March 4, 2014 1 of 58

## Conference Call of the Federal Open Market Committee on March 4, 2014

A conference call of the Federal Open Market Committee was held on Tuesday, March 4, 2014, at 3:00 p.m. Those present were the following:

Janet L. Yellen, Chair

William C. Dudley, Vice Chairman

Richard W. Fisher

Narayana Kocherlakota

Sandra Pianalto

Jerome H. Powell

Jeremy C. Stein

Daniel K. Tarullo

Charles L. Evans, Dennis P. Lockhart, and John C. Williams, Alternate Members of the Federal Open Market Committee

James Bullard, Esther L. George, and Eric Rosengren, Presidents of the Federal Reserve Banks of St. Louis, Kansas City, and Boston, respectively

William B. English, Secretary and Economist

Matthew M. Luecke, Deputy Secretary

Michelle A. Smith, Assistant Secretary

Scott G. Alvarez, General Counsel

Thomas C. Baxter, Deputy General Counsel

Steven B. Kamin, Economist

David W. Wilcox, Economist

James A. Clouse, Thomas A. Connors, Evan F. Koenig, Thomas Laubach, Michael P. Leahy, Loretta J. Mester, Samuel Schulhofer-Wohl, Mark E. Schweitzer, and William Wascher, Associate Economists

Simon Potter, Manager, System Open Market Account

Lorie K. Logan, Deputy Manager, System Open Market Account

Nellie Liang, Director, Office of Financial Stability Policy and Research, Board of Governors

Stephen A. Meyer and William Nelson, Deputy Directors, Division of Monetary Affairs, Board of Governors

Jon W. Faust, Special Adviser to the Board, Office of Board Members, Board of Governors

March 4, 2014 2 of 58

Trevor A. Reeve, Special Adviser to the Chair, Office of Board Members, Board of Governors

Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Ellen E. Meade, Senior Adviser, Division of Monetary Affairs, Board of Governors

Eric M. Engen and Michael G. Palumbo, Associate Directors, Division of Research and Statistics, Board of Governors

David Lopez-Salido, Deputy Associate Director, Division of Monetary Affairs, Board of Governors

Edward Nelson, Assistant Director, Division of Monetary Affairs, Board of Governors

Dana L. Burnett, Section Chief, Division of Monetary Affairs, Board of Governors

Randall A. Williams, Records Project Manager, Division of Monetary Affairs, Board of Governors

David Altig, Jeff Fuhrer, Glenn D. Rudebusch, and Daniel G. Sullivan, Executive Vice Presidents, Federal Reserve Banks of Atlanta, Boston, San Francisco, and Chicago, respectively

Troy Davig, Christopher J. Waller, and John A. Weinberg, Senior Vice Presidents, Federal Reserve Banks of Kansas City, St. Louis, and Richmond, respectively

Jonathan P. McCarthy and Douglas Tillett, Vice Presidents, Federal Reserve Bank of New York and Chicago, respectively

Andreas L. Hornstein, Senior Advisor, Federal Reserve Bank of Richmond

March 4, 2014 3 of 58

## Transcript of the Federal Open Market Committee Conference Call on March 4, 2014

CHAIR YELLEN. Good afternoon, everyone. I appreciate your making time for this meeting. I would have preferred that we all be together in person for my first meeting as Chair so I could thank you personally for the good wishes you have offered. But let me express those thanks nonetheless.

Steve Kamin distributed a note on developments in Ukraine, and I would like to defer that until the end of the meeting. But if time permits after we have discussed forward guidance, if you have questions for Steve, I'm sure he would be glad to take them up. The main purpose of this meeting is to discuss our forward guidance so that we are able to reach agreement on how to revise it in March.

The unemployment rate, at 6.6 percent, is very close to the threshold in our FOMC statement. And despite the weaker tone of recent data, the threshold could be crossed soon, perhaps even before our March meeting. At a minimum, this means that we may need to remove the threshold language at the March meeting. But many of us have expressed an interest in also providing more information about the post-threshold period. In light of the complexities involved in modifying our forward guidance, I thought it would be useful for us to discuss some options outside the context of a regular meeting where the state of the economy and a policy decision take priority.

By way of introduction, I would like to make a couple of general comments about forward guidance. I personally see our forward guidance as having served a very important role in keeping financial conditions accommodative and as having thereby supported the recovery.

Now that we have finally reached the point when a return to something close to full employment

March 4, 2014 4 of 58

and price stability is in most of our SEP forecasts, issues pertaining to liftoff and normalization will naturally come to play a larger role in our policy communications.

I would urge everyone to remain mindful, though, of the numerous "false dawns" the economy has presented. The effective lower bound on interest rates still imposes an important asymmetry on our ability to respond to upside and downside risks. For this reason, and also for purposes of policy continuity, I believe it remains important that our forward guidance continues to convey, in terms that are as clear as possible, the conditions under which policy will remain highly accommodative in order to promote recovery and a lasting end to this lengthy zero-interest-rate episode.

We did add some language in December that provided specific information about the Committee's likely behavior after the 6.5 percent threshold is crossed. And with market expectations now well aligned with both that guidance and our own views, I would personally be quite reluctant to offer less guidance in March than we provided in December and January.

There are a number of important issues for us to consider in revising our guidance, and I want to thank the staff for their thoughtful background memo. I appreciate the very useful comments and suggestions that a number of you provided, and they helped shape the memo and the materials circulated for this videoconference.<sup>1</sup>

For today's meeting, we have tried to craft a minimal-changes version of our current statement, and it is labeled as option 5. But I asked the staff to focus the memo on changes that go well beyond such a minimal-red-ink approach. Because the crossing of a threshold essentially necessitates a nontrivial revision of the statement, many outside analysts are expecting a change. So the present moment could provide an attractive opportunity for more

<sup>&</sup>lt;sup>1</sup> The memo "Background Documents and Questions for Discussion on Forward Guidance" used at this meeting by participants is appended to this transcript (appendix 1).

March 4, 2014 5 of 58

substantial revisions to the statement. With many commentators expecting the forward guidance to change, we will of course have the usual difficulties divining just what observers will make of any changes we decide to adopt or, indeed, what they would make of the absence of much change. Despite these difficulties, I would encourage us to consider whether we could substantially clarify our intentions, remembering, as always, that some minimalist approach, perhaps along the lines of the one circulated by the staff last Friday, will end up being deemed best.

Let me highlight four specific issues raised in our prior discussions and in the memo. First, the current guidance is focused on the unemployment rate, but we have consistently communicated that once the threshold is crossed we will be considering a more comprehensive evaluation of the labor market. Now may be an appropriate time to signal this shift in the statement. Some of the options suggested in the staff memo focused on the state of employment relative to our assessment of its maximum sustainable level. This formulation has the virtue of being taken from our Statement of Longer-Run Goals and Monetary Policy Strategy, but this approach would bring a new concept into the statement and might itself seem to call for some new, single measure of slack. Alternatively, the language circulated last Friday simply makes reference to an assessment of whether the recovery in the labor market is complete. This formulation might accurately bring to mind the broad assessment that we actually engage in.

Second, over the past several months, the possibility of inflation running persistently and significantly below our objective has become more prominent. It might be appropriate to clarify the role of low inflation in our policy intentions beyond the clause we added in December that specifies that the current target range is likely to be maintained, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal. The first two options in the

March 4, 2014 6 of 58

staff memo refer explicitly to the shortfall of inflation from our 2 percent objective as a condition determining how long to maintain the current target range for the federal funds rate, and option 3 provides one version of an inflation floor.

Third, some of you have indicated in past discussions a preference to clarify the role of financial developments in the statement. This could be warranted, for example, either to address concerns over financial stability, which may grow as the period of highly accommodative policy continues and the economy strengthens, or, alternatively, to convey a willingness of the FOMC to respond if, say, financial conditions tighten in a way that compromises the outlook for attaining our objectives. The options provided by the staff give an approach that encompasses both of these considerations. And option 4 provides an alternative that focuses directly on financial-stability risks.

Finally, if the recovery continues as we all hope, we will face an increasing need to clarify how policy will be conducted during the transitional period between liftoff and the time when we settle into some new normal. The current statement mainly suggests that the FOMC will, after liftoff, embrace the balanced approach from the consensus statement. But this is language that sheds little light on policy in the broad range of likely cases in which both employment and inflation are falling short of our objectives, so that any need to balance conflicting objectives remains well in the future.

In the new paragraph 6 that is included in the first four options, the staff has provided two sentences pertaining to the post-liftoff period. The first might be viewed as a very general description of the reaction function, whereas the second is focused on the fact that even after we return to price stability and full employment, the appropriate federal funds rate target may remain low relative to what we view as normal in the longer run.

March 4, 2014 7 of 58

Let me stop there with those broad comments that are intended to frame the discussion. If you have any questions for me at this point, I would be glad to take them. And if not, we can just begin the go-round. [No response] Okay. Seeing no questions for me, why don't we begin the go-round, and let's start with President Kocherlakota.

