are structural reasons, particularly demographics but not only demographics, why labor force participation should be expected to decline over time. And I agree with that, and I believe that most of my colleagues would endorse that as well. However, they did indicate that, in the paper, that they see some remaining cyclical shortfall. By one technique that they used, they placed the estimate at $\frac{1}{4}$ percent, but by another technique that they used it could be, I believe they said, as large as 1 percent. And so my own personal view is that there is some cyclical shortfall, and something certainly—probably within that range. But nevertheless, it's a meaningful cyclical shortfall. It's not completely—so I'm giving my own personal view, not a Committee assessment—that, you know, I see the flat—and given the underlying downward trend in labor force participation, we might interpret the flattening out of labor force participation over the last year as showing that that cyclical component has diminished somewhat. I think there is something that remains, but eventually I would certainly agree with the authors, we should expect over time to see labor force participation declining. And then, let's see, the second piece was—

BINYAMIN APPELBAUM. Is the debate about lower-for-longer essentially over?

CHAIR YELLEN. Well, you know, we stayed low for a very long time. We have been at zero for a very long time and below the levels that some common policy rules would now be suggesting, given the level of unemployment and inflation. So the recovery has been very slow. We've also been doing unconventional policies, of course, buying assets. And in a general sense, I think we have been lower for longer than—if you complete that sentence—than many standard policy rules would suggest. So, in a sense, that is a policy that we have had. And once we decide it's appropriate to begin to normalize policy and to raise the level of our target for

short-term interest rates, it would still take some time for rates to get back to levels—you can see in our projection that by the end of 2017, the participants are, on average, projecting that rates will reach the levels they consider normal in the longer run. And, similarly, we could make a similar statement with respect to where the funds rate would stand relative to the recommendations of rules. So that would take some time to return to those kinds of levels.

MARTIN CRUTSINGER. Thank you. Marty Crutsinger with the Associated Press. Madam Chair, there were two dissents from today's decision. I'd kind of like to get your thinking on how you treat dissents. I think in Chairman Bernanke's eight years, the largest number of dissents was three. Do you see two dissents as a yellow-warning flashing light that policy may need to be moderated down the road? How should market participants read the dissents?

CHAIR YELLEN. Well, I think it's very natural that the Committee should have a range of opinion about a decision as crucial as what is the right time to begin to normalize policy, and we do have a range of views in the Committee. I don't consider two dissents to be an abnormally large number. Presidents Plosser and Fisher have been quite clear in all of their speeches recently in stating that they think the time has come to begin normalizing policy. I think they, perhaps, have some concerns that if we don't begin to do so soon that inflation will pick up above levels we—that they would consider desirable, or that they have some financial stability concerns. But the Committee adopted today's statement by an overwhelming majority, and I don't consider the level of dissent to be surprising or very abnormal.

GREG IP. Greg Ip of *The Economist*. There's been another downgrade in your near-term growth forecast and a downgrade in your unemployment rate path forecast. Does it appear

that potential is much lower than you thought, and therefore slack is closing more quickly than you thought? This seems to be a persistent pattern to your forecasts.

Secondarily, how concerned are you about events in Europe and especially the recent decline in inflation expectations there?

CHAIR YELLEN. So there's been a little bit of downgrading, I think, even this time in the longer-run normal growth rates that Committee participants have written down. You are certainly right in saying that over a number of years now, there's been a pattern of forecast errors in which either we've been on track with respect to unemployment or unemployment has come down in some cases faster than we anticipated, and yet growth has pretty persistently been surprising the Committee to the downside. And that is a statement about productivity growth, which has been pretty disappointing. So we have had downward revisions in the level of potential output and to some extent, at least for a time, in the projected pace of growth. So that tension has been there.

There are a range of views about long-run growth. A lot of people are writing about this topic. I think the Committee's longer-run estimates are neither at the most pessimistic end nor the most optimistic end.

GREG IP. I had a question about Europe.

CHAIR YELLEN. Oh, about Europe. Well, I mean, you know, certainly we have discussed the outlook for Europe—the very low level of inflation that they have seen recently and the decline that they saw in inflationary expectations, in the slow pace of growth. It is one of a number of risks to the global economy, and we certainly hope that they will be successful in seeing the pace of growth and inflation pick up, and I think that will be good for the global economy and the United States.

ROBIN HARDING. Robin Harding from the *Financial Times*. Madam Chair, I want to come back to the forward guidance. Quite a large part of the Committee has recently criticized the guidance as being calendar based. But if I understood your comments earlier, that's not correct. How should people understand it? And if it doesn't have a defined meaning, what purpose is it actually serving? And do you expect to have to revisit it in the near future? Thank you.

