Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, March 2014

Percent

Variable	Central tendency[1]				Range[2]			
	2014	2015	2016	Longer run	2014	2015	2016	Longer run
Change in real GDP	2.8 to 3.0	3.0 to 3.2	2.5 to 3.0	2.2 to 2.3	2.1 to 3.0	2.2 to 3.5	2.2 to 3.4	1.8 to 2.4
December projection	2.8 to 3.2	3.0 to 3.4	2.5 to 3.2	2.2 to 2.4	2.2 to 3.3	2.2 to 3.6	2.1 to 3.5	1.8 to 2.5
Unemployment rate	6.1 to 6.3	5.6 to 5.9	5.2 to 5.6	5.2 to 5.6	6.0 to 6.5	5.4 to 5.9	5.1 to 5.8	5.2 to 6.0
December projection	6.3 to 6.6	5.8 to 6.1	5.3 to 5.8	5.2 to 5.8	6.2 to 6.7	5.5 to 6.2	5.0 to 6.0	5.2 to 6.0
PCE inflation	1.5 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	2.0
December projection	1.4 to 1.6	1.5 to 2.0	1.7 to 2.0	2.0	1.3 to 1.8	1.4 to 2.3	1.6 to 2.2	2.0
Core PCE inflation[3]	1.4 to 1.6	1.7 to 2.0	1.8 to 2.0		1.3 to 1.8	1.5 to 2.4	1.6 to 2.0	
December projection	1.4 to 1.6	1.6 to 2.0	1.8 to 2.0		1.3 to 1.8	1.5 to 2.3	1.6 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The December projections were made in conjunction with the meeting of the Federal Open Market Committee on December 17–18, 2013.

1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Table 1.A. Economic projections for the first half of 2014*
(in percent)

Central tendencies and ranges

	Central tendency	Range
Change in real GDP	2.4 to 2.5	2.1 to 2.8
PCE inflation	1.4 to 1.5	1.3 to 1.5
Core PCE inflation	1.3 to 1.4	1.2 to 1.5

Participants' projections

Projection	Change in real GDP	PCE inflation	Core PCE inflation
1	2.6	1.3	1.2
2	2.5	1.4	1.4
3	2.5	1.4	1.4
4	2.5	1.4	1.4
5	2.1	1.4	1.3
6	2.5	1.5	1.3
7	2.5	1.4	1.4
8	2.6	1.5	1.4
9	2.5	1.3	1.4
10	2.4	1.4	1.5
11	2.8	1.4	1.4
12	2.3	1.5	1.5
13	2.5	1.5	1.5
14	2.5	1.4	1.4
15	2.5	1.4	1.4
16	2.3	1.4	1.3

* Growth and inflation are reported at annualized rates.

Table 1.B. Economic projections for the second half of 2014*
(in percent)

Central tendencies and ranges

	Central tendency	Range
Change in real GDP	3.1 to 3.3	2.1 to 3.6
PCE inflation	1.6 to 1.7	1.3 to 2.2
Core PCE inflation	1.4 to 1.7	1.2 to 2.2

Participants' projections

Projection	Change in real GDP	PCE inflation	Core PCE inflation
1	3.2	1.3	1.4
2	3.1	1.6	1.4
3	3.1	1.6	1.6
4	3.5	1.8	1.8
5	2.1	1.6	1.5
6	3.3	1.5	1.5
7	3.5	1.6	1.4
8	3.2	1.5	1.2
9	3.3	1.7	1.6
10	3.6	1.6	1.9
11	3.2	2.2	2.2
12	2.9	1.7	1.7
13	3.3	1.7	1.7
14	3.3	1.6	1.6
15	3.3	1.6	1.6
16	2.9	1.6	1.5

* Projections for the second half of 2014 implied by participants' March projections for the first half of 2014 and for 2014 as a whole. Growth and inflation are reported at annualized rates.

Table 2. March economic projections, 2014–16 and over the longer run (in percent)

Projection	Year	Change in real GDP	Unemployment rate	PCE inflation	Core PCE inflation	Federal funds rate
1	2014	2.9	6.2	1.3	1.3	0.13
2	2014	2.8	6.5	1.5	1.4	0.13
3	2014	2.8	6.4	1.5	1.5	0.13
4	2014	3.0	6.0	1.6	1.6	0.13
5	2014	2.1	6.1	1.5	1.4	0.13
6	2014	2.9	6.2	1.5	1.4	0.13
7	2014	3.0	6.3	1.5	1.4	0.13
8	2014	2.9	6.2	1.5	1.3	0.13
9	2014	2.9	6.1	1.5	1.5	0.13
10	2014	3.0	6.2	1.5	1.7	0.13
11	2014	3.0	6.2	1.8	1.8	1.00
12	2014	2.6	6.3	1.6	1.6	0.13
13	2014	2.9	6.1	1.6	1.6	0.13
14	2014	2.9	6.2	1.5	1.5	0.13
15	2014	2.9	6.2	1.5	1.5	0.13
16	2014	2.6	6.4	1.5	1.4	0.13
1	2015	3.2	5.8	1.5	1.5	1.00
2	2015	3.1	5.9	1.7	1.8	0.75
3	2015	3.0	5.7	1.8	1.8	0.50
4	2015	3.2	5.6	2.4	2.4	2.25
5	2015	2.2	5.6	1.8	1.8	2.00
6	2015	3.2	5.6	1.6	1.7	1.25
7	2015	3.2	5.9	1.5	1.5	0.50
8	2015	3.5	5.4	1.8	1.7	1.00
9	2015	3.0	5.6	2.0	2.0	1.50
10	2015	2.9	5.8	1.6	1.8	1.00
11	2015	2.5	5.8	2.0	2.0	3.00
12	2015	3.0	5.9	2.0	2.0	1.00
13	2015	3.2	5.4	2.0	2.0	0.13
14	2015	3.2	5.5	1.5	1.7	1.00
15	2015	3.2	5.6	1.5	1.7	0.75
16	2015	3.2	5.9	1.5	1.5	0.13

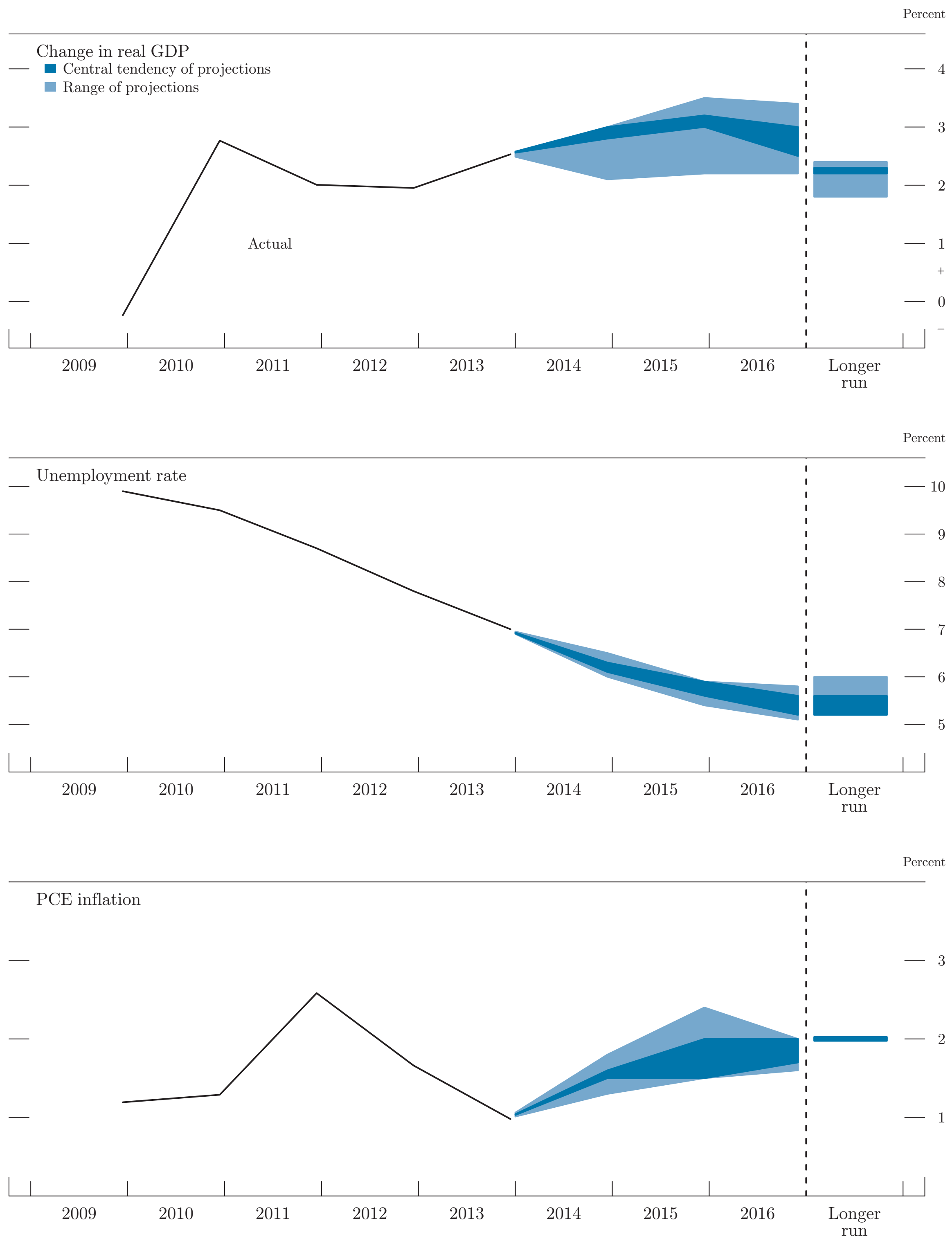
Table 2. ***(continued)***

Projection	Year	Change in real GDP	Unemployment rate	PCE inflation	Core PCE inflation	Federal funds rate
1	2016	2.8	5.5	1.9	1.9	2.25
2	2016	2.9	5.7	2.0	1.8	1.75
3	2016	2.8	5.2	2.0	2.0	2.50
4	2016	2.5	5.6	2.0	2.0	4.25
5	2016	2.2	5.2	2.0	2.0	3.50
6	2016	3.0	5.2	1.8	1.9	2.75
7	2016	3.4	5.3	1.6	1.6	1.75
8	2016	2.5	5.3	2.0	2.0	2.00
9	2016	2.9	5.3	2.0	2.0	2.75
10	2016	2.5	5.6	1.8	2.0	2.00
11	2016	2.4	5.8	2.0	2.0	4.00
12	2016	3.0	5.5	2.0	2.0	3.00
13	2016	2.5	5.3	2.0	2.0	0.75
14	2016	3.0	5.1	1.7	1.8	2.25
15	2016	3.0	5.1	1.7	1.8	2.00
16	2016	3.2	5.5	1.7	1.7	1.25
1	LR	2.3	6.0	2.0		4.00
2	LR	2.2	5.4	2.0		3.50
3	LR	2.3	5.2	2.0		4.00
4	LR	2.3	6.0	2.0		4.25
5	LR	1.8	5.5	2.0		3.75
6	LR	2.1	5.3	2.0		4.10
7	LR	2.1	5.3	2.0		3.75
8	LR	2.3	5.3	2.0		3.50
9	LR	2.3	5.6	2.0		4.00
10	LR	2.3	5.5	2.0		4.00
11	LR	2.4	5.8	2.0		4.00
12	LR	2.3	5.5	2.0		4.30
13	LR	2.3	5.3	2.0		3.50
14	LR	2.2	5.2	2.0		3.50
15	LR	2.3	5.2	2.0		4.00
16	LR	2.4	5.2	2.0		4.00

Figure 1.A. Central tendencies and ranges of economic projections, 2014–16 and over the longer run