MR. KOCHERLAKOTA. Thank you, Madam Chair. Let me be the first, in this group, at least, to welcome you to your new role. I look forward to working with you in your new capacity.

I appreciate your framing our discussion as ably as you did. I also found the options and analysis in the memo dated February 21 to be quite valuable, and I want to thank the staff for the great work that was included in that memo.

I want to divide my remarks into two parts. First, I'm going to address the question of why we need to provide forward guidance about the future evolution of the federal funds rate. Second, I'll use the answers to this question to inform my preferred choice among the five options offered to us by the staff.

I see two related answers to the question of why we need forward guidance. The first is connected to policy effectiveness. In my view, monetary policy can be effective only if markets and the public have a good understanding of our reaction function. Before the financial crisis, that understanding came from decades of historical experience—historical experience in which the FOMC adhered relatively closely to a well-documented statistical pattern of behavior—that is, something akin to a Taylor rule. In the absence of forward guidance from us, or in the presence of deliberately vague forward guidance like that in option 5, markets are likely to turn back to those pre-crisis historical relationships, like the Taylor (1993) rule or the Taylor (1999) rule, to provide their guide to future FOMC behavior. The problem is that, as the Summary of

March 4, 2014 8 of 58

Economic Projections indicates, monetary policy is likely to be more accommodative than either of these rules for years to come. Given that we are going to deviate from our pre-crisis reaction function, we need to be as informative as we can be about the reaction function that we are actually going to use, and good forward guidance can provide that information. So that's the effectiveness argument.

The second reason why we need to provide forward guidance relates to credibility.

Before January 2012, the FOMC did not have an inflation target of 2 percent. Indeed, several FOMC participants, including my predecessor, thought that appropriate policy would be consistent with a long-run average inflation rate noticeably below 2 percent. Against this recent historical backdrop, it would not be at all surprising if the public and markets still saw the new 2 percent inflation marker as being more of a ceiling than a true target. We need to be using our forward guidance about our reaction function to build the credibility of our 2 percent target by assuring the public and markets that we are in fact doing whatever we can to facilitate a rapid return to 2 percent inflation.

I think we need to be using forward guidance to do two things: to make clear that our reaction function over the next few years will differ importantly from what we did prior to the crisis and, relatedly, to make clear that we are purposefully making choices to keep inflation at 2 percent. Those are the reasons why we use forward guidance.

Given those reasons, I see option 3 as being a great example of the kind of guidance that we should think about using. I see option 3 as having four desirable attributes. The first is that it assures the public that the FOMC is highly unlikely to raise the target fed funds rate at least until the one- to two-year-ahead outlook for inflation has risen back to 2 percent. Raising the fed funds rate before that point would imply that we don't see 2 percent as a true target. Rather,

March 4, 2014 9 of 58

such an action would imply that we continue to see sub-2 percent inflation as being an appropriate outcome for monetary policy. Now, I want to be clear: The need to wait until the inflation outlook has returned to 2 percent isn't some arcane result from some fancy-pants theoretical framework. It is an actual description of how inflation-targeting central banks operate in practice. For example, the Bank of Canada has a single mandate—to keep inflation equal to 2 percent. Its operating practice is to adjust policy so that inflation is projected to return to 2 percent over some period of time that is close to 8 quarters, ranging from 6 to 11 quarters. It is true that, unlike the Bank of Canada, we also have an employment mandate, but we want to be clear about what that means for policy. It does not provide a rationalization for raising the federal funds rate before the inflation outlook gets back to 2 percent. The employment mandate is fundamentally asymmetric in nature. It does not say that the FOMC is responsible for making sure that employment doesn't get too high. It says that the FOMC is responsible for making sure that employment doesn't stay too low. This asymmetry means that the employment mandate can rationalize being more accommodative than a strict inflation-targeting central bank like the Bank of Canada, but it cannot rationalize being less accommodative than an inflation-targeting central bank.

Some observers have suggested that waiting until the outlook for inflation has returned to 2 percent is inconsistent with the FOMC's historical behavior. That may be right, but historically we didn't have a 2 percent inflation target. That is a very recent development. It goes back to January 2012. Now that we have a 2 percent inflation target, our actions need to be consistent with that target, not with our past behavior. This is exactly why we need to include this kind of 2 percent inflation floor in our forward guidance. And we need to underscore the message that our future actions will be consistent with that target, not with our past behavior.

March 4, 2014 10 of 58

The second desirable attribute of option 3 is that it does not have an employment threshold. I think this is going to be challenging for us, because it may seem that, by not including an employment threshold, we are not putting as much emphasis on employment—whereas in fact the opposite is true. An employment threshold actually works against the promotion of maximum employment. The reason is that such a threshold is designed to give the FOMC an escape clause that lets it raise the fed funds rate even though inflation is under control simply because the unemployment rate has gotten too low or employment has gotten too high. For example, even if the inflation outlook is still at 1½ percent, if unemployment falls below, say, 6½ or 6 percent, that kind of threshold gives the FOMC an escape clause that lets it raise rates even though the inflation outlook is still too low. So I see adding such a threshold as being inconsistent with promoting maximum employment, and leaving it out also gets around a lot of problems of trying to define how we want to be thinking about the labor market.

A third desirable feature of option 3 is that it appropriately allows for the possibility that the FOMC might choose to alter monetary policy in light of financial market developments either because we want to modulate risks or because we want to loosen financial market conditions. I think option 3 allows for both of those possibilities.

Finally, I like both elements of paragraph 6, both the first and second sentence. I think the second sentence in particular reminds the public and markets that the FOMC is not returning to its historical patterns of behavior.

I'll close by echoing some of my opening remarks, Madam Chair. We need forward guidance. We need forward guidance to make clear the ways in which our reaction function over the next few years will be different from what we used in the pre-crisis period. And we need forward guidance to make clear to the public that we are fully committed to keeping inflation

March 4, 2014 11 of 58

close to 2 percent. I think option 3 does a good job on both dimensions. Thank you, Madam Chair.

CHAIR YELLEN. Thank you, President Kocherlakota. President Bullard.

MR. BULLARD. Thank you, Madam Chair, and welcome to your new role. I'm looking forward to it, and I see that today we have lined up a mind-numbingly complex discussion for you to navigate, so I think that's a good way for you to get started in your new role.

As I suspect many of you did, I appreciated the staff memos on this topic. They really helped my thinking, and so did the comments on the staff memos from several presidents. I will organize my discussion here around three issues that are key from my perspective, which actually dovetail with what you said, Madam Chair, in your opening remarks.

The first question is: Does the Committee wish to take this opportunity to change out the real variable in the qualitative description of our reaction function from unemployment to employment or, possibly, to some other real variable? The second question is: Is there a case to be made for making inflation the focus variable and deemphasizing any real variable? And the third question is; How should the Committee reference financial-stability issues? I'm going to talk mainly about these three issues here and not too much about the fourth issue that you mentioned, Madam Chair.

I will comment on each of these questions in turn and, along the way, on some of the specific alternatives that were put forward in the memos. Let me just foreshadow my conclusion here. My comments are modestly negative on the options in front of the Committee. My bottom line is that, as a practical matter, the Committee should proceed with changes to the existing thresholds in a minimalist way, relying mostly on simple qualitative language. Attempts to do more in the current circumstances may cause more problems for the Committee than they solve.

March 4, 2014 12 of 58

So let me reach that conclusion by discussing these three questions. Question 1 was, should the Committee take this opportunity to change out the key real variable in the existing qualitative description of our reaction function from unemployment to employment or, possibly, to some other real variable? Several of the alternatives suggest that the Committee no longer refer to unemployment and instead use "the projected shortfall of employment from its maximum sustainable level." I have several comments on this particular language.

First, I think we should keep in mind that it may be a minor shock to financial markets, households, and businesses that we are no longer referring explicitly to unemployment. I am not sure how markets will actually react to this. Many understand that we are unlikely to retain an explicit numerical threshold for unemployment as the economy nears more normal performance, but removing the reference completely may come as something of a surprise.

Second, and perhaps more important, I think that considerable uncertainty may attend the very notion of an employment shortfall, as well as how the Committee intends to measure it. I think it would be very hard for financial markets to infer, based on what we have so far provided, what this phrase means for the date of liftoff. One reason for this is that employment projections are not in the SEP, so it seems like we would have to provide information outside the SEP process as to what might be considered an appropriate employment level. On balance, my judgment is that changing the reference from "unemployment" to "employment" in this way may create unwanted uncertainty around future FOMC intentions. This can, of course, be managed, but I think it may be quite difficult.

This thought leads to the idea that the Committee might wish to use an alternative real variable. In a comment to the Committee, I suggested real output growth as that alternative variable. This has several advantages. First, unlike employment levels, which are not projected

March 4, 2014 13 of 58

in the SEP, output growth is explicitly in the current SEP. This would give financial market participants and others in the economy a clear indication of what the Committee is expecting with respect to the key real variable mentioned in the statement. Second, in my view, a move toward more emphasis on output growth would move the Committee closer to traditional approaches to monetary policy as the economy continues to normalize. Referencing output growth also has the advantage, according to some studies, of avoiding monetary policy mistakes associated with level-based output or employment gaps. Athanasios Orphanides, in particular, is one author who has emphasized the pitfalls of gap mismeasurement and has suggested that output growth rates might provide better guidance for monetary policymakers.

