

Table 1: Economic projections of Federal Reserve Board members and Federal Reserve Bank Presidents, January 2012

Percent

Variable	Central tendency ¹				Range ²			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP.	2.2 to 2.7	2.8 to 3.2	3.3 to 4.0	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.8 to 4.3	2.2 to 3.0
November projection. . .	2.5 to 2.9	3.0 to 3.5	3.0 to 3.9	2.4 to 2.7	2.3 to 3.5	2.7 to 4.0	2.7 to 4.5	2.2 to 3.0
Unemployment rate.	8.2 to 8.5	7.4 to 8.1	6.7 to 7.6	5.2 to 6.0	7.8 to 8.6	7.0 to 8.2	6.3 to 7.7	5.0 to 6.0
November projection. . .	8.5 to 8.7	7.8 to 8.2	6.8 to 7.7	5.2 to 6.0	8.1 to 8.9	7.5 to 8.4	6.5 to 8.0	5.0 to 6.0
PCE inflation.	1.4 to 1.8	1.4 to 2.0	1.6 to 2.0	2.0	1.3 to 2.5	1.4 to 2.3	1.5 to 2.1	2.0
November projection. . .	1.4 to 2.0	1.5 to 2.0	1.5 to 2.0	1.7 to 2.0	1.4 to 2.8	1.4 to 2.5	1.5 to 2.4	1.5 to 2.0
Core PCE inflation ³	1.5 to 1.8	1.5 to 2.0	1.6 to 2.0		1.3 to 2.0	1.4 to 2.0	1.4 to 2.0	
November projection. . .	1.5 to 2.0	1.4 to 1.9	1.5 to 2.0		1.3 to 2.1	1.4 to 2.1	1.4 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 November projections were made in conjunction with the Federal Open Market Committee meeting on November 1-2, 2011.

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 1a
Economic Projections for the First Half of 2012*
(in percent)

Central Tendencies and Ranges

	Central Tendency	Range
Change in Real GDP	1.9 to 2.4	1.7 to 3.0
PCE Inflation	1.5 to 1.8	1.2 to 2.7
Core PCE Inflation	1.4 to 1.8	1.2 to 2.0

Participants' Projections

Projection	Change in Real GDP	PCE Inflation	Core PCE Inflation
1	1.9	1.5	1.4
2	2.2	1.6	1.5
3	1.7	1.5	1.5
4	2.2	1.6	1.4
5	2.4	1.7	1.7
6	2.0	1.6	1.9
7	2.3	1.5	1.5
8	1.9	1.5	1.5
9	1.7	1.5	1.5
10	2.3	1.8	1.9
11	2.5	2.7	1.7
12	2.3	1.2	1.2
13	2.4	1.5	1.5
14	2.0	1.8	1.8
15	2.3	1.6	1.4
16	1.9	1.3	1.4
17	3.0	2.0	2.0

* Growth and inflation are reported at annualized rates.

Table 1b
Economic Projections for the Second Half of 2012*
(in percent)

Central Tendencies and Ranges

	Central Tendency	Range
Change in Real GDP	2.5 to 3.0	2.4 to 3.5
PCE Inflation	1.3 to 2.0	1.3 to 2.3
Core PCE Inflation	1.5 to 1.9	1.4 to 2.0

Participants' Projections

Projection	Change in Real GDP	PCE Inflation	Core PCE Inflation
1	2.9	1.5	1.6
2	2.8	1.4	1.5
3	2.5	1.3	1.5
4	2.4	1.6	1.6
5	3.0	2.1	1.9
6	2.6	2.0	1.9
7	3.5	1.3	1.5
8	2.5	1.5	1.5
9	2.5	1.3	1.5
10	2.9	1.8	1.9
11	3.5	2.3	1.9
12	2.9	1.4	1.4
13	2.8	1.3	1.5
14	3.0	1.8	1.8
15	2.5	1.8	1.8
16	2.5	1.7	1.8
17	3.0	2.0	2.0

* Projections for the second half of 2012 implied by participants' January projections for the first half of 2012 and for 2012 as a whole. Growth and inflation are reported at annualized rates.