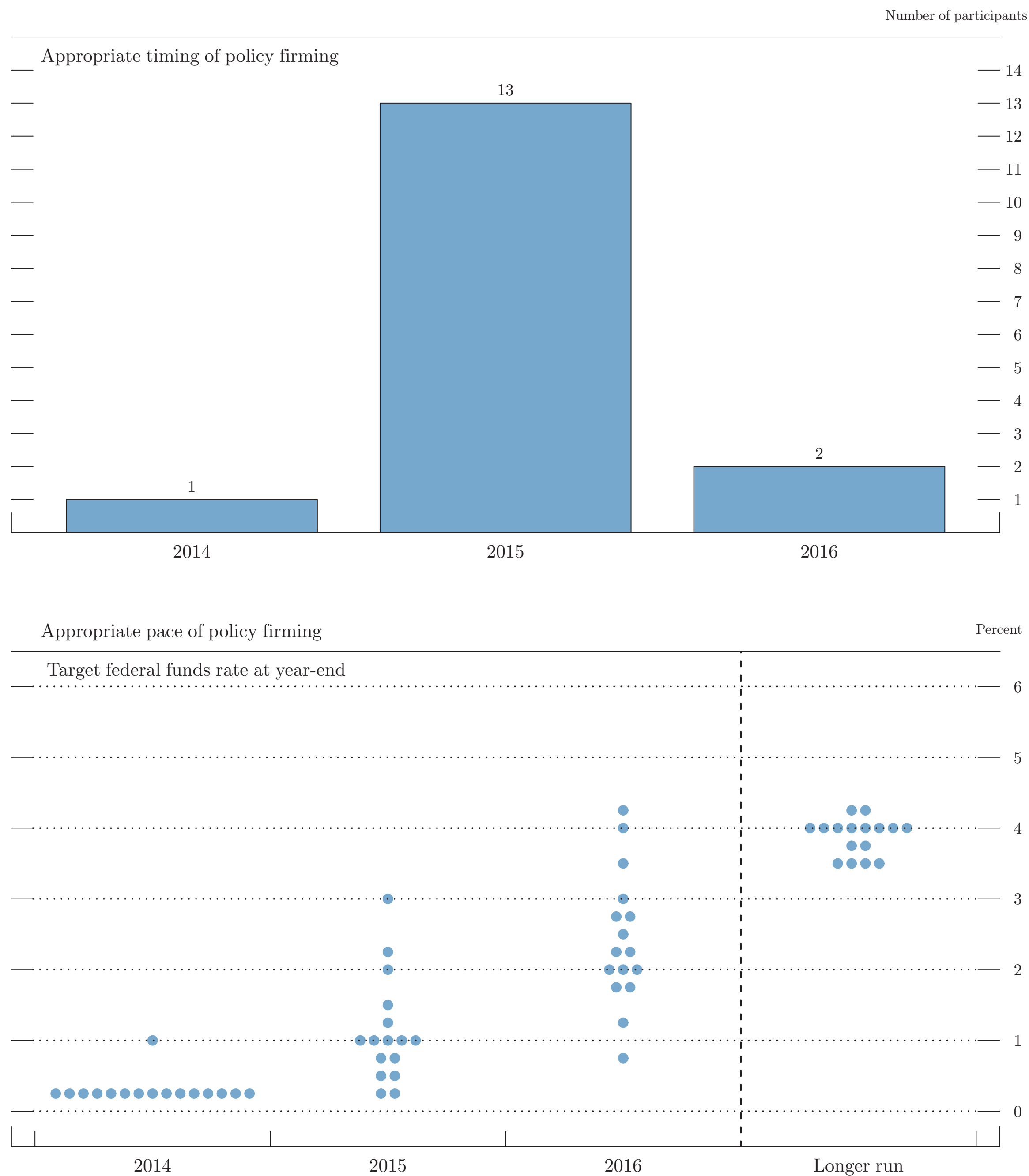
NOTE: Definitions of variables are in the general note to table 1. The data for the actual values of the variables are annual.

Figure 1.B. Central tendencies and ranges of economic projections, 2014–16 and over the longer run



NOTE: Definitions of variables are in the general note to table 1. The data for the actual values of the variables are annual.

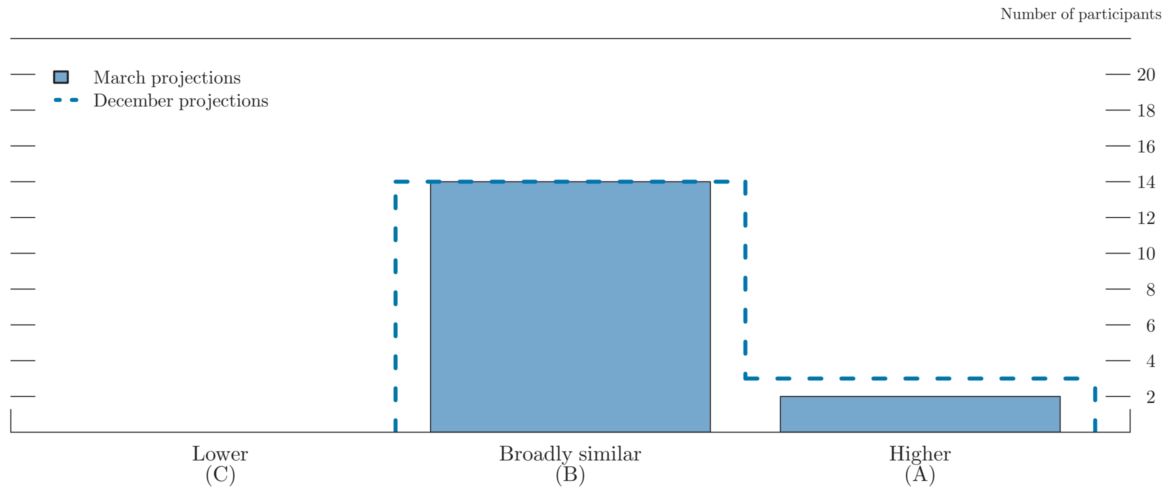
Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



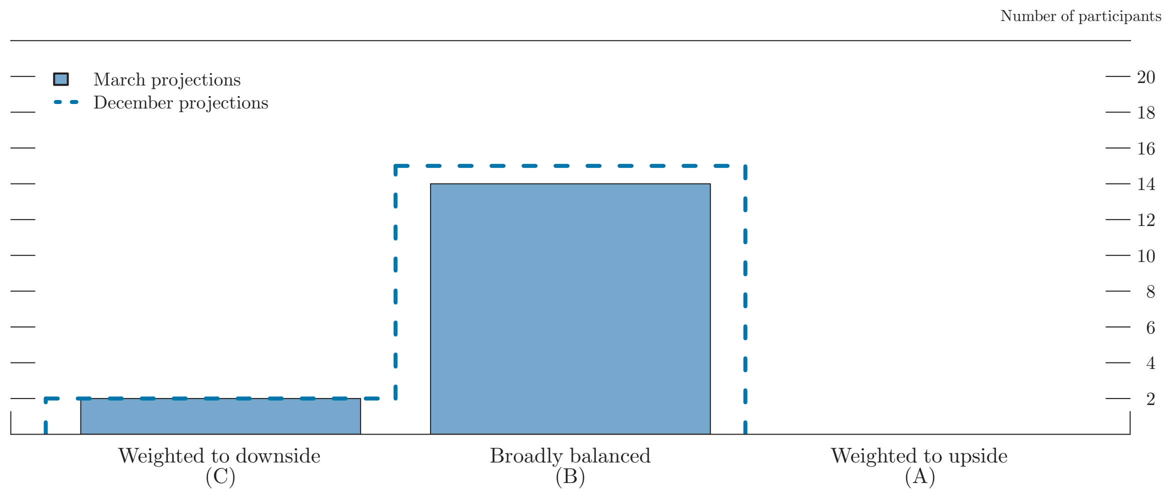
NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year. In December 2013, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2014, 2015, and 2016 were, respectively, 2, 12, and 3. In the lower panel, each shaded circle indicates the value (rounded to the nearest 1/4 percentage point) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

Figure 4.A. Uncertainty and risks – GDP growth

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.



2(b): Please indicate your judgment of the risk weighting around your projections.

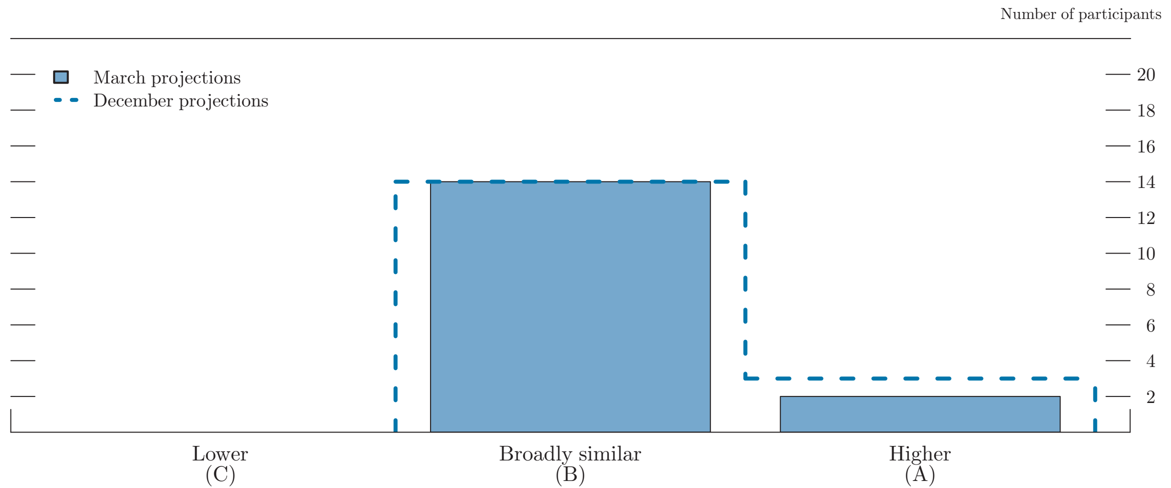


Individual responses

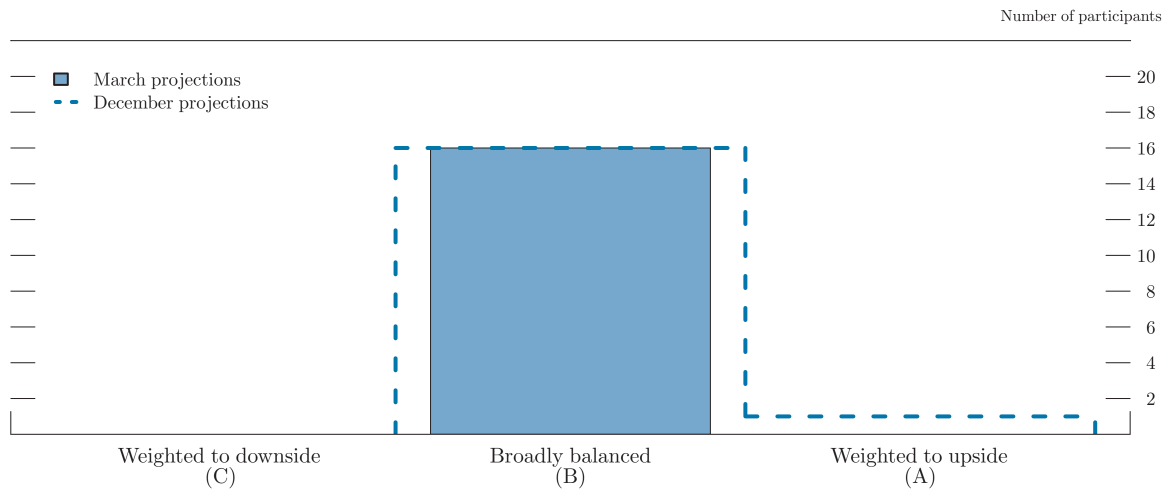
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	B	B	B	B	B	B	B	A	B	B	B	B	A	B	B	B
2(b)	B	C	B	B	B	B	B	B	B	B	B	B	B	C	B	B

Figure 4.B. Uncertainty and risks – Unemployment rate

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.



2(b): Please indicate your judgment of the risk weighting around your projections.

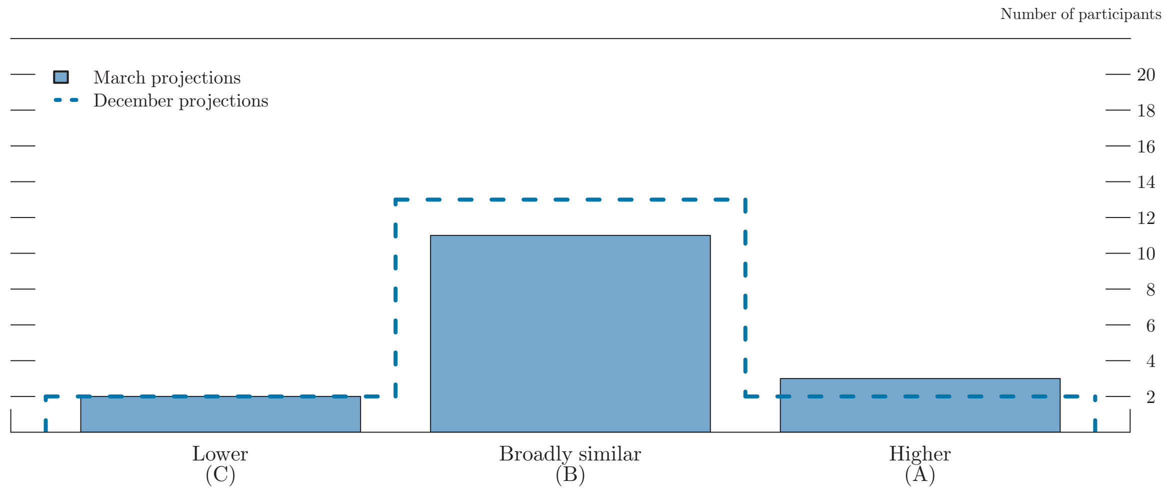


Individual responses

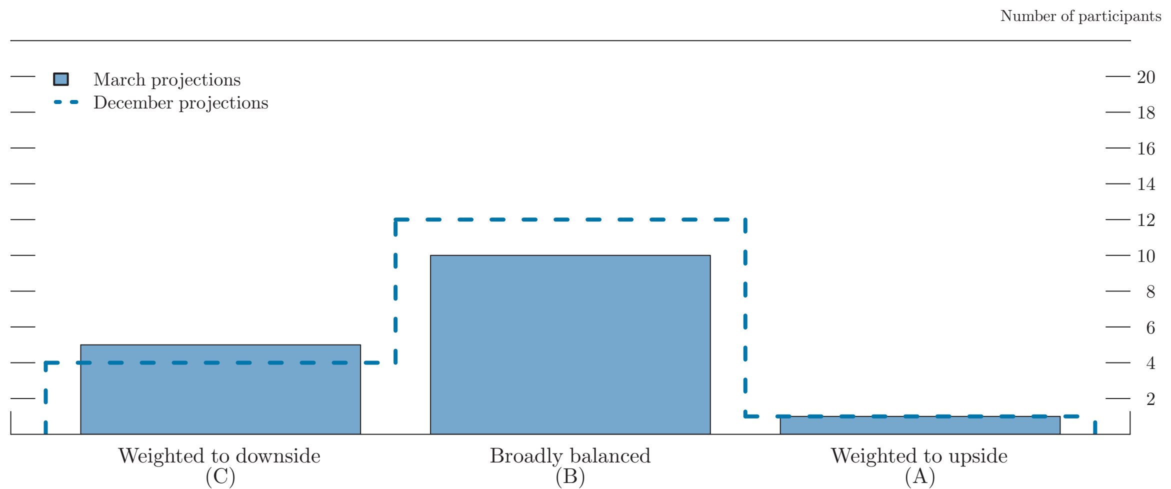
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	B	B	B	B	B	B	B	A	B	B	B	B	A	B	B	B
2(b)	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B

Figure 4.C. Uncertainty and risks – PCE inflation

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.