CHAIR YELLEN. So we are constantly discussing forward guidance and thinking about whether it's appropriate and how to revise it. And we did do a major overhaul of our forward guidance in March. I think the Committee participants who have spoken out on this topic recently want to make sure that we have the flexibility—that the Committee has the flexibility to respond to unfolding developments. They want to make sure that if progress really does turn out to be faster than we have—we would expect, that the Committee will be in a position to start sooner tightening monetary policy. They do not want to be locked into something that the markets see as a calendar-based and firm commitment. And so they want to emphasize data dependence of our policy and make sure that we have appropriate flexibility. But I agree with that. And, as I said earlier, I think we do not have any mechanical interpretation that applies to this. It, of course, gives an impression about what we think will be appropriate, but there is no mechanical interpretation. And I've said repeatedly, and I want to say again, that if events surprise us, and we're moving more quickly toward our objectives, and the Committee sees a need to move sooner or later depending on what the data is, that we do feel—I do feel we have the flexibility to move. And it is important for markets to understand that there is uncertainty, and this statement is not some sort of firm promise about a particular amount of time.

STEVEN BECKNER. Good afternoon, Chair Yellen. Getting back to the one aspect of the forward guidance is the statement, which you've reiterated about the funds rate probably needing to stay below normal for some time after achieving mandate-consistent levels on unemployment, inflation, and so forth. The SEP assessments of appropriate funds rate levels show the funds rate getting up to that 3.75 percent normal level at the end of 2017. If you look at the SEP projections of unemployment, inflation, and so forth, they seem to get back to those mandate-consistent levels by the end of 2016, if not much sooner. So what is the justification for waiting that much longer to get back to normal, particularly when you have such a large balance sheet that you intend to reduce only gradually? Is there a danger of getting behind the curve?

And, secondly, can I just ask, can you envision a time when, to reduce reserve pressures, you may have to resort to asset sales that you don't anticipate doing now?

CHAIR YELLEN. So on the first question of "some time" before rates return to normal levels, as I mentioned, you can see in the SEP that by the end of 2017, many participants are anticipating that rates will return to what they think are normal longer-run levels, but the economy, in their view, will have probably gotten back to normal levels of unemployment and near-normal levels of inflation sometime in 2016. So that looks like a year or more in which rates would be below normal longer-run levels.

We asked participants why they hold the views that they do about appropriate policy, and there are a number of different explanations that participants give. But a common view on this is that there have been a variety of headwinds resulting from the crisis that have slowed growth, led to a sluggish recovery from the crisis, and that these headwinds will dissipate only slowly, that they are dissipating—an example would be the fact that mortgage credit really is, at this point, available really to those with pristine credit. Credit conditions there are abnormally tight.

Another thing that we see is that households' expectations about their likely income paths remain quite depressed relative to pre-crisis levels. That's something that may be holding back consumer spending. So the view would be that those forces will dissipate over time, but only very gradually. In addition, we have had slow productivity growth, and a slow pace of potential output likely depresses the pace of investment spending. And so, those are some of the things that participants mention as why it will take some time to get back.

So the story is, it's not that the Fed is behind the curve in failing to return the funds rate to normal levels when the economy is recovered. It is rather that, in order to achieve such a recovery in 2016 or by the end, that it's necessary and appropriate to have a somewhat more accommodative policy than would be normal in the absence of those headwinds.

PETER BARNES. Peter Barnes of Fox Business, ma'am. I would like to follow up on Greg's question about Europe, because tomorrow Scotland is going to be voting on independence from Great Britain, and there's some concern that if it does vote to break from Great Britain, that this could cause some turmoil in global financial markets and the global economy. Are you concerned about that? Do you see any impact if Scotland does vote for independence on the European economy and potentially on the American economy? And, if so, is the Fed doing anything in preparation for that possibility? Thank you.

CHAIR YELLEN. Well, Scottish voters are about to go to the polls tomorrow, and they've had a good debate about this topic. And in light of that, I really don't want to weigh in on this today.

PEDRO DA COSTA. Thank you. Pedro da Costa with Dow Jones Newswires. My question is about your particular views about whether a gradual approach to tightening is better than a more aggressive and less predictable one, because there was some discussion about—

internally and externally, about whether it was the Fed's predictability in the 2004-ish period that kind of created the conditions of complacency that led to the housing bubble. So I wonder if you'd be more inclined to be gradualist in your approach and more transparent in outlining future moves or whether you think keeping the market guessing—there's some value to that. Thanks.

CHAIR YELLEN. You know, this is something the Committee is going to have to discuss when the time comes to normalize policy. Looking back on the period, the run-up to the financial crisis, I don't think, by any means, "measured pace" and the very predictable pace of 25 basis points per meeting explains why we had a financial crisis, but it may have diminished volatility and been a small contributing factor, and the Committee will have to think about how to do this. I think many people in the aftermath of that episode think that somewhat less of a mechanical pace would perhaps be better, but this is a matter that we will, in due time, have to discuss.