Some of you may worry that output growth today is relatively robust and, therefore, that this might suggest a more aggressive policy than the Committee intends. But, in my view, even with a reference in the statement to output growth as the key real variable, accommodative policy can still be rationalized because of today's lower-than-expected inflation outcomes. I recognize, Madam Chair, that the Committee may not be willing to go in this direction at this time, but I think that if we want to change out unemployment for a new real variable, this might be a reasonable alternative—if not now, then perhaps at some point in the future. As you suggested, Madam Chair, this meeting is probably a good opportunity to at least consider possible alternatives, and that's why I'm putting this one forward.

This leads to my second question—namely, is there a case to be made for making inflation the focus variable and deemphasizing references to a real variable? This idea is contained in option 3 in the staff memo. I think there is a compelling case for going in this direction, which I would characterize as something closer to strict inflation targeting. This type of option would make clear that the Committee prefers real variables to be as robust as possible,

March 4, 2014 14 of 58

provided that no serious inflation problem develops, and so does not require the Committee to put explicit limits on either levels or growth rates of real variables. Here I am unwittingly echoing some of the arguments that President Kocherlakota just made, particularly the idea that perhaps the Committee would not want to be putting such limits on real variables. After all, we want low unemployment, high employment, and so on.

Surely this approach has much to commend it in terms of transparency, simplicity, and—I believe—consistency with what the Committee truly desires. Why should the Committee put limits on what it thinks may be realistic in terms of levels of unemployment, employment, or output growth when those limits are only educated guesses in any event? Would it not be better to react directly to evidence on inflation alone and simply set monetary policy accordingly? If this means that unemployment can move to very low levels, employment levels can be quite high, and output growth rates can soar, is this not all the better? The answer is that, indeed, it would be better, and so, in many ways, I think that promoting inflation as the key variable in our communication has much to recommend it.

Still, my sense is that the Committee may not be ready to go in the strict inflation-targeting direction, and, in any event, I think option 3 as written does have one important problem. The problem, at least in my view, is that the text refers to projected inflation between one and two years ahead. I do not think it is credible for a central bank to project inflation over the medium term as being different from target, at least under ordinary circumstances. Indeed, as President Kocherlakota just stressed, the very criterion for optimal inflation-targeting policy in many models would be to set policy exactly so that inflation would be projected to equal the target over the medium term. Any projection that does not meet this criterion would normally be viewed as involving suboptimal policy, because the central bank could increase the amount of

March 4, 2014 15 of 58

accommodation in a way that would make the projection equal to target over the medium term. Because of this difficulty, I see the adoption of the approach in option 3 as problematic from a communications perspective. If the Committee's inflation forecast does not equal the target over the medium term, why doesn't the Committee simply increase the amount of accommodation so that the inflation forecast does equal the target over the medium term?

This brings me to question 3, which is how to handle references to financial stability in the statement. On this topic, I think a minimalist reference is appropriate. We need to show that the topic is understood by the Committee without overstating how much of a factor this may be in Committee decisionmaking. The "irrational exuberance" speech by former Chairman Greenspan was given in 1996, and since that time, the Committee has struggled with two extraordinary bubbles in the U.S. economy. The debate on monetary policy and bubbles continues to rage. I do not think that anyone inside or outside the Fed has to be reminded that financial stability is an important concern in the making of monetary policy. If we make a minimal reference to financial stability, that will be sufficient to remind everyone that we are fully cognizant of this issue.

The considerations I have emphasized suggest that option 5, with its more minimalist approach to changing the language in the Committee's forward guidance paragraph, is most likely to succeed in delivering the continuity sought by the Committee in contemplating this change of language. This approach simply removes the thresholds and replaces the previous text with references to a wide variety of indicators and a notion of complete recovery in labor markets in the future. This last criterion will cause some uncertainty as to its meaning but at the same time suggest that a judgment call will have to be made by the Committee based on a wide variety of factors. This is a better approach for the time being and, in my view, moves the

March 4, 2014 16 of 58

Committee somewhat closer to normal monetary policy. An oblique reference to financial stability is included through the phrase "readings on financial developments."

On balance, then, Madam Chair, I prefer option 5 of the options presented to the Committee for its use of mostly qualitative language to replace our existing thresholds on unemployment and inflation. The other options suffer from key drawbacks that I think would introduce unwanted uncertainty into financial markets' understanding of Committee intentions. Thank you, Madam Chair.

CHAIR YELLEN. Thank you, President Bullard. President Rosengren.

MR. ROSENGREN. Thank you, Madam Chair. It is a pleasure to be serving in the first meeting in your official capacity.

CHAIR YELLEN. Thank you.

MR. ROSENGREN. My hope is that the forward guidance language we choose does the following. First, as in the memo on the different options for forward guidance, I believe the language should have a neutral effect on expectations. Expectations seem appropriately aligned with the Committee's thinking at this time. Given the weakness in incoming data, I would certainly not want the language to tighten financial conditions.

Second, given the market focus on calendar dates, the language needs to avoid adding to uncertainty around the implications for our current thinking on the likely liftoff date. This is achieved by the statement that the current target range for the federal funds rate will be maintained "for a considerable time after the asset purchase program ends." It is tied to our actions—namely, the tapering program. Since the tapering program can be slowed down or sped up, it has flexibility. However, the modal interpretation of this language will be that liftoff would likely occur in the latter half of 2015.

March 4, 2014 17 of 58

Third, the language should be as simple as possible. The difference between purchases and liftoff and between triggers and thresholds has been surprisingly difficult to communicate, as witnessed both by the rise in short-term rates that followed the announcement of possible tapering in the middle of last year and by the confusion that persists around the 6½ percent threshold.

In my view, the option that gets closest to these objectives is option 2. It is designed to have a neutral effect on expectations, provides clarity on likely liftoff, and has a relatively simple construction. However, I think it should be simplified further.

For option 2, paragraph 5, I would substitute the first area highlighted in blue with "the Committee will consider the projected pace at which labor markets are normalizing and the projected pace at which inflation returns to the Committee's longer-run goal of 2 percent. In assessing the improvement in labor market conditions, the Committee will consider a broad range of indicators." The concept of normalizing seems more consistent with the concept of the long-run unemployment forecast provided in the SEP, although normalizing would incorporate more than just the unemployment rate.

For option 2, paragraph 5, I would substitute the second area highlighted in blue with "at least as long as labor market conditions are in the process of normalizing, inflation projected between one and two years ahead does not significantly exceed 2 percent, and longer-term inflation expectations continue to be well anchored." This refers back to returning to normalized labor markets. It also replaces language that sounds like an inflation ceiling, "does not exceed 2 percent," with "does not significantly exceed 2 percent."

In terms of the other questions, I would not include language on financial developments at this time. I do not believe we have clarity or consensus on this issue yet, and we probably

March 4, 2014 18 of 58

need to have much more discussion on that topic. I am comfortable with paragraph 6 in options 1 through 3, and I would highlight one concern, which is that some of the SEP submissions may not be consistent with the guidance we are providing. This is likely to provide less clarity than desirable, and it highlights more work that needs to be done on the SEP. Ideally, how we report the SEP should be as consistent as possible with any guidance provided in the statement. Thank you very much, Madam Chair.

CHAIR YELLEN. Thank you, President Rosengren. President Lockhart.

MR. LOCKHART. Thank you, Madam Chair. I would like to comment on broad communications tactics as regards forward guidance as well as the substance of the statement. I will respond to some of the questions as I proceed.

First, I would caution against going too far in reliance on the statement alone as our tool to transmit guidance. A point I've made before in Committee meetings is that the Committee is designed to arrive at a common decision, not necessarily a uniformly held rationale for decisions. So I prefer an approach to crafting the statement that treats it as a vehicle for communicating a framework, or a general statement, for our determination of the path of policy.

I see the statement as a device for implementing forward guidance as having a tactical role within a set of communications alternatives, each with its own array of possible tactical uses. These other communications devices are the Chair's press conference, the SEPs, the minutes, the Chair's speeches and testimony, our collective speaking opportunities, and, maybe, other devices to be developed. The use of these alternative communications vehicles can convey more information, appropriately qualified details, and general color or can draw attention to quantification in the SEP of elements of the statement.

March 4, 2014 19 of 58

Proper governance, however, is a legitimate concern. The principle of Committee ratification of the content of formal communications requires, it seems to me, a disciplined process around use of some of the alternative communications devices. As we move ahead to refine our communications strategy, I'd like to see us wrestle in good time with how to do all of this and deal with communications as a package. I can envision a checklist of sorts for composing and updating a statement to convey a framework for policy decisions. It might include elements such as an assessment of progress toward qualitative goals, a projection of progress over a time horizon, a reference to a broad set of indicators, and critical considerations in setting or changing policies.