2(b): Please indicate your judgment of the risk weighting around your projections.

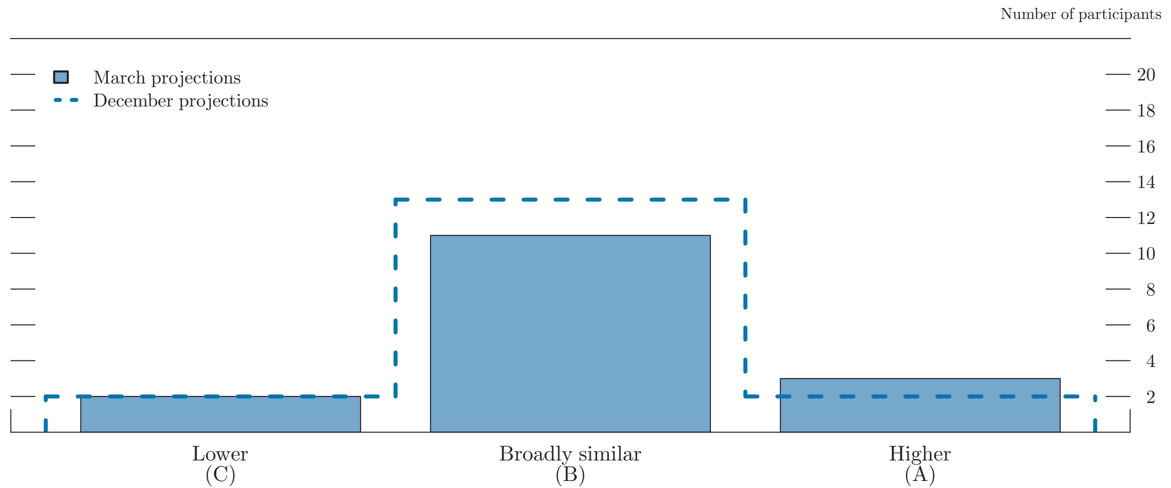


Individual responses

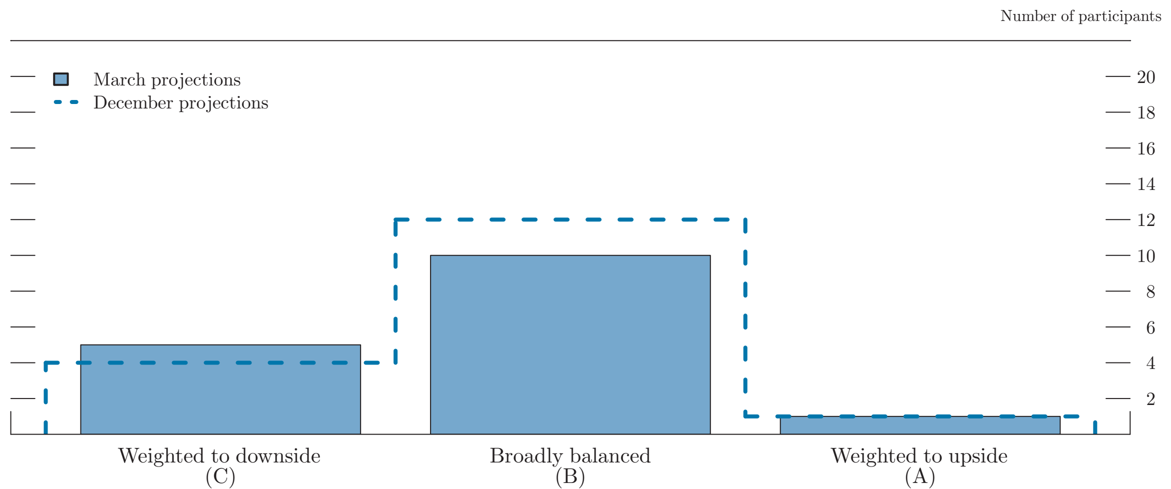
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	B	B	B	B	C	C	B	A	B	B	A	B	A	B	B	B
2(b)	B	B	C	B	B	B	C	B	B	B	A	B	C	C	B	C

Figure 4.D. Uncertainty and risks – Core PCE inflation

2(a): Please indicate your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years.



2(b): Please indicate your judgment of the risk weighting around your projections.



Individual responses

Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	B	B	B	B	C	C	B	A	B	B	A	B	A	B	B	B
2(b)	B	B	C	B	B	B	C	B	B	B	A	B	C	C	B	C

Longer-run Projections

1(c). If you anticipate that the convergence process will take SHORTER OR LONGER than about five or six years, please indicate below your best estimate of the duration of the convergence process. You may also include below any other explanatory comments that you think would be helpful.

Respondent 1: N/A

Respondent 2: N/A

Respondent 3: No comment

Respondent 4: We anticipate a quicker convergence - real GDP will converge to its long run value in 2017, the unemployment rate in 2017, and PCE inflation in 2016. As part of this process, we anticipate that inflation will temporarily overshoot the FOMC's 2 percent target and that the unemployment rate will reach levels below its natural rate.

Respondent 5: N/A

Respondent 6: N/A

Respondent 7: Convergence to the longer-run level of the unemployment rate is expected to occur in three years. Convergence to the longer-run rate of inflation rate is slower, and should take roughly five years.

Respondent 8: Our assessment of the economy's potential growth rate remains within the 2% to 2 1/2% range, with a point estimate of about 2 1/4% (rounded to 2.3% above). Our interpretation of the recent literature and some additional in-house analysis indicates that a reasonable range for an estimate of the longer-run unemployment rate is 4 1/2% to 6%, with a point estimate of about 5 1/4% (rounded to 5.3% above). Assuming appropriate policy and no further significant shocks, we expect the unemployment rate to reach its longer-run level and the output gap to be fairly small in early 2016. However, our analysis of recent long expansions suggests there is a significant probability that the unemployment rate could fall modestly below 5 1/4% for a period within the 5-6 year timeframe.

We assume that long-term inflation expectations will continue to be anchored around 2.5% on a CPI basis and that the FOMC's inflation objective will remain at 2% for the PCE deflator (equivalent to about 2.5% for the CPI based on the longer-term average of the difference between CPI and PCE inflation). Under these conditions and with the output gap anticipated to shrink over the coming years, we expect inflation as measured by the PCE deflator to be about 2% in 2016.

As indicated in our projections, we anticipate that under appropriate monetary policy and no further shocks, the convergence process should be largely completed by 2016.

Respondent 9: I expect inflation to reach its mandate-consistent level as early as 2015, and output and employment to reach or exceed their respective long-run sustainable paths before the end of 2016. It is likely to prove challenging, at that point, to prevent the economy from overshooting the desired equilibrium.

Respondent 10: N/A

Respondent 11: The convergence process may be somewhat shorter than 5-6 years

Respondent 12: I anticipate that convergence will take less than 5 years. Except for the federal funds rate, the December SEP shows we are near equilibrium in 2016. Given my view of appropriate policy, I would expect the federal funds rate will be near its longer run value by the second half of 2017.

Respondent 13: Shorter than five years under appropriate policy.

The fall in labor force participation and the low inflation rate have led me to a slightly lower estimate of the long-run unemployment rate consistent with 2% inflation.

Respondent 14: N/A

Respondent 15: N/A

Respondent 16: N/A

Uncertainty and Risks

2(a). (Optional) If you have any explanatory comments regarding your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years, you may enter them below.

Respondent 1: At this point, uncertainty looks to be broadly similar to the norms of the last 20 years. The weather has increased uncertainty–in that we might be blaming it for what is ultimately broad-based softness, or it might be masking stronger underlying momentum in the economy–but not in a dramatic fashion.

Respondent 2: N/A

Respondent 3: No comments.

Respondent 4: N/A

Respondent 5: Real GDP is likely to grow more slowly than it has in previous cyclical expansions, more in line with growth in the last few years. I do not believe that fluctuations in growth around this lower trend are likely to be larger than in the past. Inflation expectations probably have become more firmly anchored as a result of the FOMC's consensus statements, and uncertainty is accordingly lower than in the past.

Respondent 6: Uncertainty about my projection for economic activity is similar to its average level over the past 20 years. Of course, that period was characterized by considerable turmoil, including the Great Recession, the European (and earlier, Asian) financial crises, the Iraq war, 9/11, the dot.com boom and bust, and so on.

Inflation is anchored by quite stable inflation expectations. The stability of these expectations has been reinforced by the release in 2012 of an explicit 2 percent objective for inflation. Hence, uncertainty about inflation is lower than in the past two decades.

Respondent 7: N/A

Respondent 8: Quantitative judgment based on the width of the probability intervals from the FRBNY forecast distribution for real GDP growth and core PCE inflation relative to the forecast errors over the last 20 years. These intervals have widened some from those at the time of the December SEP. Part of the widening reflects uncertainty engendered from the possibility that weather effects may be obscuring the true underlying state of the U.S. economy. The probability intervals for the forecasts of these variables remain wide in part because of the still-extraordinary economic and financial environment, including the policy rate remaining constrained by its effective lower bound.

Respondent 9: N/A

Respondent 10: N/A

Respondent 11: It remains the case that the effect of the extraordinary monetary policy in place and uncertainties surrounding the future path of policy, including the timing of the exit from accommodative policy, contribute to uncertainty around my inflation forecast.

Respondent 12: N/A

Respondent 13: N/A

Respondent 14: N/A

Respondent 15: N/A

Respondent 16: Because the experience of the past 5 years is now such a large part of the comparison period, we, like the Tealbook, think the uncertainty over the GDP growth and unemployment rate forecasts are broadly similar to the levels of uncertainty over the past 20 years. If not for those years, we'd say the level of uncertainty was higher than usual.

Uncertainty and Risks (continued)

2(b). (Optional) If you have any explanatory comments regarding your judgment of the risk weighting around your projections, you may enter them below.

Respondent 1: I believe the risks to my projections are broadly balanced. The real economy faces a number of downside risks, including ongoing fiscal challenges, geopolitical events, potential slowdowns in key foreign economies, and the possibility that financial markets and housing markets may respond adversely to the eventual normalization of interest rates. But the economy has also shown considerable resilience during this recovery. As fiscal drag eases, the housing recovery picks up steam, and the labor market improves, upside surprises are certainly plausible. The risks to my inflation outlook also appear to be broadly balanced. A continuation of the recent low readings would push inflation below my forecast, but I already expect that it will take some time for inflation to return to our 2 percent longer-run objective; similarly, a slowdown in key emerging market trading partners could weigh on commodity prices and goods import prices. Alternatively, faster economic growth or an unanchoring of inflation expectations from our large balance sheet pose upside risks to the inflation outlook.

Respondent 2: The risks to the U.S. economy taken on its own seem to me to remain broadly balanced. However, the external risks – from both economic and geopolitical sources – have tuned to the downside since December

Respondent 3: I see the possibility that labor market slack is greater than what I assume in my baseline, slowing the return of inflation to 2%.

Respondent 4: N/A

Respondent 5: N/A

Respondent 6: Risks to economic activity appear balanced. The economy has so far weathered the run-up since last spring in mortgage and other interest rates. In addition, as headwinds continue to abate, upside scenarios involving a virtuous cycle of economic activity become more plausible.

The zero lower bound does somewhat constrain our ability to respond to adverse shocks. However, this constraint has become less of an issue over time, in light of the effectiveness of forward guidance and LSAPs. As a result, I do not view the zero lower bound as a quantitatively significant source of downside skew at this point.

Inflation risks are also balanced.

Respondent 7: N/A

Respondent 8: Quantitative judgment based on the difference between the central projection and the expected value from the FRBNY forecast distribution. Under our appropriate policy stance, the risks to the inflation outlook are roughly balanced, as has been the case in the previous six SEPs. As was the case in December, the risks to the real activity outlook are roughly balanced over near-term horizons, as indicated in the summary of our judgment; however, at the longer horizons of the SEP, the risks are still modestly skewed to the downside. In part, the balanced risks reflect two opposing interpretations of the recent data. On the one hand, some of the recent data have held up relatively well taking into account various estimates of the weather effects, which would imply that the economy

may have greater underlying strength than our current assessment. On the other hand, it is possible that we and most forecasters are attributing too much of the weakness in the recent data to transitory factors (including the weather), and that the underlying strength of the economy is less than in our central assessment. In addition, the intermittent fluctuations in financial and commodity markets, partly attributable to EME developments and the Ukraine situation, could be a sign of significant risks to the U.S. economy. Other concerns include the low inflation data in many parts of the world, which could leave the U.S. and world economy more susceptible to negative shocks, and the constraints that monetary policy faces under the zero lower bound.