**Table 2: January Economic Projections
(in percent)**

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation	Federal Funds Rate
1	2012	2.4	8.5	1.5	1.5	0.13
2	2012	2.5	8.2	1.5	1.5	0.13
3	2012	2.1	8.6	1.4	1.5	0.13
4	2012	2.3	8.4	1.6	1.5	0.13
5	2012	2.7	8.3	1.9	1.8	0.13
6	2012	2.3	8.5	1.8	1.9	0.13
7	2012	2.9	8.3	1.4	1.5	0.13
8	2012	2.2	8.3	1.5	1.5	0.13
9	2012	2.1	8.6	1.4	1.5	0.13
10	2012	2.6	8.2	1.8	1.9	0.50
11	2012	3.0	7.8	2.5	1.8	0.13
12	2012	2.6	8.0	1.3	1.3	0.13
13	2012	2.6	8.4	1.4	1.5	0.13
14	2012	2.5	8.4	1.8	1.8	1.00
15	2012	2.4	8.3	1.7	1.6	0.13
16	2012	2.2	8.6	1.5	1.6	0.13
17	2012	3.0	7.8	2.0	2.0	1.00
1	2013	3.0	8.1	1.4	1.4	0.13
2	2013	2.9	7.7	1.8	1.6	0.13
3	2013	2.4	8.2	1.4	1.4	0.13
4	2013	2.7	8.1	1.8	1.6	0.13
5	2013	3.0	7.7	2.0	1.9	0.13
6	2013	2.8	8.1	2.0	2.0	0.75
7	2013	3.4	7.3	1.4	1.5	0.13
8	2013	2.8	8.1	1.4	1.5	0.13
9	2013	2.9	8.0	1.4	1.5	0.13
10	2013	3.0	7.6	2.1	2.0	1.00
11	2013	3.8	7.0	2.3	2.0	0.75
12	2013	3.3	7.4	1.6	1.6	0.13
13	2013	3.0	8.1	1.5	1.5	0.13
14	2013	3.2	7.8	2.0	2.0	1.90
15	2013	3.1	7.8	1.8	1.8	0.50
16	2013	3.0	8.2	1.5	1.4	0.13
17	2013	3.0	7.0	2.0	2.0	1.75

Table 2 (continued): January Economic Projections

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation	Federal Funds Rate
1	2014	3.7	7.6	1.5	1.4	0.13
2	2014	2.8	7.2	2.0	1.8	0.75
3	2014	4.0	7.6	1.5	1.5	0.13
4	2014	2.9	7.7	1.9	1.7	0.13
5	2014	3.3	7.1	2.0	2.0	1.00
6	2014	3.4	7.6	2.0	2.0	2.00
7	2014	3.7	6.7	1.8	1.7	1.00
8	2014	3.4	7.4	1.5	1.5	0.50
9	2014	4.1	7.3	1.6	1.6	0.13
10	2014	3.4	7.0	2.1	2.0	1.50
11	2014	3.5	6.5	2.0	2.0	2.75
12	2014	4.3	6.6	2.0	2.0	0.50
13	2014	4.2	7.3	1.7	1.6	0.13
14	2014	3.6	7.0	2.0	2.0	2.50
15	2014	3.4	7.1	1.9	1.9	2.50
16	2014	3.3	7.6	1.6	1.6	0.13
17	2014	3.0	6.3	2.0	2.0	2.50
1	LR	2.5	5.2	2.0		4.00
2	LR	2.6	6.0	2.0		4.00
3	LR	3.0	5.4	2.0		3.80
4	LR	2.4	5.5	2.0		4.20
5	LR	2.5	5.2	2.0		4.50
6	LR	2.5	6.0	2.0		4.50
7	LR	2.5	5.5	2.0		4.50
8	LR	2.2	5.5	2.0		4.20
9	LR	2.5	5.3	2.0		4.00
10	LR	2.6	6.0	2.0		4.00
11	LR	2.3	6.0	2.0		4.25
12	LR	2.3	5.0	2.0		4.00
13	LR	2.5	5.2	2.0		4.50
14	LR	2.7	5.5	2.0		4.00
15	LR	2.5	5.5	2.0		4.50
16	LR	2.3	5.4	2.0		4.00
17	LR	2.7	6.0	2.0		4.50

Table 2 Appendix: For those participants that, under appropriate monetary policy, the target federal funds rate will not be raised until after 2014