Of the five options presented, option 5 comes closest to what I have in mind. I think it adequately covers the financial developments consideration, and if we view financial stability as a distinct consideration, I would not be averse to language like that in option 4 on financial stability *per se*.

A statement that serves to communicate a framework would almost of necessity rely on qualitative measures of economic conditionality. Reliance in the statement on qualitative measures allows, in my mind, for interpretation elsewhere, particularly in press conferences. I would, therefore, drop the use of thresholds, targets, or triggers. I do not favor linking the timing of the first increase of the federal funds rate to the asset purchase program. I view the wind-down as likely to continue on the current track unless the economy deteriorates markedly. This makes the terminal point of asset purchases fairly predictable. Linking liftoff to the end of the asset purchase program introduces a date feature that I believe the Committee is trying to avoid.

I also do not favor introducing an inflation floor, at least not at this time. And I do not think it's necessary yet to introduce additional guidance on the path of the policy rate post-liftoff.

March 4, 2014 20 of 58

The conditions for liftoff are still down the road, and I would prefer to assess and communicate our exit strategy with a clearer view of what conditions are likely to be at that time. I see potential for misinterpretation of how near the liftoff date might be, so I would hold fire on additional post-liftoff guidance at this time. However, I do not particularly object to the existing post-liftoff language. Those are my comments. Thank you, Madam Chair.

CHAIR YELLEN. Thank you, President Lockhart. President Fisher.

MR. FISHER. Well, first, Madam Chair, congratulations and condolences.

CHAIR YELLEN. I take both. Thank you.

MR. FISHER. Let me just project ahead. I am going to conclude pretty much along the same lines as President Bullard and President Lockhart, with the suggestion of adopting a minimalist approach for the present time—that is, option 5. I suggest that our changes to the statement be minimalist and a little bit more qualitative, and at the same time maintain respect for the 2 percent longer-term inflation goal that we established under your predecessor.

In considering all of this, I am very mindful of the fact that, first, we really don't know—at least, I don't believe we can successfully articulate with precision—what a maximum sustainable level of employment or of output growth relative to long-term trend actually is.

Second, I wonder and would like to discuss with the staff—not now, but later—what our historical record of success is with projecting employment one to two years forward, or even inflation, for that matter. And then, third, I am mindful of the fact that it is very difficult to define financial stability. I suspect that among us we would have different definitions. For example, would financial instability involve a significant correction in equity markets, or would it be a financial development that would upset the development of the real economy? Against that background, I am going to tackle the questions that the staff proposed in the most recent

March 4, 2014 21 of 58

memo, more or less in reverse order. I wish to make the following points and then to make a suggestion, Madam Chair.

To begin, I believe that it would be ideal for the Committee to decide on a strategy for conducting post-liftoff monetary policy and also on a plan for communicating that strategy to the public—through statements but also through our speeches, and particularly through your press conferences—either before or in conjunction with the new forward guidance on liftoff. I think this is a sensible way to proceed for two reasons. First, private-sector expectations concerning the post-liftoff conduct of policy influence current demand and, hence, the timing of liftoff.

And, second, the appropriate economic criteria for removing accommodation in the post-liftoff period logically determine the appropriate criteria for liftoff. I think a statement of broad principles that merely recites the dual mandate or repeats what is said in the Committee's Statement on Longer-run Goals and Monetary Policy Strategy doesn't contribute much, and it actually adds to what I consider to be an already overly long FOMC statement.

With regard to a point made by President Kocherlakota about paragraph 6 in options 1 through 3 and paragraph 7 in option 4, that second sentence is the one that I have trouble with. It states that short-term interest rates are likely to remain unusually low for a time even after employment and inflation return to mandate-consistent levels. Unless we have a consensus as to why short-term rates are likely to remain unusually low, and a consensus that these reasons are important, I don't think that sentence should be included, and I wouldn't include the first sentence in paragraph 6.

As to my own preferences on post-liftoff forward guidance, I spelled them out in a memo that I sent around to our colleagues. I would prefer a statement along the following lines—I'm just going to repeat what I wrote: "The Committee intends to adjust its policy instruments so as

March 4, 2014 22 of 58

to hold projections of average PCE inflation over the coming three to five years, and beyond, as nearly as possible constant at 2 percent. Realized inflation of a rate modestly higher than 2 percent is acceptable if accompanied by weaker-than-previously-projected real economic activity, and realized inflation at a rate modestly lower than 2 percent is acceptable if accompanied by stronger-than-previously-projected real economic activity. The Committee believes that monetary policy conducted according to these principles will help households and firms plan their purchases and investments and manage their financial obligations in a manner that keeps employment near its maximum sustainable level."

I do believe that financial developments, if not financial stability *per se*, certainly need to be mentioned in a policy consideration. And I conclude overall, with that background, that we are going to need some additional time to tackle thoughtfully and thoroughly the issues associated with post-liftoff guidance. So for now I'd prefer a statement that meets the following criteria. First, it does no harm. Second, it keeps the door open to my preferred form of post-liftoff guidance—of course, this is my preference. And, third, except as necessary to accomplish those first two points, it keeps close to the existing language until we get this hammered out a little bit more thoroughly than I suspect we are able to do in this phone call.

So I come down to option 5. I would make a slight amendment to option 5, Madam Chair, and that is in the second section, which begins with "The Committee anticipates." I'm just going to read what I would suggest here: "The Committee anticipates, based on its assessment of these factors, that it likely will be appropriate to maintain the current 0 to <sup>1</sup>/<sub>4</sub> percent target range for the federal funds rate at least as long as complete recovery in the labor market appears to be more than a year away, and projected inflation is not above the Committee's 2 percent longer-run goal"—in other words, I would strike the word "especially."

March 4, 2014 23 of 58

Those are my changes to that sentence. The key operative changes are inserting "and," striking "especially if," striking "continues to run below," and inserting "is not above."

In keeping with what I think President Lockhart said, I would get rid of the next sentence because it ties liftoff of the federal funds rate to the asset purchase program, and I think President Lockhart made a very good point there. I don't think that sentence is necessary. And then I would basically leave the last sentence that's now in blue by itself.

So those are the changes that I would suggest we make. Certainly, that's as much as I could support at this juncture. I think it does provide us a bridge. It's qualitative. It maintains respect for our 2 percent longer-term inflation goal. And it takes away specific date guidance and also removes the numerical reference to unemployment. Thank you, Madam Chair.

CHAIR YELLEN. President Williams.

MR. WILLIAMS. Thank you, Madam Chair. I actually find myself in complete agreement with the comments of President Rosengren. Nevertheless, I will make my own comments, and I have my own version of paragraph 5, which is similar in spirit to President Rosengren's comments but, I think, is something that may be even a little simpler.

As we move from the extraordinary times of the past several years to more ordinary times, our policy statements and forward guidance should move away from numeric thresholds, triggers, and floors, as many people have already mentioned. Instead, the statement should provide a more qualitative explanation of our policy reaction function in the context of the economic situation and our goals. Over time, the statement should become shorter and should not try to cover all possible issues and contingencies.

In considering the qualitative versus quantitative guidance, I think of the analogy of giving someone instructions on how to get to Disneyland from Northern California—say, from

March 4, 2014 24 of 58

Sacramento. And the first part of it is, get on I–5, go south for several hours, and just keep going. That's what I see as our threshold language of a 6½ percent unemployment rate, and I think that served us very well. Eventually, you start going over the Grapevine, you come into Los Angeles, and you run into the massive traffic there, road closures, and situations that you did not expect. Obviously, there you have to use judgment, and you have to adapt to a change in circumstances. So any attempt to explain to somebody how you navigate through an area like Los Angeles in a predetermined way is going to fail. I think that, as we've gotten closer to our goals, we are facing a choice to either say, "Well, keep going on I–5 at full speed"—the danger with that is, you end up in Mexico—or try to explain all of the contingencies and the factors and the thresholds that you should be following. And it's better to try to provide more of the framework, the reaction function, and not try to explain all of the conditions and contingencies.

I see three primary goals of the March FOMC statement: first, to reaffirm the public's understanding of our policy approach and our plans—that is, keep policy expectations basically where they are today; second, to provide a bridge between the end of our asset purchase program and the date of funds rate liftoff; and, third, to provide a general contour of how we expect to see policy in the post-liftoff period. Many of the proposals in the staff memo, in my view, try to do too much, distracting attention from these three basic goals. I think we can be clearer and more effective if we keep the statement language more similar to that of January but, at the same time, importantly, anchor interest rate expectations appropriately.

Toward this end, I have my own four-sentence version of paragraph 5, which I will read, and it goes like this: "To support continued progress toward maximum employment and price stability, the Committee today reaffirmed its view that a highly accommodative stance of monetary policy will remain appropriate for a considerable time after the asset purchase program

March 4, 2014 25 of 58

ends. In determining how long to maintain the current range of 0 to ½ percent for the fed funds rate, the Committee will consider actual and expected future progress of unemployment and inflation toward their mandate-consistent levels. This assessment will take into account a wide range of information, including various measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial developments. The Committee currently anticipates it will be appropriate to maintain the current range for the federal funds rate until significant further progress toward its goals is achieved, provided that longer-term inflation expectations continue to be well anchored and risks to financial stability remain contained." I am also comfortable with including paragraph 6.