Respondent 9: N/A

Respondent 10: N/A

Respondent 11: I view the risks to inflation as weighted to the upside over the medium and longer run. Longer-term inflation risks reflect uncertainty about the timing and efficacy of the Fed's withdrawal of accommodation. The risks to output growth and unemployment are balanced.

Respondent 12: N/A

Respondent 13: I remained concerned about our ability to respond effectively to a decline in inflation or inflation expectations.

Respondent 14: Although I see the distribution of shocks to aggregate demand as reasonably balanced, I still view the balance of risks to GDP growth as somewhat weighted to the downside due to the constraints that limit the ability of monetary policy to offset negative shocks to demand at the zero lower bound. I see the risks to unemployment as balanced, with the risk of high unemployment, due to the constraints imposed by the zero lower bound, offset by the risk that productivity may continue to grow more slowly than anticipated, as it has done over the past few years. For some time now, inflation has been running below the level I had anticipated. While I expect some of the factors that have held inflation down to be transitory, low inflation may prove more persistent, creating risks to inflation I consider to be weighted to the downside.

Respondent 15: N/A

Respondent 16: We think the risks to the forecasts for growth and unemployment are roughly in balance. The bad winter weather makes it more difficult to read the incoming data, but we do not see this as tilting the risks to the outlook in one way or the other. More fundamenatlly, on the downside, we still have not seen the steady, consistent job growth that would make us more comfortable with our projected acceleration in consumer spending. We also have been surprised a bit by the degree to which the increase in long-term interest rates has weighed on housing markets. It also appears that many households are still shut out of credit markets. On the up side, improved household sector fundamentals–notably, gains in wealth and lower unemployment–bode well for household spending. The downside risks from weaker growth abroad have diminished a bit (though European concerns have been replaced by EME jitters) and the U.S. fiscal situation appears to be in better balance. Furthermore, as household and business sentiment seems to have been largely unaffected by the soft patch in the data, we could be poised for an earlier and more pronounced "virtuous cyclical" dynamic then we are projecting.

We continue to see downside risks to the inflation outlook predominating over the projection period. We don't see any obvious forces pushing inflation much higher in the near term: Neither

the data nor our business contacts suggest any meaningful cost pressures, demand still is not strong enough for firms to increase margins, and there are no inflationary pressures coming from abroad. Our projection of inflation picking up steadily over the projection period depends heavily on an upward pull on prices from inflation expectations and credible FOMC communications about its commitment to a symmetric 2 percent inflation target. For some time we have noted the risk that this upward force may not be as strong as we have assumed.

Key Factors Informing Your Judgments regarding the Appropriate Path of the Federal Funds Rate

3(c). Please describe the key factors informing your judgments regarding the appropriate path of the federal funds rate. You may include other comments on appropriate monetary policy here as well.

Respondent 1: In my current outlook, low inflationary pressures will justify delaying the first increase in the federal funds rate target until the second quarter of 2015. By that point, the unemployment rate will have declined further and be near my estimate of its long-run natural rate, and my projection for inflation between one and two years ahead will have increased to our 2 percent longer-run objective. Consistent with our current guidance, once the first increase in the funds rate target occurs, I also believe it will be appropriate to raise the funds rate gradually.

Respondent 2: N/A

Respondent 3: My outlook has liftoff for the federal funds rate in December 2015 and 25 basis point increases at each meeting in 2016.

Respondent 4: We marked down our GDP growth forecast for 2014 due to weaker data over the winter months. This caused us to move our date of lift-off to Q1/2015 from Q4/2014.

Respondent 5: I believe that in March 2015 labor markets will have improved significantly, and inflation will be above 1.5 percent and increasing. Accordingly, I believe we will want to begin raising the funds rate to keep inflation from rising too rapidly.

Respondent 6: Output and unemployment gaps remain large and persistent, and my outlook for inflation over the medium term is persistently below our 2 percent objective. This situation calls for very accommodative monetary policy. Even with continuing LSAPs, appropriate policy calls for delaying liftoff from the zero lower bound until the third quarter of 2015. My judgment on appropriate policy is informed by looking at simple rules that adjust for the zero lower bound and by my expectations of, and uncertainty about, the costs and benefits of continuing unconventional actions.

Respondent 7: Liftoff of the federal funds rate from the zero-lower-bound is expected to occur late in 2015, once the unemployment rate drops below 6 percent. With inflation well below target and a relatively modest acceleration in the pace of GDP growth, monetary policy can afford to be patient in the process of removing accomodation.

Respondent 8: The crucial factors behind our assessment of the appropriate path for monetary policy and the FFR are the current state of the economy, our central economic outlook, and our balance of risks around the central outlook. Overall, even though the uncertainty is somewhat greater than in December, there have not been any significant changes in these three dimensions, which points to no significant changes in our assessment of the appropriate policy path. Furthermore, we believe that the accommodative policy stance of the major advanced economy central banks has been an important factor behind the extent of improvement in U.S. and global economic data over the past year. Finally, even though our risk assessments for real activity and inflation are again balanced, the downside risks to both real activity and inflation probably are more costly in the current environment.

In these circumstances and noting that the economic developments since September 2012 have been in rough accord with our projection at that time (when we had proposed the introduction of an outcome-based purchase program and policy stance), we see appropriate monetary policy as remaining accommodative to strengthen the economic expansion. Under this policy, it will be the economic outcomes and outlook that will dictate the path of the policy stance, a point that should be made clear to the public. Based on our modal outlook, we anticipate that the target FFR will remain near zero until mid-2015. We expect that long-term inflation expectations will remain anchored over this period. The pace of renormalization of the target FFR following the period of near zero policy rates will then depend upon our assessment of economic conditions and the outlook, longer-term inflation expectations, and overall financial conditions. At this point, we expect that the increase in the FFR will be gradual such that it will still be below our estimate of its longer-run level at the end of 2016, as a commitment to remain "low for long" is important for providing accommodation at this time when the FFR is constrained by the zero lower bound.

Another factor informing our assessment of the appropriate path for the target FFR is our estimate of the equilibrium real short-term interest rate. In normal times, we assume that this rate is in the range of 1% - 3%; adding the objective for inflation (2%) then gives our estimated range for nominal equilibrium rate as 3.0 - 5.0%. Given the behavior of nominal and real Treasury yields and productivity growth since the end of the recession, we currently see this rate over the longer run as more likely to be in the lower half of the indicated range, which results in the point estimate given in the response to question 3(a). Moreover, given our assessment of economic and financial conditions, our judgement of the current "neutral" FFR is below our estimate of the longer-run FFR and is expected to remain so for some time.

Although we do not expect that additional tools will need to be implemented to provide accommodation in our modal outlook, we believe it is still important for the FOMC to be prepared to employ all of its tools in case some downside risks to the outlook are realized.

Respondent 9: The most important thing we can now do, to promote a healthy economic recovery, is to clarify our post-liftoff policy reaction function. This reaction function is not well conveyed by the funds-rate path implied by the modal economic scenario, or by threshold-based forward guidance.

For purposes of this exercise, I rely heavily on the prescriptions of the 1999 Taylor rule with inertia, as that rule seems to perform reasonably well in a wide range of circumstances. In calculating the rule-prescribed funds rate, I assume that liftoff is delayed until 2015, after the current asset-purchase program ends.

Respondent 10: Under the modal forecast for the evolution of the economy, I assume that the asset purchase program wraps up in October 2014, and that per our guidance regarding "a considerable time after the asset purchase program ends" we lift off in either March or June of 2015. From that point forward, I have in mind that we raise the funds rate only gradually. As a practical matter, this is likely to translate into a 25 basis point increase every other meeting, or 100 basis points per year.

Respondent 11: I expect the asset purchase program to end in 2014Q3 and the Committee will need to start raising the funds rate in 2014Q4 as the economy continues to strengthen. The economy returns to steady state by the end of 2015, with inflation returning to 2 percent, growth at 2.4 percent, and the unemployment rate at 5.8 percent. My policy path has the funds rate gradually rising over the forecast horizon to reach its long-run level of 4 percent by the end of 2016.

Respondent 12: Key factors informing my judgment regarding the appropriate path of monetary policy are achieving an inflation objective of 2.0 percent and ensuring a sustainable economic recovery that reduces unemployment. Once we begin to raise the funds rate, I believe we can be gradual–raising

the funds rate by 25 bps per meeting. I also believe we should continue reducing our asset purchases by $10 billion per meeting.

Respondent 13: Under appropriate monetary policy, the FOMC should keep the fed funds rate extraordinarily low until we are near full employment, as long as the medium-term outlook for inflation remains below 2%.

Respondent 14: My path for the federal funds rate, both before and after liftoff from the zero bound, is shaped by my expectation that the headwinds that have been holding back recovery since the financial crisis will continue to exert a restraining, albeit abating, influence on aggregate demand for several years to come. In addition, inflation is running well below our 2% longer-run objective. To promote the attainment of our maximum employment and price stability objectives over the medium term I see it as necessary to pursue a highly accommodative policy throughout the forecast period. I would assess the equilibrium real funds rate at present and over the forecast to be substantially below my estimate of its longer run normal level of around 1.5%. This reflects factors such as abnormally tight fiscal policy, lingering credit effects from the financial crisis, and business and household pessimism. My estimate of the longer-run normal level of the nominal (and real) federal funds rate of 3.5% (and 1.5%) are consistent with estimates from the staff's three factor model. This estimate likely reflects some pessimism about the prospects for longer-run growth, consistent, for example, with current Laubach-Williams estimates of trend GDP growth.

Respondent 15: I forecast that the federal funds rate will rise a bit more slowly than the Baseline forecast.

Respondent 16: Our forecast assumes that we will steadily reduce the pace of asset purchases, with the program being completed this fall. With regard to forward guidance, we believe it is appropriate for the Committee's policy statement to maintain the current 6-1/2 percent unemployment rate threshold and language about the probable path for rates after that threshold is crossed until the time the unemployment rate actually reaches 6-1/2 percent. Once the threshold is crossed, we assume forward guidance will be modified in a way that does not change market perceptions regarding the FOMC's commitment to highly accommodative policy and a symmetric 2 percent inflation target. Our preferred way of doing so is for the guidance to be clear that, as long as the one- to two-year-ahead inflation outlook was below 2 percent, we would delay liftoff until labor markets have regained their full health as measured by a broad array of indicators.

In our forecast, the unemployment rate reaches 6-1/2 percent in the second half of 2014–close to the time when asset purchases are completed. However, for quite a considerable time after that, we expect inflation to exhibit only modest upward momentum. Accordingly, policy can afford to remain on hold. Our baseline assumption is that the pre-conditions for funds rate lift-off will not be firmly in place until sometime in early 2016.

Appropriate Monetary Policy – Balance Sheet

3(d)&(e). Does your view of the appropriate path of the Federal Reserve's balance sheet, other than the projected timing for implementing the FOMC's exit strategy, differ materially from that assumed by the staff in the Tealbook? If yes, please specify in what ways (either qualitatively, or if you prefer, quantitatively).

	YES	NO
March survey	2	14
December survey	6	11

Respondent 1: No
N/A

Respondent 2: No
N/A

Respondent 3: No
N/A

Respondent 4: No
N/A

Respondent 5: Yes
I favor immediate cessation of long-term asset purchases and reinvestment of maturing mortgage-backed securities.

Respondent 6: No
N/A

Respondent 7: No
N/A

Respondent 8: No
As in the Tealbook, we expect the pace of purchases to be reduced in measured steps, and for the purchase program to conclude before the end of the year. We anticipate the cumulative amount of purchases to be around $1.5 trillion, close to that of the Tealbook. We would note that within our overall strategy for appropriate monetary policy, we believe that a continued collective emphasis on an accommodative stance based on a portfolio of tools would enhance the efficacy of policy under current circumstances.

Respondent 9: No
I would have liked the asset-purchase program end sooner than is called for in the Tealbook, but I am willing to see purchases wind down at the current pace provided longer-term inflation expectations remain well anchored and signs of financial excess do not markedly increase.

Respondent 10: No
N/A

Respondent 11: Yes
I anticipate following the Committee's June 2011 exit strategy principles, but because my funds rate path is steeper than in the Tealbook, I anticipate that we would reduce the size of the balance sheet more quickly than in the Tealbook over the forecast horizon.

Respondent 12: No
While broadly consistent with Tealbook, I believe we should complete the asset purchase program by late in the third quarter or early in the fourth quarter.

Respondent 13: No
N/A

Respondent 14: No
N/A

Respondent 15: No
N/A

Respondent 16: No
N/A

Forecast Narratives

4(a). Please describe the key factors shaping your central economic outlook and the uncertainty around that outlook.

Respondent 1: Adverse weather has weighed down economic activity to start 2014, but a return to more typical weather patterns should help the economy to pick up the pace of growth. Economic fundamentals remain encouraging: monetary policy is highly accommodative, fiscal drag is waning, household balance sheets are strengthening, labor markets continue to improve, and most of the countries affected by the euro zone crisis are gradually returning to growth. Barring a set-back, I continue to be cautiously optimistic that the economy is poised for moderately stronger growth in the years ahead compared with what we have experienced over the last few years.