This approach anchors interest rate expectations in three ways. First, it retains and highlights the "considerable time after the asset purchase program ends" phrasing, which I think is important. Second, it states that we will maintain the funds rate at its current level until significant further progress toward our goals is achieved, and, of course, it makes reference to both of our goals. And, third, the inclusion of paragraph 6 should help anchor expectations about the path after liftoff.

Now, regarding the questions in the staff memo, paragraphs 2 to 4 of the FOMC statement already discuss the general principles of our approach to policy, so we don't really need to restate the general approach in paragraph 5, in my view. I would also mention at that point that it's important in thinking about paragraph 5 to reread paragraphs 2 through 4. There is a lot of discussion there about objectives or appropriate stance of policy, and, in thinking about paragraph 5, you want to realize that that whole set-up is around asset purchases. So, in my view, you want to start paragraph 5 with a reference to the end of asset purchases.

March 4, 2014 26 of 58

With respect to financial developments, I think the current discussion in the FOMC statement, the very brief mention of it, is appropriate and encompasses consideration of financial-stability issues. And, to repeat a comment that has already been made, we want to be careful to avoid the appearance that we have a particular target for asset prices in mind.

Finally, to even better anchor policy expectations during this transition period, we could start publishing the median of the SEP forecasts for the current set of voters on the Committee in addition to what we currently publish. In my view, this approach would preserve the strengths of presenting the full set of SEP submissions, which gives you the full range of views of all of the 19 participants but, importantly, would give a clearer view of the center of the Committee, which would provide hard numbers to reinforce the message in the statement. Thank you.

CHAIR YELLEN. Thank you, President Williams. President Evans.

MR. EVANS. Thank you, Madam Chair. The economic and global environments continue to call for strongly accommodative monetary policy in the United States. In this context, it has been extremely important that the public and financial markets understand that the funds rate would remain at zero for a long time. Our threshold forward guidance has worked well to solidify the public's understanding on this dimension, and the economic conditionality of our guidance has been pretty well understood. Frankly, this has been quite successful to date.

Furthermore, as noted by the staff, market expectations currently appear well aligned with the FOMC views on how policy is likely to evolve, and I agree with the principle that we don't want our new statement to alter that view. So I am in favor of maintaining a form of forward guidance in the statement. It simply is key for maintaining the necessary high degree of monetary accommodation as we go forward.

March 4, 2014 27 of 58

Any changes to the forward guidance in our FOMC statement should be consistent with a number of uncontroversial key elements. First, our guidance should clearly demonstrate fidelity to our January 2012 Longer-Run Goals and Monetary Policy Strategy. We should be expressing our clear intention to meet our dual-mandate goals in a timely and balanced fashion. And we should repeatedly ask if our policy formulation is consistent with this important formulation.

This takes me to the second element. We should mention both sides of our dual mandate prominently in the guidance—both the real side and inflation.

Third, central bankers, in general, have difficulty acknowledging that an inflation objective should be evaluated symmetrically around its long-run goal. I agree with the comments of President Kocherlakota on this. Our policy commentary should be construed with sufficient care to be convincing to the public that 2 percent is not a ceiling for inflation.

Fourth, the overall stance of monetary policy is characterized by both the current settings and the entire expected path for our policy tools. This means that our guidance should include commentary that adequately captures our future policy intentions for the funds rate after its initial liftoff from zero.

With these elements in mind, and considering the history of the Committee's discussions on the subject of forward guidance, I'm most drawn to option 5, which contains the smallest changes to the January forward guidance. I find its conditional guidance for not lifting rates, as long as projected inflation is under 2 percent, to be workable and acceptable. With regard to the employment side of the mandate, I personally like using highly explicit conditional criteria in our forward guidance. However, I know that reducing the unemployment threshold is off the table. I also recognize that the somewhat unusual behavior of the unemployment rate of late suggests

March 4, 2014 28 of 58

that it might not be the best marker to use today. Circumstances certainly are different than when we brought it into the statement in the fall of 2012.

The other options seem to have more challenges, in my opinion. In the abstract, I am drawn to the threshold for the level of employment in option 2 that is associated with maximum employment. However, I don't have a lot of confidence that we're going to be able to operationalize it well. If anyone has more imagination than I do on how to operationalize this, then I'd be interested in marrying it with the explicit inflation objective threshold in option 3. But, in my opinion, option 3 alone lacks sufficient real-side conditionality. That's still important. I doubt that inflation is going to increase very quickly, and I don't think it's going to increase to 2 percent very soon. But if it did and the unemployment rate was at 6½ percent, or just a little bit above, I think a balanced approach calls for patience in adjusting our funds rate, and having both of them in the forward guidance is helpful in that regard.

So I tend to prefer option 5. With some very small modifications, I think it could be reasonably workable. The most important attribute in this formulation, for me, is the description of the labor market guideline—that is, "at least as long as complete recovery in the labor market appears to be more than a year away." This is clever and is broadly consistent with many ways one might want to formulate a labor market threshold. For example, if the unemployment rate fell to 6 percent, or even a little bit below that, I might expect that 5½ percent unemployment is in reach within a year—maybe. It gets closer to my policy intention, as I would expect it to be formulated in line with the January 2012 longer-run goals statement. It also allows for a wide array of labor market data to be included in the conditionality test—employment levels, employment-to-population ratios and labor force participation rates relative to trends, and hiring

March 4, 2014 29 of 58

and quits developments. And the statement could be modified to mention, a little bit more than it does currently, that we will consider a broad array of such indicators.

Some other improvement opportunities are the following: The option should add the horizon for the inflation projections to be one to two years ahead, as in the other options. And President Rosengren had a suggestion that this language could be adjusted a little bit to mention that, as long as inflation didn't "significantly exceed 2 percent"—I think that would be helpful. That would also demonstrate that our 2 percent longer-run inflation objective is not a ceiling. And the option should append mention of our taking account of financial developments and their implications for attaining the Committee's dual-mandate objectives, as in the last sentence of option 3, paragraph 5. Lastly, a description of the post-liftoff path for short-term interest rates could be enhanced in one of the various paragraph 6 options, as in paragraph 6 of option 3—that fits nicely.

Our SEP forecasts for 2016 have us at our mandate goals, and the funds rate is about 2 percent. That's going to be challenging for the public and financial market participants. I think when you go out and talk to people, anybody who is knowledgeable and is aware of that will ask what we mean by that. This paragraph helps address that, and I would support its inclusion. Thank you, Madam Chair.

CHAIR YELLEN. Thank you, President Evans. Vice President Weinberg, who is substituting for President Lacker.

MR. WEINBERG. Thank you, Madam Chair. It's clearly an opportune and appropriate time to modify forward guidance, given the approaching 6½ percent unemployment threshold. At the moment, there doesn't seem to be much of a case for trying to significantly shift market

March 4, 2014 30 of 58

expectations for the path of short-term interest rates, as market expectations appear to be pretty well aligned with the Committee's center of gravity as displayed in the SEP, for example.

One of the key questions in thinking about what to communicate is how to describe conditions that would lead to an initial interest rate increase. The Committee has really not spent much time discussing the economic conditions that, for each participant, would likely trigger wanting to raise rates for the first time. On this, there is probably a wide range of views around the table. Accordingly, anything more than a fairly minimalist approach could be premature at this point. Trying to articulate something more precise involves implicitly staking out the conceptual framework, and more discussions about the framework might be useful before doing so.

Our preference would be for a streamlined version of option 5 in which the third and fourth sentences are combined to read as follows: "The Committee anticipates, based on its assessment of these factors, that it likely will be appropriate to maintain the current 0 to ½ percent target range for the federal funds rate for a considerable time after the asset purchase program ends." This eliminates the clause "at least as long as complete recovery in the labor market appears to be more than a year away, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal." You could call this a "hyper-minimalist approach."

While the "complete recovery" language in option 5 is intentionally less specific, and that is appealing in some regards, I think that people seeing that language are naturally going to want to map it to a specific unemployment rate or an employment-to-population ratio or some other metric. Using a phrase like "complete recovery" or "maximum sustainable level of employment" in this context seems to go beyond the Committee's consensus statement of 2012,

March 4, 2014 31 of 58

which states that "the maximum level of employment is largely determined by nonmonetary factors" and which emphasizes its variability. Granted, the consensus statement goes on to cite participants' estimates of the longer-run normal rate of unemployment, but it never actually equates that concept with the maximum level of employment. In the current context, pivoting from an unemployment rate threshold to a formulation that refers to "maximum sustainable level of employment" risks looking opportunistic, as if the Committee is responding to the fall in the unemployment rate by shifting to other labor market indicators.

Finally, we're against including a reference to financial-stability concerns or financial market developments. Aside from a concern for financial stability, it's not clear on what basis one would want to single out for special consideration the implication of financial market developments for our goals, compared with the full array of factors taken into consideration. Further, the notion of highlighting concerns about financial stability in a monetary policy context creates some difficulties. Would people conclude that the Committee would compromise on employment and inflation objectives for the sake of financial stability? Or would they conclude that large asset price increases would induce tighter monetary policy, or that large asset price declines would induce easier policy? Might they conclude that the Committee would ease policy in response to distress at one or more large financial institutions? Without a shared understanding of how financial market developments ought to enter into the monetary policy reaction function, communicating to the public about the role of financial-stability considerations could create more problems than it solves. Here again, further deliberations by the Committee on the relevant conceptual framework could be fruitful before expanding the dimensions of Committee communications further. Thank you.

CHAIR YELLEN. Thank you very much. President Pianalto.

March 4, 2014 32 of 58

MS. PIANALTO. Thank you, Madam Chair. And I can't tell you how delighted I am to use those words—"Madam Chair." I, too, am pleased to be serving under your leadership, although it will be only for a few more months—but thank you.

CHAIR YELLEN. Thanks.

MS. PIANALTO. As today's discussion demonstrates, the communication challenges before us are significant. In my view, we face two broad challenges. The first, and more pressing, challenge is communicating the conditions that will most likely lead to liftoff for the federal funds rate. The second is communicating the likely pace of adjustment after liftoff.

The first challenge is simpler to address than the second, although I'm not sure, after today's conversation, that it's going to be quite that simple. But I do believe that our experiences, first with the date-based guidance and then with the unemployment thresholds for the fed funds rate liftoff, highlight the importance of proceeding cautiously with very broad changes to our forward guidance. For now, I suggest that the Committee focus on addressing the first challenge—that is, the timing of liftoff—and then take some time over the spring and summer to study and discuss the efficacy of approaches to guidance on the pace of adjustment after liftoff.

To address the communications challenges around liftoff, in my view, it would be most effective to revise the forward guidance to simply refer to labor market conditions in broad terms and to establish an explicit inflation floor. In my economic outlook, the labor market will continue to improve gradually, and the inflation forecast is likely to be the key driver in the timing of liftoff. In addition, since the current statement language has an inflation ceiling and other wording that comes close to an inflation floor, the formal establishment of an inflation floor wouldn't represent a large change in guidance or a large change in our approach.

March 4, 2014 33 of 58

Of the forward-guidance options circulated to the Committee, I view option 5 as the best starting point because it provides continuity with the current statement and includes the full range of factors that the Committee will consider in deciding on liftoff. However, I believe that the reference in option 5 to "at least as long as complete recovery in the labor market appears to be more than a year away" could prove to be problematic. One reason that it could be problematic is that the Committee is likely to have difficulty in clearly defining a complete recovery in labor markets, just as we had some trouble with the guidance around the LSAP program that referred to a simpler notion of substantial improvement in the outlook for the labor market. A second reason that it might be problematic is that such guidance would imply that the Committee can accurately predict complete recovery in the labor market at least one year in advance, even though the simpler exercise of forecasting the unemployment rate over the last two years has been difficult. And a third reason is that we haven't had the time for careful study of the efficacy of waiting to raise rates until just one year before the labor market recovery is complete.

For these reasons, I would prefer a version of option 5 modified to drop the reference to complete recovery in labor markets, and, in place of that language, I would insert the inflation floor language that's provided in the second sentence of option 3. The inflation forecast will capture many of the factors that are likely to determine liftoff, but they are more difficult to spell out in simple terms in the forward guidance. When you look at the December SEP, it suggests that using a 2 percent inflation floor would also be generally consistent with the Committee participants' forecasts and policy views. Based on the limited information available in the December SEP, it looks as though the liftoff for many participants was being driven more by an inflation forecast than by the unemployment threshold.

March 4, 2014 34 of 58

So, with those general comments, let me very quickly turn to the questions that were posed to the Committee. Regarding whether to include a general statement on policy decisions, I believe that it would be helpful to include the guidance that is provided in the second and the last sentences of option 5. I think any further general statement that the Committee wishes to make would best be presented in the annual Statement on Longer-Run Goals and Monetary Policy Strategy. As for linking liftoff to LSAPs, I believe that the statement language should preserve the guidance that's provided in the current statement. To do otherwise might suggest a shift in our policy position. Regarding thresholds, triggers, and floors, as I just stated, I would prefer forward guidance that includes an inflation floor.

In response to the second question, I believe that it is best to include financial developments or financial stability in the broader list of indicators that the Committee will be monitoring to decide on liftoff. And, in my view, the wording in option 5 is appropriate.

In response to the third question, at this point, with liftoff likely to be some way off, market expectations seem to reflect an anticipation of gradual changes in the fed funds rate target after liftoff. So, at least for now, I don't believe it's necessary to add more-explicit language that could, over time, prove to require changes. Instead, as I've indicated, I'd prefer to focus now on addressing the challenges of liftoff communications and to use an inflation floor to address that issue. The Committee can take time again over the spring and summer to study and discuss the efficacy of approaches to guidance on the pace of adjustment after liftoff.

At this time, in response to question 4, I don't have any other changes to suggest. Thank you, Madam Chair.

CHAIR YELLEN. Thank you, President Pianalto. President George.

March 4, 2014 35 of 58

MS. GEORGE. Thank you, Madam Chair. Like others, I've appreciated the opportunity to discuss the Committee's forward guidance ahead of our March 18 meeting, and I, too, thank the staff for teeing up the options that we're discussing today.

This exercise highlights, I think, the significant communications challenge that we face in the transition from unconventional aspects of our policy. So, as I thought about the various options and the related implications and consequences, I gravitated to minimal changes at this point, continuing to simplify and clarify where possible rather than introducing new benchmarks or thresholds to describe the Committee's sense of the future path of short-term rates. To that end, I would support language along the lines of option 5 for our March statement, including the alternative drafted by President Plosser and sent out earlier, while leaning on other communications vehicles to elaborate. And I want to also join in with those who have expressed concern within option 5 about that language of "complete recovery." I think that will pose some challenges in explaining what we mean by that.

In terms of the first and third questions, I would offer two thoughts on forward guidance relative to our existing strategy statement and the SEP. I continue to think the Statement on Longer-Run Goals and Monetary Policy Strategy provides a good depiction of the Committee's approach to its policy decisions. The statement is clear, I think, that we account for deviations of inflation from its long-run goal and deviations of employment from our assessment of its maximum level while considering risk to the financial system. It also explains the balanced approach we intend to pursue when these objectives are not complementary and describes that we account for the balance of risk when setting policy. So this statement is an important complement to forward guidance, and I would not muddy future FOMC statements with further

March 4, 2014 36 of 58

attempts to explain our approach to monetary strategy, since it's likely to be either redundant or confusing.

In addition to leaning on our existing strategy statement, we should not underweight the value of the SEP in providing guidance on the path of rates after liftoff. The SEP, despite its noted shortcomings, offers an ongoing and consistent framework that currently communicates the intention of Committee participants to keep the funds rate at an unusually low level to support the economy. Unlike static dates or thresholds or other quantifications, which can move in unpredictable ways that don't always align well with our policy intentions, the rate projections in the SEP over time will move in response to economic developments, providing information on how policy will vary with economic conditions after liftoff. For this reason, I continue to believe that we could leverage the existing communication provided by the SEP to convey our future intentions by moving median projections of the funds rate into the FOMC statement.

One issue, of course, that's been raised is whether the median should reflect all participants or only voting members. And because the submissions today are not identified, I'm not sure whether this is an issue just in theory or in reality. But a reference by the FOMC to the SEP would not be without precedent. SEP medians are referenced today in our Statement on Longer-Run Goals and Monetary Policy Strategy, and they're visibly attached to and described as part of the FOMC minutes at each submission. Of course, in addition to these two vehicles, the press conferences and FOMC minutes can assist importantly with the heavy lifting of communicating our policy intentions.

In terms of question 2, on a more prominent role for financial developments, I tend to think that our Statement on Longer-Run Goals and Monetary Policy Strategy already references this. But I could support including a sentence along the lines of that offered in option 4.

March 4, 2014 37 of 58

And, finally, I'll conclude by saying that, in the longer term, I look forward to moving in the direction of statements like those that the staff shared from the Bank of England, whereby we can shift from some of our lengthy, complex statements to something more succinct and straightforward as we communicate our policy. Thank you, Madam Chair.

CHAIR YELLEN. Thank you, President George. Governor Tarullo.

MR. TARULLO. Thank you, Madam Chair. I'll make a few comments here. First—and I think this picks up on a theme that Dennis introduced, and several people have echoed it since then—I do believe that, particularly as we pass the 6.5 percent threshold, we're better advised to have somewhat generally stated standards in the FOMC statement, which can be elaborated upon as circumstances dictate. I might deviate a bit from what Dennis stated in expressing a strong bias in favor of having the Chair do most of that elaboration, particularly, though not exclusively, in the press conferences that she'll be conducting. To the degree that we think of communication of forward guidance as itself an element of monetary policy, I think it becomes particularly important to have an authoritative voice elaborating that position, and there's no alternative here, really, but the Chair.