Recent inflation readings have continued to be subdued. A number of energy and agricultural commodity prices have been rising of late, but the persistence of these increases is uncertain so I anticipate limited pass-through to broad consumer prices. Reflecting inflationary momentum, I have modestly pushed out the point at which inflation starts to turn up in my outlook. Well-anchored inflation expectations and an improving economy should help pull inflation up toward the 2 percent long-run objective over the next few years.

As I discussed above, I view overall uncertainty as roughly comparable to historical norms of the last 20 years. Risks to my outlook appear to be broadly balanced for both the real economy and inflation.

Respondent 2: I have lowered by a few tenths of a percentage point my projection for GDP growth in 2014. Otherwise I have made only modest changes to my projections. However, even assuming (as I do) that some of the disappointing data of the last few months reflects something more than distortions caused by bad weather, my expectation is for a somewhat reduced pace of growth in the next few quarters rather than a basic change in the pattern of continued moderate recovery as household deleveraging continues (slowly) and as fiscal contraction loosens. I look for an uptick in growth later this year and into next as consumer spending becomes more supported by cumulative increases in income owing to steady job creation and, eventually, some more widespread increases in compensation. In contrast to December, when I felt that the major change in the outlook was the diminution in downside risks, the past three months has seen the reemergence of significant such risks, especially international risks. The case for a significant slide in Chinese growth seems stronger than just a few months ago and, obviously, the situation in Ukraine holds the potential for geopolitical tensions and possible military conflict that could lead to risk-off behavior around the world. There is also some chance of disruption in energy supplies that could increase headline inflation.

Respondent 3: A modest acceleration in aggregate spending occurs in 2014 amid dissipating headwinds and ongoing policy accommodation. GDP growth rises somewhat above potential over the medium term, gradually closing the "gap" and aiding in a further firming up in labor markets.

My outlook calls for a strengthening in consumer spending as disposable income grows at a more robust pace, and household balance sheets continue to improve amid gradually improving credit conditions. Also, a combination of high profit levels, liquid corporate balance sheets, and low interest rates promote a stronger capital expansion.

Headwinds in the form of fiscal drag and uncertainty, and spillovers from abroad dissipate gradually throughout the forecast horizon. Absent these restraints on spending and investment, the pace of the expansion improves.

As the growth trajectory firms through the medium term and excess slack is reduced, downward pressure on wages and prices will lessen, allowing anchored inflation expectations to pull inflation toward the explicit objective.

I see the risks to the growth outlook as roughly balanced. I view much of the recent weakness in the incoming data as weather-related, but given the recent history of "false-starts," I am concerned that weakness is more fundamental and less transitory. Risks related to structural imbalances in many emerging market economies and geo-political risks emanating from Eastern Europe weigh on my mind as well. Balancing those downside risks, I also see the possibility that we are underestimating latent economic strength that has been restrained by significant headwinds and idiosyncratic shocks. Bolstered by improving household balance sheets, rising wealth, and a firming in the employment trajectory, consumer demand grows at a rate greater than I expect in my baseline outlook.

With the current inflation trend already low and with soft wage growth, it is possible that I am underestimating the amount of slack in the economy.

Respondent 4: We marked down our GDP growth forecast for 2014 due to weaker data over the winter months.

Respondent 5: Population growth in the 16-64 age group will only be 0.3 percent per year over the forecast period. Real GDP per employee has risen slightly less than 1 percent per year over the last 3 years. These fundamentals are not likely to change dramatically, although employment growth could excede population growth by as much as a percentage point, and productivity growth could improve modestly. Thus my forecast is slightly above my estimate of longer-run real GDP growth.

Respondent 6: The economy is still recovering from the severe housing collapse and financial crisis. Recoveries from these types of episodes are associated with sustained weakness in aggregate demand through a variety of channels, which policy has only partially offset. Many of the associated headwinds are slowly easing:

- Housing appears poised to continue its recovery despite the pickup in mortgage rates since the middle of last year and some uneven recent data;
- Consumer balance sheets as well as banking and credit conditions are improving;
- Fiscal policy has been a notable drag on the economy, but that drag is steadily diminishing;
- Though slowly improving, the weakness of the global economy remains a concern. In particular, Europe is still a source of downside risk, but a severe crisis looks less likely over time. Similarly, while the financial stress in many emerging markets economies (EMEs) earlier this year has eased, the risk of financial disruption and a slowdown in EME growth remains a risk;
- Policy uncertainty, relative to last year, is now back to more normal levels and should be less of a headwind going forward.

In this environment, I expect the economic recovery will proceed at a moderate pace, which will allow us to continue making progress on closing output and unemployment gaps over the next few years. Even with substantial monetary stimulus, it will take a sustained period of above-trend growth to return the economy to full employment.

In terms of inflation, significant slack in labor and goods markets and subdued commodity and import prices should keep inflation below the FOMC's 2 percent inflation target for the next few years. Well-anchored inflation expectations and diminishing slack eventually pull inflation back to our objective.

Respondent 7: The pace of economic activity in the second half of 2013 was somewhat stronger than what was anticipated at the time of the December projections. Recent data releases, however, have been relatively disappointing and indicate that the acceleration in the underlying pace of economic activity is still modest. We attribute only a small portion of the weakness in recent data to adverse weather conditions. Labor market developments since December have been mixed at best, with a slowdown in the pace of payroll gains and a stable unemployment rate. On the positive side, while consumption data over the winter has been revised down, household income has not and the dynamics

of households' net worth through the end of 2013 has been positive. Too, surveys of consumer sentiment have remained relatively upbeat. Overall, the premises for an acceleration in consumer spending - and in activity more generally - are largely intact. At this point, however, the acceleration is mainly in the outlook. We expect GDP to grow at roughly 3 percent this year, after growing by 2.5 percent in 2013. With a more self-sustained pace of growth in place, further modest improvements in the pace of growth should occur in 2015 and 2016 as firms increase their productive capacity. By the end of 2016, the unemployment rate is expected to reach its equilibrium level.

The expectation of a faster pace of growth this year and next continues to be predicated on the waning effects of fiscal policy and the stimulative stance of monetary policy. The outlook is conditioned on the current asset purchase program to total $1.5 trillion. Moreover, the liftoff of the federal funds rate from the zero-lower-bound occurs only once the unemployment rate drops below 6 percent, as the modest projected acceleration in growth in a low inflation environment allows for a patient removal of accomodation.

While the risks to the real outlook have become somewhat more balanced, on the inflation side the risk is that the recent low readings of core inflation may prove more long-lasting than what we are assuming in our forecast

Respondent 8: Other conditioning assumptions: We expect the lower degree of inflation persistence evident since the early 1990s to continue. Inflation expectations remain well anchored. We project foreign real GDP growth (GDP weighted) at 2.8% (down from 3.0% in December) in 2014, and 3.0% (down from 3.1% in December) in 2015. Our assumptions concerning the nominal dollar exchange rate are similar to those in the Tealbook. Reflecting net movements in futures quotes since December, which have been volatile over the time, our assumed path of WTI oil prices has moved up to $96.00 (from $92.00 in December) for 2014Q4, and to $87.50 (from $86.50 in December) for 2015Q4. Our federal fiscal assumptions are similar to those in the Tealbook, taking on board the lifting of the debt ceiling in February and the agreement on overall spending levels for FY 2015. We adopt the Tealbook assumptions regarding equity and home prices.

Outlook: The flow of data over the past couple of months has been difficult to interpret and, as one might expect, has led to the development of two camps. One view is that the economy has lost a lot of the forward momentum that had been evident up through November. Since then, real PCE (excluding utilities and health care) has declined, a three-month moving average of monthly gains in nonfarm payroll employment has fallen from 225,000 to 129,000, and the three-month change of manufacturing output has gone from 4.2% (annual rate) to -1.2%. The opposing view is that even though the U.S. economy has become more fundamentally robust than it has been throughout this expansion, some slowing of growth in 2014Q1 was likely as a payback for the outsized growth contributions from inventory investment and net exports in 2013Q4, compounded by the effects of the unusually harsh winter weather in January and February that likely lowered the 2014Q1 growth rate by as much as a full percentage point.

We are more in the latter camp, continuing to believe that the underlying fundamentals of the U.S. and global economies have improved to the point where it is reasonable to expect that a firming of growth is underway. Indeed, despite the reduction in our projection for 2014Q1 real GDP growth from 2 1/4% (annual rate) in December to 1 1/2% now, we expect growth of final sales to domestic purchasers to be 2.5% (annual rate) in the quarter, modestly above the average of the second half of 2013. The improving underlying fundamentals are well known at this point. Both the asset and the liability side of household balance sheets are effectively repaired, with aggregate household liabilities finally beginning to expand. The excess housing stock built up over the boom of the previous decade has been worked off, and home prices continue to rise rapidly due to a shortage of homes for sale. Fiscal consolidation at both the federal and the state and local levels is largely over, particularly for the state and local sector, with employment at the state and local level up 0.3% over the twelve months ending in February. In addition, credit standards continue to ease, and overall financial conditions

remain fairly supportive. In addition, growth prospects among many of our major trading partners have improved.

Therefore, we continue to believe that the most likely scenario for the US economy is for real GDP to grow at around 3% (Q4/Q4) in 2014, and then rise to around 3 1/2% in 2015. All else equal, the stronger growth of output should translate into stronger growth of employment, with the unemployment rate declining to around 6 1/4% by the end of 2014, just below 5 1/2% at the end of 2015, and then 5 1/4%, our estimate for the longer-run natural rate of unemployment, in 2016. However, there is considerable uncertainty around this projected path of the unemployment rate due to uncertainty over the future path of the participation rate. The labor force participation rate averaged 63.0% in January and February, up from 62.9% in the fourth quarter. We expect it to begin trending upward in the near future, reaching 63.4% by 2015Q4. With little remaining resource slack by the first part of 2016, we expect real GDP growth to slow to near our estimate of potential growth.

We expect inflation to rise gradually over the forecast horizon, and to be near the FOMC objective by the end of 2015, at which time we expect inflation to stabilize. This forecast is based on the projected gradual increase in the levels of resource utilization, which would ease downward pressure on firms' marginal costs and prices, a firming in global demand, and the upward pull on actual inflation from stable inflation expectations. Underpinning the latter assumption is the broad stability of long-term inflation expectations across different financial and survey measures, combined with ongoing moderate growth of wages and unit labor costs, all observations consistent with anchored inflation expectations.

Respondent 9: Sustained low real interest rates, easy credit, improved household and strong corporate finances, and pent-up demand for durable goods provide the basis for an acceleration in the pace of the recovery. The advanced foreign economies are now expanding. The substantial drag from restrictive U.S. fiscal policy seems likely to diminish. New oil and gas extraction technologies reduce the danger that higher energy prices will damp the recovery. On the other hand, corporations so far remain focused on squeezing out efficiencies, buying back shares, and paying dividends rather than on expanding their operations in ways that lead to robust employment growth.

Inflation has stabilized and will likely return fairly quickly to mandate-consistent levels as the recovery accelerates.

Respondent 10: Some of the potential positives I see include: (i) relatively strong consumer spending, helped along by wealth effects and healthier household balance sheets; (ii) the potential for a pickup in capital spending, which has been lagging behind fundamentals, but which I think could pull back into line if business confidence picks up; (iii) fading fiscal drag, and a year without debt-ceiling drama; (iv) economic conditions among our major trading partners somewhere between benign to mildly helpful.

By contrast, I suspect that housing will not be as much of a positive this year as it was in the first part of last year, in part simply because house prices have made up a considerable fraction of the ground they lost in the crisis.

In terms of risks, I continue to worry that the exit from our highly accomodative policies may be somewhat bumpy, and may at some point involve an unintended tightening of financial conditions that could set back the recovery. I am particularly concerned about the potential for a sharp market correction in the the pricing of various forms of credit risk.

Respondent 11: I expect output growth to accelerate to 3 percent in 2014. The pace of growth then runs near my longer-term trend rate of 2.4 percent in 2015 and 2016. With a moderate pace of growth over the forecast horizon, the labor market recovery remains gradual – I expect the unemployment rate to move down to about 5.8 percent by the end of 2015, at which time it reaches my estimate of the natural rate of unemployment. I anticipate that headline inflation will rise gradually to 1.8 percent

in 2014 and 2 percent in 2015 and 2016. Inflation stays anchored around my target of 2 percent in response to tighter monetary policy than that anticipated in the Tealbook.

In my view, the substantial liquidity that is now in the financial system continues to imply a risk that inflation will rapidly accelerate to unacceptable levels and that inflation expectations may become unanchored. To ward off these developments, the FOMC will need to commence a steady tightening of monetary policy by ending asset purchases in 2014Q3 and then beginning to raise rates in 2014Q4.

Respondent 12: I have revised down my outlook for the first quarter by 1/2 percentage point, reflecting slightly more drag from inventory investment and payback for the stronger-than-expected growth in nonresidential fixed investment in the fourth quarter. Research by my staff suggests the weather-induced shifts in real activity during the winter months will have little impact on growth in the current and the next quarter. As a result, I have left the rest of my outlook unchanged. I continue to expect above-trend growth of 2.6 percent this year and then rising to 3 percent for the rest of the forecast horizon.

I also expect private domestic final sales to be about 1/2 percentage point stronger this year and next. The pickup in growth reflects a significant reduction in fiscal drag, an improving labor market along with higher wage inflation, and improved household balance sheets. Finally, while the housing recovery has slowed somewhat, it remains on track.