A second point is, although I've got, personally, a fair amount of flexibility on the specific language that we will adopt, consistent with that notion of general standards, I do think it's important that we not lose the advantage of what we've gotten already in the language that we've inserted into the existing paragraph 5. One of those things is the notion that we are likely—not certain, but likely—to stay at the zero lower bound well past the time when we pass a 6½ percent unemployment rate. And, second, as we begin to increase interest rates, we will, to use our euphemism, "take a balanced approach." It might be advisable to substitute in that "balanced approach" language something that makes mention of—and I'm not sure this is the

March 4, 2014 38 of 58

right term—the headwinds that we'll be confronting, because those give a justification for why we think the path upward is, again, not likely to be steep, although we're not prejudging anything.

I would just note in passing that, although I've got a fair amount of flexibility on the language and, in some respects, I like some of the earlier statements in option 2 rather than in option 5, I really am less concerned with that. I would say, though, that I think there's a bit of a risk here. Not many people have proposed it, but there's a bit of a risk that too much reliance on projections as our standard becomes a bit circular. That is, it almost is the conclusion being stated as the standard. If you think inflation is going to be below target and employment is going to be below target, and that's your projection, then, almost by definition, you're going to be in favor of a longer period of accommodation, and you're in favor of it because of your expectation that that's where we're going to be. So I'm not sure it communicates an enormous amount of information very effectively, but I say that with the understanding that we already use projections and we're going to continue to use projections as we go forward here and in other parts of the statement.

The next point is that what we've got now is, first, some indication of when we'll begin to raise rates and, second, some indication of how steep a climb we'll have once we begin.

That's where, I think, we don't want to lose the benefits of the communications we've had to date, and we want to keep market expectations about where they are. We haven't yet said anything about the endpoint, and this is where I, like several of you, find paragraph 6 in a few of the options attractive, because it does state an endpoint. And it seems to me it's an endpoint that, while not giving a specific number, communicates something about how we'll be thinking about policy along the way. Richard is quite right that we haven't had a debate on that, and it may be

March 4, 2014 39 of 58

that it would be premature to adopt it. But, unlike Sandy, I'm a little bit concerned about taking it one step at a time. Let's just say when we're going to begin, and sometime later we'll talk about how steep a climb, and sometime thereafter we'll talk about the endpoint. I think it's preferable to say something about all three—again, in somewhat generally stated standards—and then allow the Chair to elaborate after listening to the whole Committee during the quarterly meetings that are followed by press conferences.

With respect to the financial-stability point, I think Jim had it just right. It would be useful to make reference to it, but not to make too big a deal of it. And a simple minimalist reference to financial-stability considerations would be just fine, from my point of view, but I don't feel very strongly about that.

In conclusion, Madam Chair, I would stay away, as much as possible, from projections being the basis for the standards. I agree with what I think is the somewhat emergent consensus, with a lot of variation—that we go with a basic minimalist approach. But with respect to the specific language, this is one for which I happily give you my proxy so that, as you try to allocate the votes, you've got an extra one just to lean in whatever direction you think useful.

CHAIR YELLEN. Thanks—much appreciated, Governor Tarullo. Governor Stein.

MR. STEIN. Thank you, Madam Chair. Let me start with a few premises—three, in particular—and then I'll comment on the options. One, as several others have observed, is that we're basically in a good place. Market expectations are roughly lined up with what I take to be the center of mass of where the Committee sees the appropriate path. Like many others, again, I think it's good not to "overtinker," to do no harm, and to remember that we've got considerable support—beyond what's in the FOMC statement—for the guidance, both in your credibility on this issue and in the LSAP timing factor, which is that if we just keep the LSAPs going until

March 4, 2014 40 of 58

roughly the end of 2014, it's hard for people to envision a world in which we lift off before mid-2015. This suggests not feeling the need to overdo it in the statement.

The second point is, I think we want to begin thinking about all of this in terms of a transition back to a more normal world and asking ourselves how we will want to communicate in that more normal world. Then we should ask, is what we're setting up now going to converge smoothly to that desired end state? Or are we setting up a bunch of one-offs, tests regarding certain variables, that are helpful and serve a purpose now but we may have to awkwardly dismantle later on? So that's the second consideration.

The third thing—and this is something that Narayana pointed out—is that there's a clear challenge: The collective view is that the right time-consistent rate is below what a naive application of a Taylor rule would seem to suggest. We may ultimately converge back to doing something like a Taylor rule, but we need a coherent narrative that both takes us there and, ideally, self-liquidates. That is, in the process of getting to where we want to be now, we don't leave ourselves with a lot of junk DNA in the statement. At the same time, we have to have a strong, coherent explanation—especially if the news comes in a little bit good—when somebody says, "Hey, Taylor says you should be doing this. Why aren't you doing it?" In this spirit, one observation is the asymmetry induced by the zero lower bound and the fact that, in a world of uncertainty, it's just time consistent and rational to wait a little bit longer as a result of that uncertainty, because, if you get a little bit behind, you can always raise, but if you raise prematurely, you can't undo that. This is something that's missing from all of the options, and it's something, Madam Chair, that you mentioned at the outset, and it surprises me that we're not taking a little bit more advantage of it. I think it's a nice bit of logic. If you lean on it a little bit more, you have to lean less on other special factors and data idiosyncrasies, which may work for

March 4, 2014 41 of 58

now but then may not work later. And I take that to be a little bit of a lesson from Carney's adventure with 7 percent. It seemed as though it was going to get you somewhere, and then it didn't. So I like that. I like the fact that it's a self-liquidating thing. It has a logic now that just pulls away as we normalize.

I think one could make more use of this asymmetry. Now, whether it belongs in the statement as opposed to in the press conference, I don't have a strong view. It may well be that it's better off not being in the statement. I think it's worth maybe having folks work up a sentence and see if it writes itself well. I'd just throw out something somewhere in one of these options like "In determining how long to maintain"—blah, blah, blah—"the Committee will take into account the asymmetry created by the zero lower bound and the added motivation this creates relative to traditional monetary policy rules for waiting until the recovery is well established." So one could use something like that in any option that you like. And again, I think it takes a little bit of the lean, then, off of some of the other stuff.

All right. In terms of the options themselves, like many of the others, I'm attracted to the simplicity and continuity of option 5. But, like Sandy and a couple of others, there is a sentence that really concerns me. The sentence contains the phrase "at least as long as complete recovery in the labor market appears to be more than a year away." I read this as very threshold-like in its language. It has very much the formulation that we used for the threshold—"at least as long as the unemployment rate remains above 6½ percent." So I worry that if you say that, people are going to ask you to call out what that means. What are the indicators that tell you what "complete recovery" is? And when will you know that it's a year away? Then we'll get drawn into a little bit of the same kind of numbers game. I would be quite comfortable with option 5 if we could replace that little clause with something we've had before—"for a considerable time

March 4, 2014 42 of 58

after the asset purchase program ends." If one felt that that didn't do enough or wasn't strong enough, I would be happy with something along the lines of the zero-lower-bound stuff. But, again, I read that as threshold-like. Even though there's not a number in there, I feel as though it'll put you in a position of really having to start ponying up what your metrics are. So that's my concern. But other than that, I think something along the lines of option 5 works well. Thank you, Madam Chair.

CHAIR YELLEN. Thank you. Governor Powell.

MR. POWELL. Thank you, Madam Chair. I, too, think that some variant of option 5 is the right place to land, and I'll talk about that. But I want to talk first about a couple of the other issues that arise in the preceding options.

First, I am not attracted to the idea of switching to an employment type of goal. I think it would certainly be perceived by the market as a significant signal, and the signal would probably be along the lines of losing confidence in the unemployment rate as a measure. But we are already saying in the postmeeting statement that we are looking at a variety of labor market measures, and, therefore, I think it might be confusing, and, in the end, doesn't buy us a lot. So I'm not attracted to that idea.

Turning to the pre-liftoff guidance, I am not attracted, again, to the new thresholds. And I take the point of the thresholds that are in option 2 and option 4 to be to set up some brakes on this locomotive against unwanted tightening if the economy does strengthen again. But, in my view, we have already got effective brakes—and, for me, that is in the form of a link to the end of asset purchases. Specifically, monetary policy will remain highly accommodative for a considerable time after the end of asset purchases. I realize we are mixing state dependence and time dependence there, but I think this is really the ballast that is holding market expectations

March 4, 2014 43 of 58

close to where the Committee is. I think this is a very important fundamental aspect. It's working right now and is central to the market's understanding, and I think it would be very unwise to change it at this time.

I'll come to this in the end, but complete recovery in the labor market as a threshold, in particular—you know, you think about those words and we may never have that, if you take it literally. Right? If you look at what we know of the Scandinavian countries or the long history of crises, there is permanent damage in some respect to the labor market in a lot of cases. So it's not a great formulation, in my view.