I continue to see sustained improvement in labor market conditions. A broad measure of labor market conditions shows substantial improvement since September 2012 supported by historically high levels of momentum. Over the last year, the unemployment rate fell 1 percentage point and U6 fell 1.7 percentage points–the largest year-over-year decline in its history. I would note there was some slowing in momentum in February, though still above its longer-run historical average, largely reflecting a reduction in the growth of aggregate weekly hours, most likely due to weather-related absences in February.

Turning to inflation, with measures of inflation expectations holding steady and the labor market continuing to gradually normalize, I expect inflation to firm this year and move toward two percent over the next few years.

Respondent 13: 1. As noted above: I continue to be concerned about possible declines in inflation expectations.

2. As in December: the main risk to the outlook is monetary policy itself. We seem to be cautious in our pursuit of our long-run price stability and employment goals. That caution will leave households and firms concerned about our ability/willingness to insulate the economy against tail risks, and push down on current spending.

Respondent 14: My forecast envisions that, after a weather-induced pothole this quarter, growth picks up notably over the next several years, the unemployment rate continues to decline and inflation moves slowly back toward the Committee's 2 percent longer-run objective. An accommodative monetary policy and easing credit constraints will serve as important factors propelling a more rapid recovery. A significant factor shaping the outlook is diminishing fiscal drag this year. After accounting for the effects of severe winter weather, private demand seems to be strengthening, although at a slightly less robust pace than previously estimated. Going forward, I expect PCE to accelerate further. Facotrs propelling this pickup in PCE include the waning impact of tax increases last year, a strengthening of household balance sheets due to rising house and equity prices, improving prospects for the labor market and robust auto sales driven by low interest rates, readily available credit and an aging fleet, generating substantial replacement demand. Residential investment has slowed significantly since last fall, likely due to the effects of rising mortgage rates and also reflecting severe winter weather, but I expect a pickup in housing starts and considerable growth in residential investment later this year. Investment in equipment and intangibles has also advanced at a slow pace, on balance,

in recent quarters, but I anticipate that stronger growth in sales this year will lead to a meaningful pickup. With respect to the labor market, I have been surprised that with growth running around 2-1/2 percent, payroll employyment has been rising at a pace of 180,000 jobs per month over the past year–a pattern that is causing me to adjust down slightly my assumptions concerning the likely pace of productivity growth over the next few years. Unemployment has also declined by more than I'd anticipated due in part to a decline in labor force participation, which I view as partly cyclical. In part for this reason, I see the decline in the unemployment rate as understating the extent of slack in the labor market. I anticipate some rebound, or at least a flattening out of the participation rate, and a slower decline in unemployment going forward. Inflation has been running below the Committee's 2% objective in spite of the fact that inflation expectations are well-anchored. In part, I believe this reflects significant remaining slack in labor and product markets. My forecast envisions a return to 2% inflation beyond the end of the forecast horizon.

Respondent 15: N/A

Respondent 16: The key factors shaping our forecast are the same as they have been for some time. Accommodative monetary policy, continued improvement in household and business balance sheets, and the diminution of fiscal restraint should allow domestic demand to gain momentum as we move through the projection period. Furthermore, over time, fewer households and small businesses will find themselves with limited access to traditional credit markets. Pent-up demand for capital goods and consumer durables should provide further impetus to growth. Demand from abroad is projected to firm as the recovery in Europe gains traction and emerging market economies work through their difficulties. Our forecast also assumes that there will not be any unusual changes in financial conditions beyond those warranted by an improved economic outlook and further relaxation of constraints on household and small business credit.

Together, these factors are assumed to produce growth a bit above potential in 2014 and more noticeably above it in 2015 and 2016. We expect growth to nearly close resource gaps by the end of 2016, at which time we project that the unemployment rate will only be about 1/4 percentage point above its long-run neutral level. Resource slack thus is expected to exert a diminishing downward influence on inflation as we move through the projection period. And, importantly, we assume inflation will be pulled up by inflation expectations. In order to maintain a strong enough pull from expectations, we assume the FOMC will not begin to remove accommodation until the one- to two-year-ahead inflation outlook is clearly headed back towards target; given the normal inertia in the inflation process, such a path could well be consistent with some modest overshooting of target beyond the projection horizon. (Our extended inflation forecast has PCE prices rising 2.0 percent in 2017 and 2.2 percent in 2018).

The main sources of uncertainty and risks to our forecast are described in 2(b) above.

Forecast Narratives (continued)

4(b). Please describe the key factors causing your forecast to change since the previous SEP.

Respondent 1: Aside from some minor adjustments, my outlook for GDP growth is little changed since December. The biggest revision has been to my forecast for the unemployment rate. For the last several SEP submissions, unemployment has declined more rapidly than I had anticipated. Carrying these dynamics forward, I have lowered my path for the unemployment rate over the next few years, with the result that I now expect the unemployment rate at the end of 2016 will be nearly 1/2 percentage point lower than in my December forecast. With this downward revision, I see the unemployment rate falling below my estimate of its long-run natural rate. I have also slightly reduced my inflation projection for 2014, as inflation has not yet begun to turn up as I had expected. Nevertheless, I continue to expect inflation will approach our 2 percent long-run objective by the end of 2016, helped in part by the stronger labor market recovery in my forecast.

Respondent 2: Seen answer to 4(a)

Respondent 3: I have not made any material changes to my forecast since the December submission.

Respondent 4: Our forecasts have changed only slightly. We now foresee somewhat less momentum for GDP growth in the economy and lift-off in Q1/2015 rather than Q4/2014. We see GDP growth accelerating in the second half of 2014 relative to the first half. We also revised up our expected GDP growth rate for 2015. As a result, our forecast is for more overshooting of inflation as well as a longer period in which the unemployment rate is below its natural rate.

Respondent 5: N/A

Respondent 6: Since December, I have made only modest changes to the broad contours of my forecast, and the data remain consistent with a recovery that gains traction over the coming year. Weather has been a drag on growth in the first quarter of 2014. I expect the reversal of this drag to contribute to growth in the remainder of the year. Thus, on net my GDP forecast for 2014 is only slightly weaker than in December. These disruptions have no substantial longer-term impact on the forecast. The overall pace of the recovery remains strong enough to continue to bring the unemployment rate down.

In fact, the unemployment rate is running below what I had expected, leading me to lower its projected path. I currently expect the unemployment rate to reach 6-1/2 percent in the first half of 2014.

Finally, incoming data on core and overall prices have been in line with my expectations. Consequently, my inflation outlook has not changed since December.

Respondent 7: While activity in the second half of 2013 was somewhat stronger than expected, going forward the outlook for economic activity is largely unchanged. The unemployment rate is on a lower trajectory than previously forecast, and we interpret this lower level as reflecting a smaller output gap than previously thought. As a result, by the end of 2016 the projected level of the unemployment rate is lower than in the December forecast, despite the fact that the outlook for GDP growth has not changed materially.

Respondent 8: The changes to our medium-term forecast have been relatively modest on net, mostly entailing a small upward revision to the projected real GDP growth path, a small downward revision to the inflation path, and a modest downward revision to the unemployment path. Most of the revision to the medium-term real activity forecast came between the December and January FOMC meetings, reflecting the solid data during that period. The revision of the medium-term inflation forecast also came during that same period as the inflation data pointed to a somewhat more prolonged period of modest inflation.

Over the near term, the data indicate that real growth in 2014Q1 will be lower than we anticipated in December, reflecting the weak data that have come in the past couple of months. As we mentioned previously, we see this weaker growth as transitory and have made little revision to the projections for subsequent quarters.

The modest upgrade in the medium-term real activity forecast reflects small upgrades in consumption and investment.

As we stated in our answer to question 2(a), our assessment of the uncertainty has increased modestly such that the uncertainty around the inflation forecast is again somewhat higher than the SEP standard. Uncertainty around the real activity forecast also remains higher than the SEP standard. This rise in uncertainty shift in part reflects the possibility that weather effects are obscuring our assessment of the true underlying state of the U.S. economy.

Respondent 9: Inventory investment was stronger in the second half of 2013 than I had anticipated, negatively impacting GDP growth prospects in the first half of 2014.

I've given greater weight, in this exercise, to the notion that growth in potential GDP has been and will be weaker than historical averages would suggest. (This is the easiest explanation for the declines in unemployment we've seen in the face of 2-percent real GDP growth, and is consistent with the notion that much of the decline we've seen in labor force participation is structural–the result of the aging of the baby boomers.) As a result, the unemployment rate falls more quickly than in my December submission despite slightly weaker projected real GDP growth, and I've cut my long-run projected GDP growth rate down a notch to 2.3 percent.

Finally, I've moved my estimate of the longer-run unemployment rate upward to match the long-run average of the CBO's "natural rate" of unemployment.

Respondent 10: My forecast is little changed, except for the fact that I have knocked the path of the unemployment rate down by two-tenths, in light of the decline we have seen in the unemployment rate since the last round.

Respondent 11: NA

Respondent 12: My forecast has not significantly changed since the last SEP. I have reduced my unemployment rate forecast by about 1/4 percentage point in 2014 and 2015 compared to the December SEP.

Respondent 13: There has been little change in my forecast, except that I have lowered my estimate of the long-run unemployment rate consistent with 2% inflation.

Respondent 14: My forecast has changed only marginally since December. My projected paths for growth and for the unemployment rate are slightly lower over the forecast horizon, in light of incoming data suggesting continued slow productivity growth and my projecton for inflation is little changed.

Respondent 15: N/A

Respondent 16: Our assumptions for appropriate policy have changed somewhat since the December SEP. Our appropriate policy had included forward guidance broadly similar to what the Committee adopted at that meeting; we have, however, made our post-threshold policy forward guidance assumption more explicit.

Our outlook for 2014 has been revised down 1/4 percentage point. This entirely reflects a weaker first quarter, as we continue to see growth returning to about a 3 percent "run rate" for the remainder of the year. The unemployment rate, however, has declined more than we expected given our assumptions regarding potential output growth. That, and some reevaluation of trends in labor force participation, have caused us to revise down our assumptions for potential output growth in 2013 and over the projection period. We have marked down our forecasts for actual GDP growth in 2014-2016 commensurately.

Not only has the unemployment rate declined somewhat more than we anticipated in December, we also have finally seen some signal that labor force participation may be at least stabilizing. Accordingly, for 2014 we have now built in a somewhat slower decline in the unemployment rate than what would be indicated by a straight reading of Okun's Law to reflect a somewhat faster closing of the participation rate towards its trend.

Forecast Narratives (continued)

4(c). Please describe any important differences between your current economic forecast and the Tealbook.

Respondent 1: My forecast is broadly similar to the Tealbook. I expect that GDP growth will pick up and proceed at above-trend rates from 2014 through 2016, which will cause the unemployment rate to modestly fall below its natural rate by the end of 2016 and pull inflation up toward our 2 percent long-term objective.

Respondent 2: No signficant differences this time around

Respondent 3: My growth, unemployment, and inflation projections are essentially the same as the Tealbook for all forecast horizons.

Respondent 4: The major differences involve the unemployment rate. The Tealbook forecast indicates that the unemployment rate will decline to 5.1 percent in 2016 and that its long run value will be 5.2 percent, while our forecast is that the unemployment rate will move below its long run value in 2015 and 2016 (5.6 percent), before increasing to its long run value of 6.0 percent.

Respondent 5: The Tealbook projects a strong surge in personal consumption expenditure that I view as unlikely. I also believe that the path for inventory accumulation will be below the one shown in the Tealbook.

Respondent 6: My forecast is broadly similar to the Tealbook projection.

Respondent 7: The two forecasts are similar both in terms of real activity and inflation. However, our forecast is conditioned on a more patient removal of policy accomodation than in the Tealbook.

Respondent 8: Our forecast for real GDP growth in 2015 is modestly above that of the Tealbook, but the difference is not particularly significant. More substantively, the composition of growth over 2014-15 differs between the two forecasts. The Tealbook projects higher consumption growth than in our forecast; the difference appears to reflect a stronger wealth effect and possibly higher compensation growth than we have in our forecast. However, our forecast for the saving rate has moved closer to that of the Tealbook. The Tealbook projects slower growth in business fixed investment in 2014-15 than in our forecast; the reason for this difference appears to be that the Tealbook has a more moderate pace of business output growth than we have. In contrast, the Tealbook forecasts modestly stronger growth in residential investment, as it assumes that stronger income growth and higher confidence will overcome higher mortgage rates to a greater extent than we assume.

For 2016, real GDP growth in our projection is about one-half percentage point below the Tealbook forecast. This difference reflects that in our forecast, unemployment is close to the longer-run natural rate at the end of 2015 whereas the Tealbook has a somewhat larger gap. Furthermore, the Tealbook projects unemployment to fall modestly below its longer-run natural rate in 2016, whereas we project unemployment to remain near its longer-run natural rate. This difference appears to reflect that with inflation still below objective in the Tealbook forecast, the economy can run somewhat above potential for a time. With inflation near objective in 2016 in our forecast, we do not expect such a development.

Until 2016, the projected path of the unemployment rate in the Tealbook is somewhat above our forecast. The Tealbook also sees the labor force participation rate as flat over the forecast horizon, whereas we anticipate a small increase. In part, these differences seem to reflect somewhat differing assessments of the labor market flows and dynamics that would be typical for this stage of an expansion.