Now, the current formulation of the "considerable time" sentence is linked to the highly accommodative stance of monetary policy, which the memo points out is kind of ambiguous on its face. But I strongly suspect that what many in the market interpret that to mean is the current target for the federal funds rate. I'm actually okay with either formulation, and, frankly, I think that either formulation is consistent with and in sync with the December SEP.

A final point, and I'm going to put this into one proposed sentence, is that as we pass the 6.5 percent unemployment rate and the threshold language drops away, we lose, especially if projected inflation continues to run below the Committee's 2 percent longer-run goal. I think you can put all of those thoughts in one sentence and come out with something like this, which would land in paragraph 5: "The Committee anticipates 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 and the economy strengthens, particularly if projected inflation continues to run below the Committee's 2 percent longer-term goal." I think President Williams managed to squeeze "financial stability" into that sentence, too, and I wouldn't object to that.

March 4, 2014 44 of 58

On a separate point, what's not in here—and I hate to complicate this even further—is that we have left open the question of reinvestment of the assets on the balance sheet. I don't think we have said anything publicly about it since 2011, and at that point I think we were saying we would cease reinvestments six months before liftoff. I think in the previous Tealbook, it was actually synchronous with liftoff. So this is the time to think about whether we wouldn't resolve that question and use this occasion, or an occasion soon, to say what we're going to do about that. In other words, we would indicate that we will maintain our reinvestment policy and preserve the size of the balance sheet as it exists at the end of the asset purchase program until liftoff, or something like that. If we leave that out, there's a suggestion that we forgot it.

In terms of financial stability, I like the more explicit formulations. I could live with either of the ones in paragraph 4.

As far as post-liftoff guidance is concerned, I like paragraph 6. It is pretty much fine with me. What it doesn't have, of course, is an explanation of why. As someone pointed out, it just flatly states what the SEP already says, which is that we're going to be at full employment with mandate-consistent inflation, and we are going to have a 2 percent funds rate. That, I think, clearly falls to the press conference, and, therefore, I am going to jump ahead and say what I would say in the press conference. First I'd mention the headwinds, deleveraging, lack of credit availability, that kind of thing. I would also make the risk-management point that Jeremy made, that it's an asymmetrical situation and we need to get as far away from the zero lower bound as possible before easing off the gas. I would also personally emphasize that the output gap is not directly observable and famously difficult to estimate in real time. And I believe that, today, uncertainty about the size of the gap is unusually high and is probably skewed in a way that indicators, like the unemployment gap, are likely to understate the real resource gap. Finally, I

March 4, 2014 45 of 58

would say that, given the unusually high uncertainty, we will carefully monitor inflation, particularly wage inflation, as well as financial conditions, to tell us how close we are to full employment. Thank you.

CHAIR YELLEN. Thank you, Governor Powell. And last but not least, Vice Chairman Dudley.

VICE CHAIRMAN DUDLEY. Thank you, Chair Yellen. It is great to have the opportunity to work with you as Chair.

CHAIR YELLEN. Thank you.

VICE CHAIRMAN DUDLEY. I want to first start by answering the questions and then I'll make a few general observations, given the discussion that we've had. In terms of the questions, I am very much where most people are. I'd prefer a qualitative approach rather than a quantitative approach. It seems to me that the goal of the statement is to describe our expectations about the outlook and then our likely reaction function not just to that outlook but to other possible outlooks, so people can sort of think along with us.

Should we link the liftoff explicitly to the end of asset purchases? I think the answer is yes. There is such a link, and it's highly unlikely that we are going to start to raise the short-term funds rate before we end asset purchases. So why not be explicit about that?

I don't like thresholds, triggers, or floors. I think they are both too complicated and too specific. They are too complicated in the sense that we then have to articulate why we picked that particular threshold, trigger, or floor; they are too specific in the sense that as the information set changes, we may not want to be governed so specifically by the particular threshold, trigger, or floor that we chose. The world is, obviously, more complicated than that,

March 4, 2014 46 of 58

and we see that in the case of the 6½ percent unemployment rate, and we saw that in the case of the Bank of England's 7 percent unemployment rate threshold.

I particularly don't like thresholds, triggers, and floors that are tied to forecasts. What happens if the forecasts are wrong? And how does the market react to forecast changes? Say we had inflation on a one- to two-year time horizon of 1.6 percent and then we moved it to 1.9 percent. How would the market respond to that? I also think if we tie our actions to our forecasts, it would make the flawed SEP process even more important and introduce the potential for gaming in terms of SEP submissions where the forecast submissions could actually be used to drive the policy outcomes directly. I think it would be really unfortunate if we got into that sort of situation.

I agree that having a sentence referencing financial market developments is welcome, but I strongly prefer financial market developments to financial stability because I think the topic of financial market developments emits two separate issues that are important. The first issue is deviations of financial conditions from what we expect, and the second is financial stability, so it includes two very different concepts. The fact is, if financial conditions are grossly different from what we anticipate, this does have implications for monetary policy, so we need to take that into consideration.

I very much prefer providing guidance about the trajectory of interest rates after liftoff, both the gradient and the terminal level of the funds rate, because I think that is an important determinant of financial conditions. Bond yields and equity prices today depend on what is going to happen not just in terms of the time of liftoff, but where short-term rates go over the medium to longer term. Leaving out post-liftoff guidance implies that all that matters is the time you lift off. The other problem, I think, in not including it now is that if we don't include it now,

March 4, 2014 47 of 58

and liftoff gets closer, then we are going to be in this position of, when do we introduce it? And that is going to be a really big market event. So if we're going to revamp the statement, now is a perfect time to do it, with a new Chair. Let's get this into the statement now, because it will make it much easier to keep it in the statement going forward. In general, I think the statement needs to be revamped now for several reasons. The 6½ percent unemployment rate threshold is stale, and I think the timing is right with the new Chair. If we don't alter it in March, it would just make it a much more significant change if we were to revamp it later. So this is actually a singular opportunity to make meaningful changes to the statement.

In terms of what I'm for, I am generally inclined to a more minimalist approach, along the lines of either option 1 or 5. If we went down the route of an option 5, I would want to have two sorts of changes. One, as someone observed, it does seem like it has a threshold in there, and I'm a little uncomfortable with that. And, two, I really do think we need a paragraph 6 to explain what happens to the trajectory of interest rates after liftoff. In terms of other changes, I think President Williams made a suggestion that maybe we should put the punchline up-front, that short-term rates aren't going to be raised until a considerable time after the end of asset purchases. I like that coming first, rather than burying the lead.

I think we should at least consider the idea of being more explicit in the statement by saying that the changes are not designed to shift market expectations. I'm not really sure how to do that. But if you remember, in December 2012 when we shifted to an unemployment rate threshold, we said, "The Committee views these thresholds as consistent with its earlier date-based guidance." And I thought that was good because it is going to be firmer if you have that in the statement than if you just defer it to the press conference. If you decide not to include it in the statement, I think it is extremely important that it be discussed at the press conference.

March 4, 2014 48 of 58

I think the press conference is extremely important. In addition to making it clear that we are not trying to alter expectations, I think we want to explain in the press conference why the statement needed to be changed, the staleness of the 6½ percent unemployment rate, and the importance of linking the interest rate liftoff to the end of asset purchases because that is how the Committee is thinking about that. I think it's important to provide guidance. I think we need to explain to people a little bit more that we're providing long-term guidance on the path of short-term rates because it's important for financial conditions. I don't think we have really articulated it to the full degree that we need to. And I think, in the press conference, you could explain a little bit more why financial market developments are important as well.

I think Governor Powell made a good suggestion about reinvestments. Our last statement about this in 2011 indicated that we would likely begin the process of normalization by ceasing reinvestments. I feel like that has been hanging out there as something that, you know, clearly doesn't apply any more. We are not going to want to cease reinvestments six months before liftoff, because we are not going to know when six months before is. So I think we should really try to think about correcting that as well. Thank you, Madam Chair.

CHAIR YELLEN. Thanks, everybody. I think we've had a really rich discussion, and you have made a lot of truly helpful comments. It will be the staff's task to work with me to see if we can figure out something that takes many of the comments into account.

I have heard a considerable amount of interest in something along the lines of option 5, a more minimalist approach building on what we have, but with many suggested changes to what we offered up. We will try hard to think about the valuable suggestions you've given and come back to you early next week with some proposals for your reaction to see if we can converge by the time of the meeting. But I appreciate very much everyone's input today.

March 4, 2014 49 of 58

We are running perhaps slightly earlier than anticipated, so before we conclude—well, first of all, are there any other final questions or comments on forward guidance anyone would like to make after hearing the go-round? [No response]

Seeing none, then, let me give you an opportunity, if you have any questions about Ukraine and want to take that up and get Steve to opine, I think we have a couple of minutes if anyone wants to make a comment or ask a question about developments there. [No response] Okay. Seeing none, I guess it is time to wrap up.

We are beating our estimated time by a considerable amount. I appreciate all of you making time to do this. I know it was last minute, but I really thought this is sufficiently complex that having a go-round and hearing your views would really put us in a better place in terms of designing options that could attract support in March. And I think we have learned a lot, so thanks so much for all of your input.

## END OF MEETING