A more fundamental difference between the forecasts concerns the potential growth rate. The Tealbook has reduced the level of potential GDP and its growth rate over the past few cycles. In contrast, we have maintained our estimate of the potential growth rate. This difference seems to reflect the recent reduction in unemployment and what the Tealbook sees as an inconsistency with Okun's Law–to resolve that inconsistency, the Tealbook has made these changes to its potential GDP assumption. Based on our analysis of unemployment dynamics during the middle of long expansions (at more than 4 1/2 years, the current expansion now qualifies as long), the decline in the unemployment rate in this expansion relative to Okun's Law implications has not been unusual, and thus we have not seen the need to adjust our potential growth assumptions.

Although we have marked down our inflation forecast modestly, we still see a stronger influence of anchored inflation expectations on inflation dynamics than does the Tealbook. Consequently, our inflation forecast and the Tealbook forecast are similar over the near term, but beyond that we see total and core inflation rising more quickly to near 2% than does the Tealbook.

On the real side, the uncertainty and risk assessments differ a bit between the Tealbook and our projection. We continue to see uncertainty around the real GDP and unemployment forecasts as higher than normal whereas the Tealbook sees uncertainty at near normal levels. This assessment reflects our view that the unusual nature of the current expansion as well as a policy environment that is constrained by the effective lower bound leaves uncertainty about real activity above normal levels (even the more elevated normal levels now associated with the 20-year window of forecast errors). Over the near term, we see the risks to real activity as balanced whereas the Tealbook sees them skewed a little to the downside: the difference seems to reflect that we place somewhat more probability on headwinds receding faster than anticipated. Our views on the risk assessment for inflation is similar to that in the Tealbook, but we ascribe a little more uncertainty around our projection than does the Tealbook.

Respondent 9: I see a somewhat faster rise in inflation than is called for in the Tealbook. The higher inflation path and an earlier liftoff combine to generate a slightly steeper increase in the federal funds rate.

Respondent 10: I am very close to the Tealbook through 2015. By 2016, my unemployment rate is a touch higher, and my growth forecast is a bit lower than those in the Tealbook. This is because I have in mind a somewhat higher value of the natural rate of unemployment, so in my forecast, the economy is closer to full employment–and growth is correspondingly nearer to a long-run steady state value–by 2016.

Respondent 11: My forecast calls for higher inflation and tighter monetary policy over the forecast horizon than the Tealbook.

Respondent 12: I see growth in real GDP about 1/4 percentage points slower in 2014 and 2015 than does Tealbook. This reflects significantly slower growth in consumption (about 1 percentage point per year) and residential investment. On the other hand, I see growth in business fixed investment about 1 percentage point faster than Tealbook. Finally, I expect inflation to rise more quickly than Tealbook and will average 2 percent in 2015 and 2016.

Respondent 13: I see appropriate monetary policy as being more accommodative than the TB's assumed policy stance. As a result, I'm forecasting that the unemployment rate will fall more rapidly than does the TB and the inflation rate will rise more rapidly.

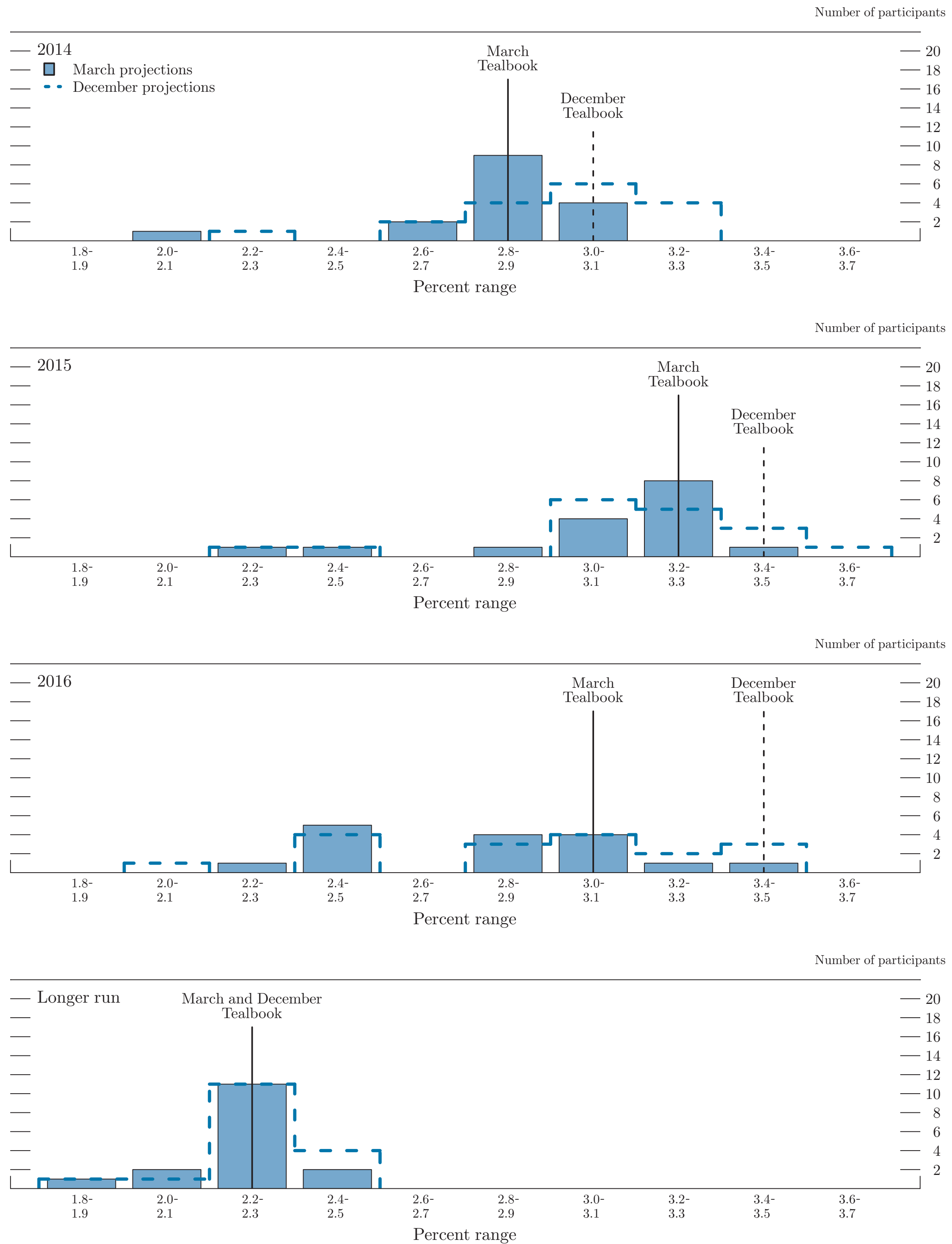
Respondent 14: N/A

Respondent 15: N/A

Respondent 16: We assume that the first increase in the funds rate will occur early in 2016, three quarters later than the Tealbook. Our rate of increase after liftoff is similar. Accordingly, at the end of the projection period our assumed level of the funds rate only reaches 1.25 percent.

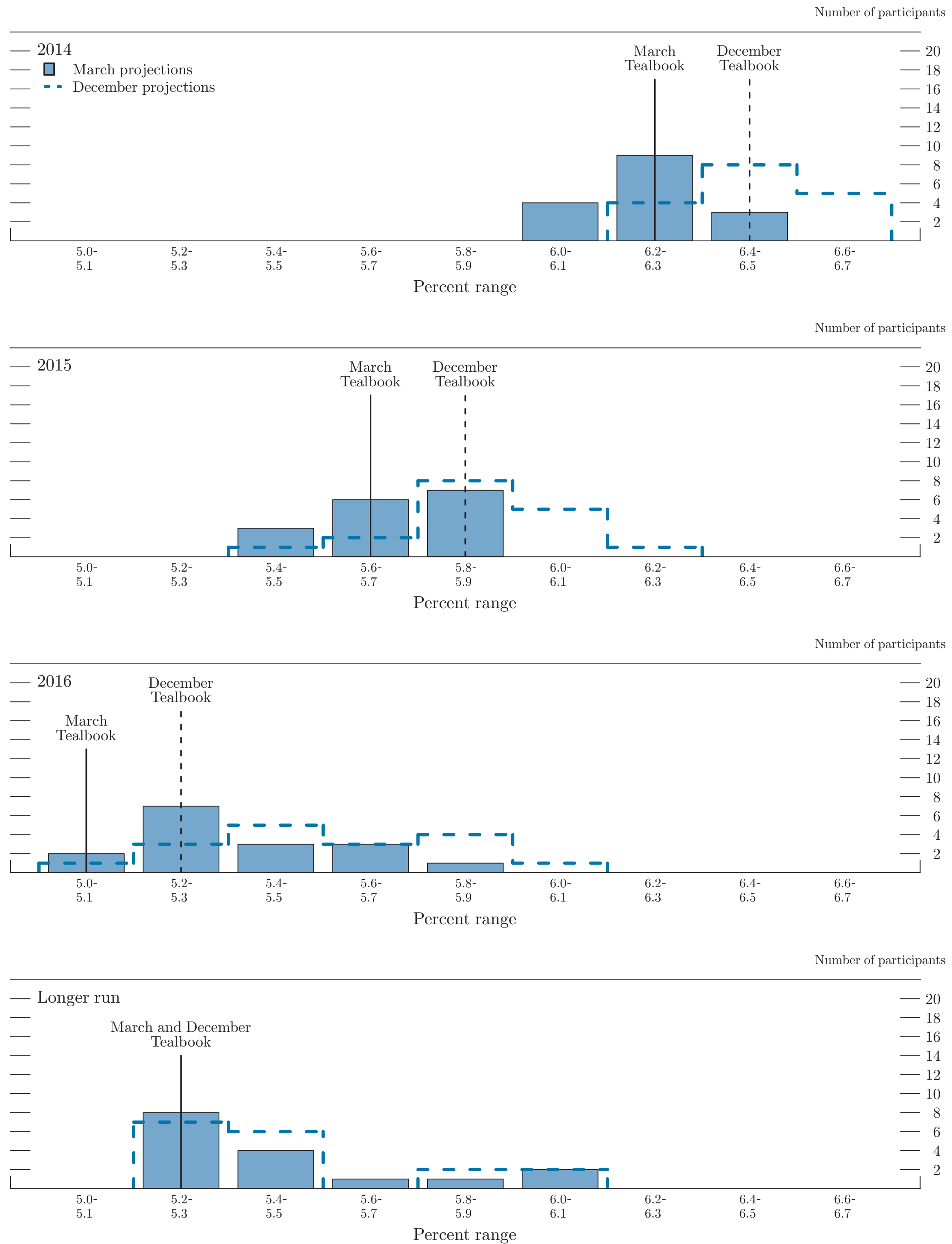
We assume that the economy entered 2014 with somewhat less momentum than the Tealbook, and our outlook for growth over 2014:Q2-2014:Q4 is a bit more subdued. Our outlook for growth in 2015-2016 is a bit stronger than the Tealbook, reflecting our somewhat faster assumed pace of growth of potential output. On net, while the Tealbook closes resource gaps by the end of 2016, we still see a small gap remaining at that time. Our inflation forecast is a touch below the Tealbook, although in contrast to the Tealbook's balanced assessment, we see the risks to the inflation forecast as being to the downside.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2014–16 and over the longer run



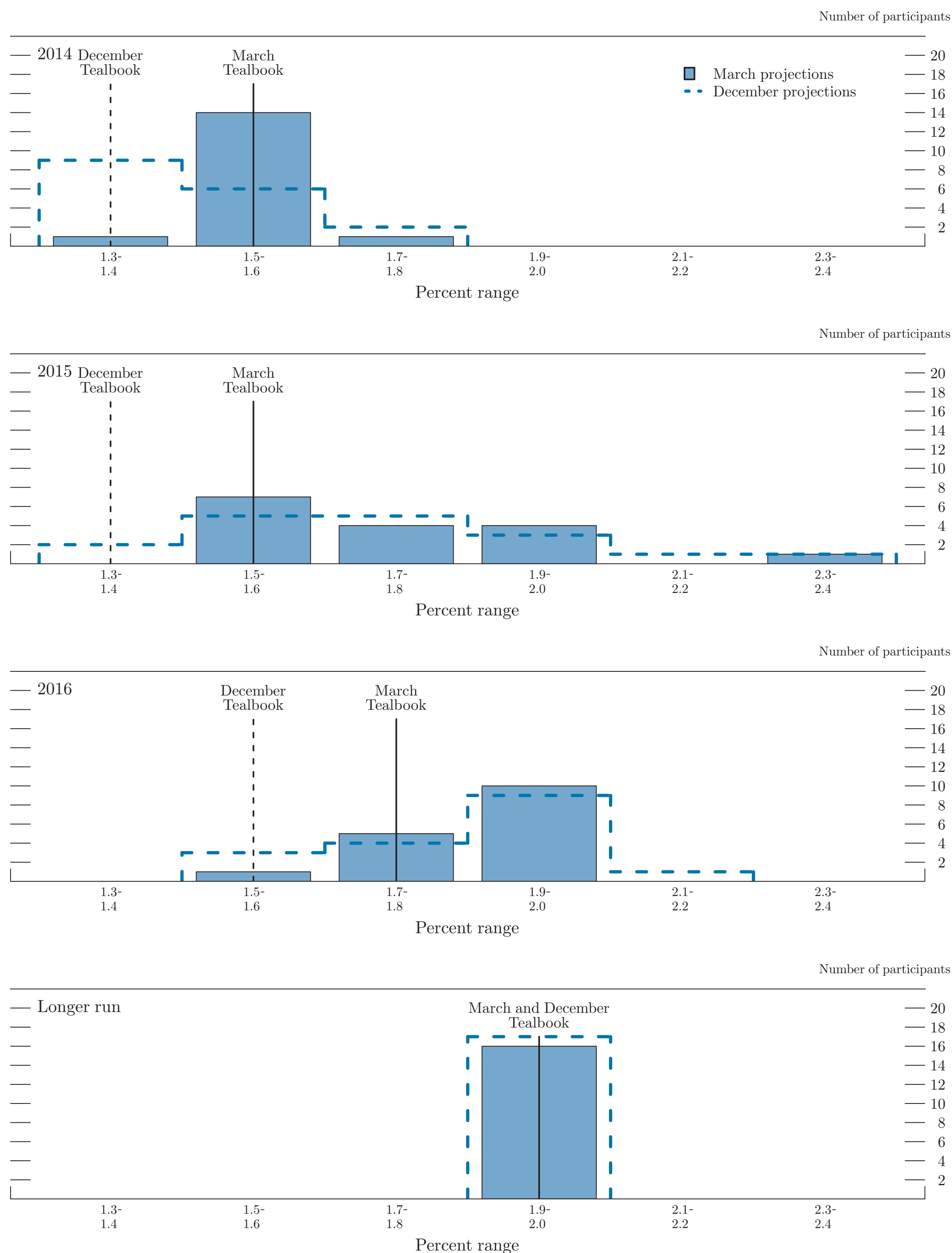
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2014–16 and over the longer run



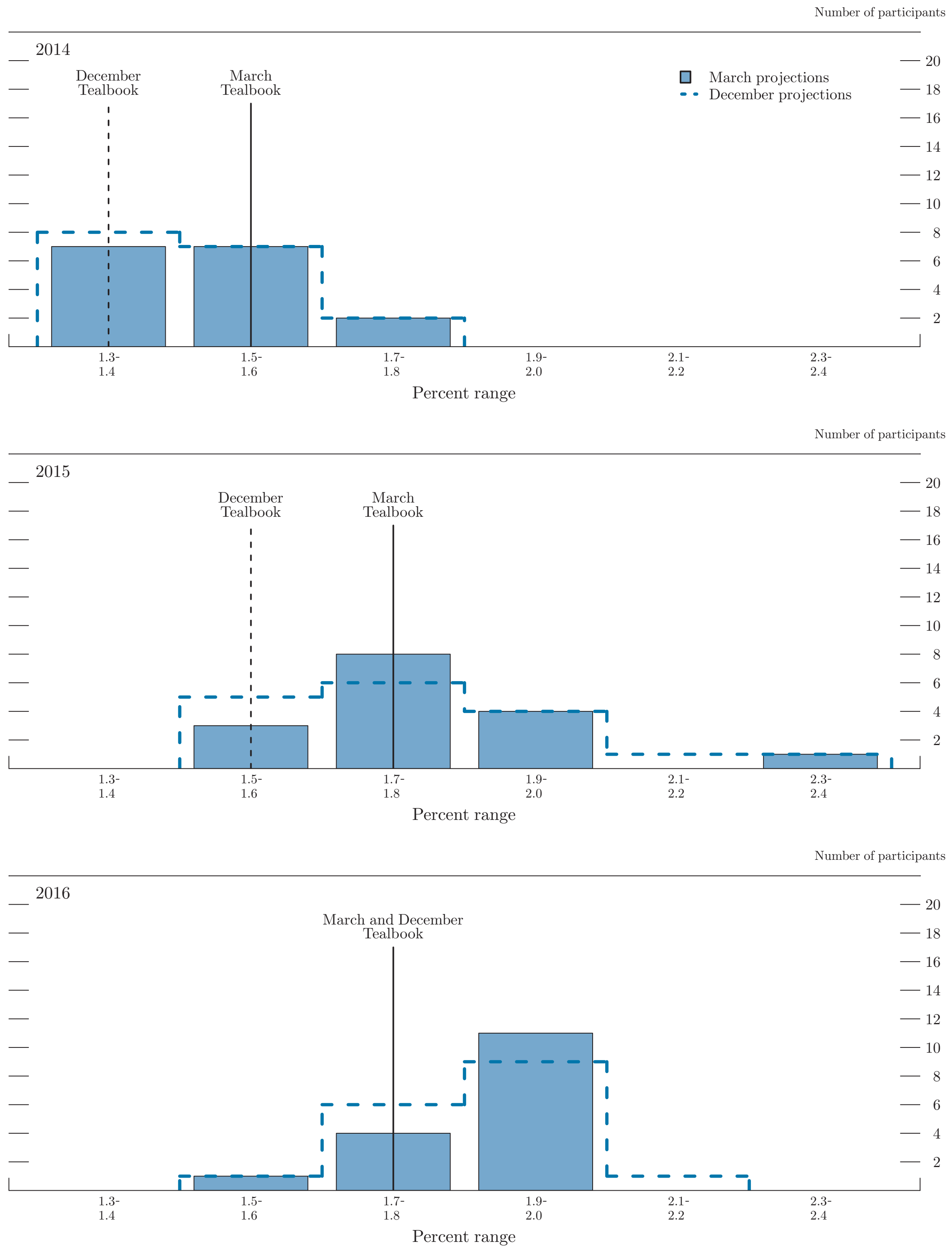
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2014–16 and over the longer run



NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2014–16

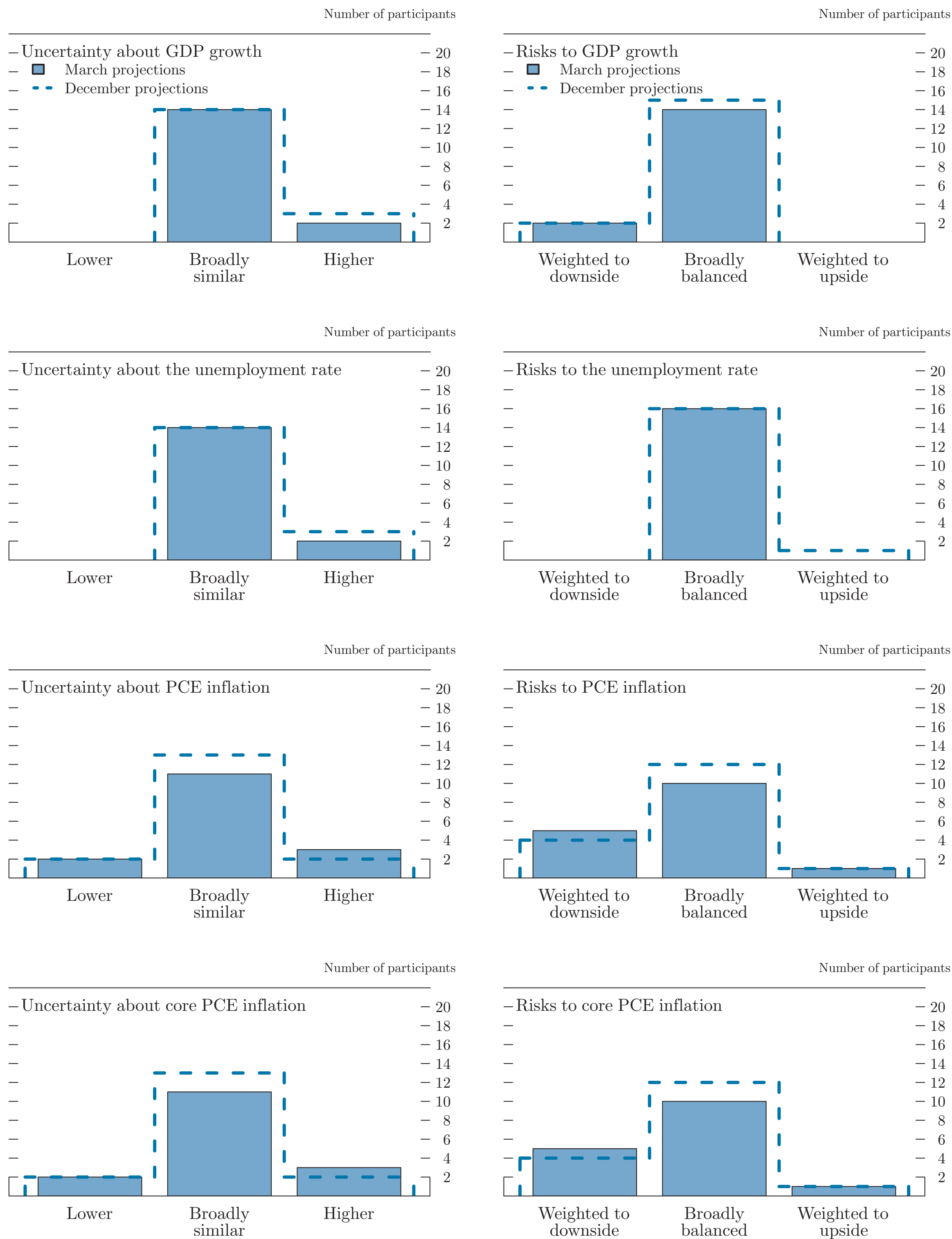


NOTE: Definitions of variables are in the general note to table 1.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2014–16 and over the longer run

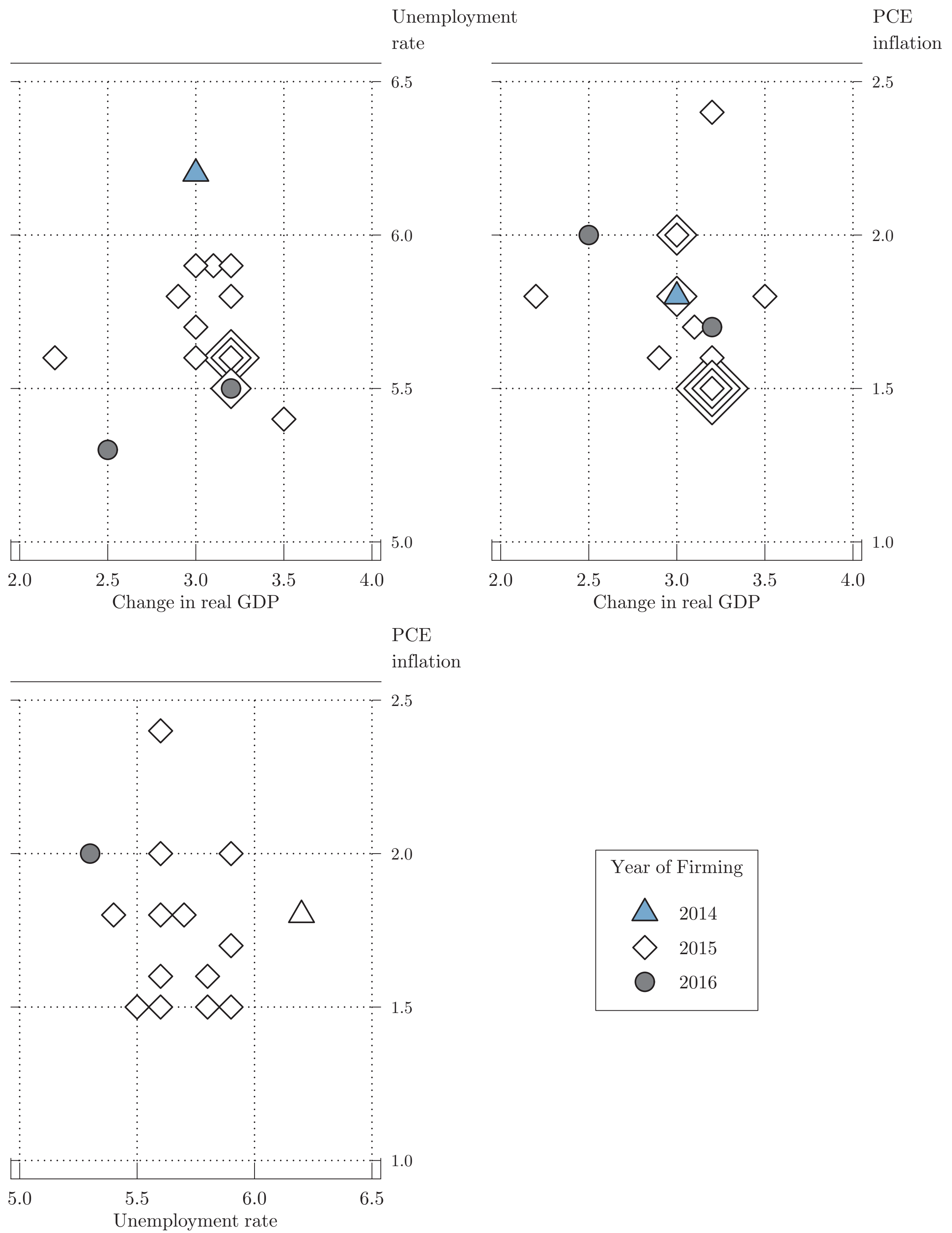
NOTE: The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

Figure 4. Uncertainty and risks in economic projections



NOTE: Definitions of variables are in the general note to table 1.

Figure 5. Scatterplots of projections in the initial year of policy firming (in percent)



NOTE: When the projections of two or more participants are identical, larger markers, which represent one participant each, are used so that each projection can be seen.