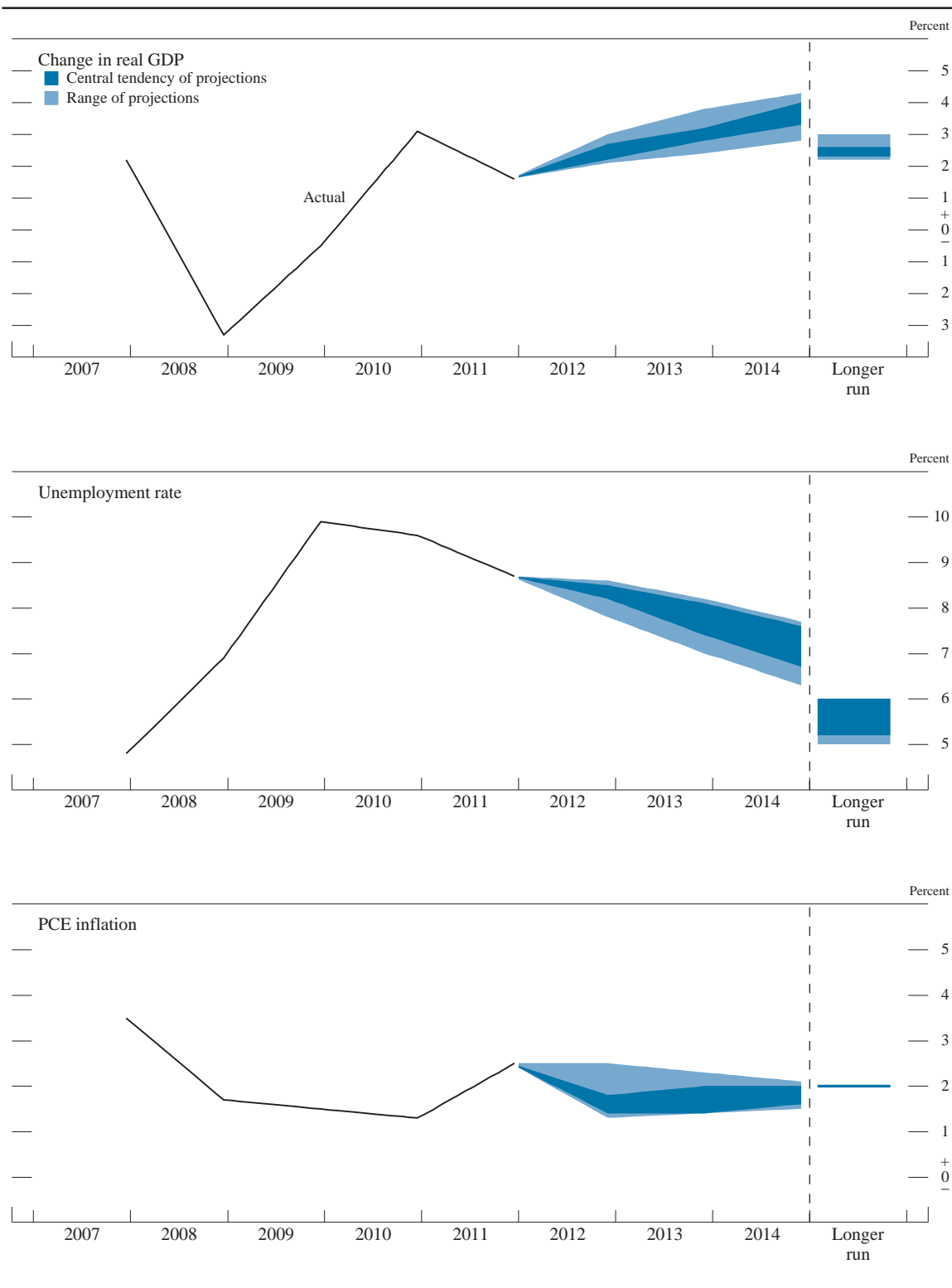
Projection	Year of first increase	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation	Federal Funds Rate
1	2015	4	7	1.5	1.4	0.5
3	2016	4	6.2	1.7	1.7	1.5
4	2015	3.3	7.4	2	2	0.5
9	2015	4.6	6.5	1.7	1.7	0.5
13	2015	4.2	6.3	1.7	1.7	0.5
16	2016	3.5	6.5	2.9	2.6	1.75

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



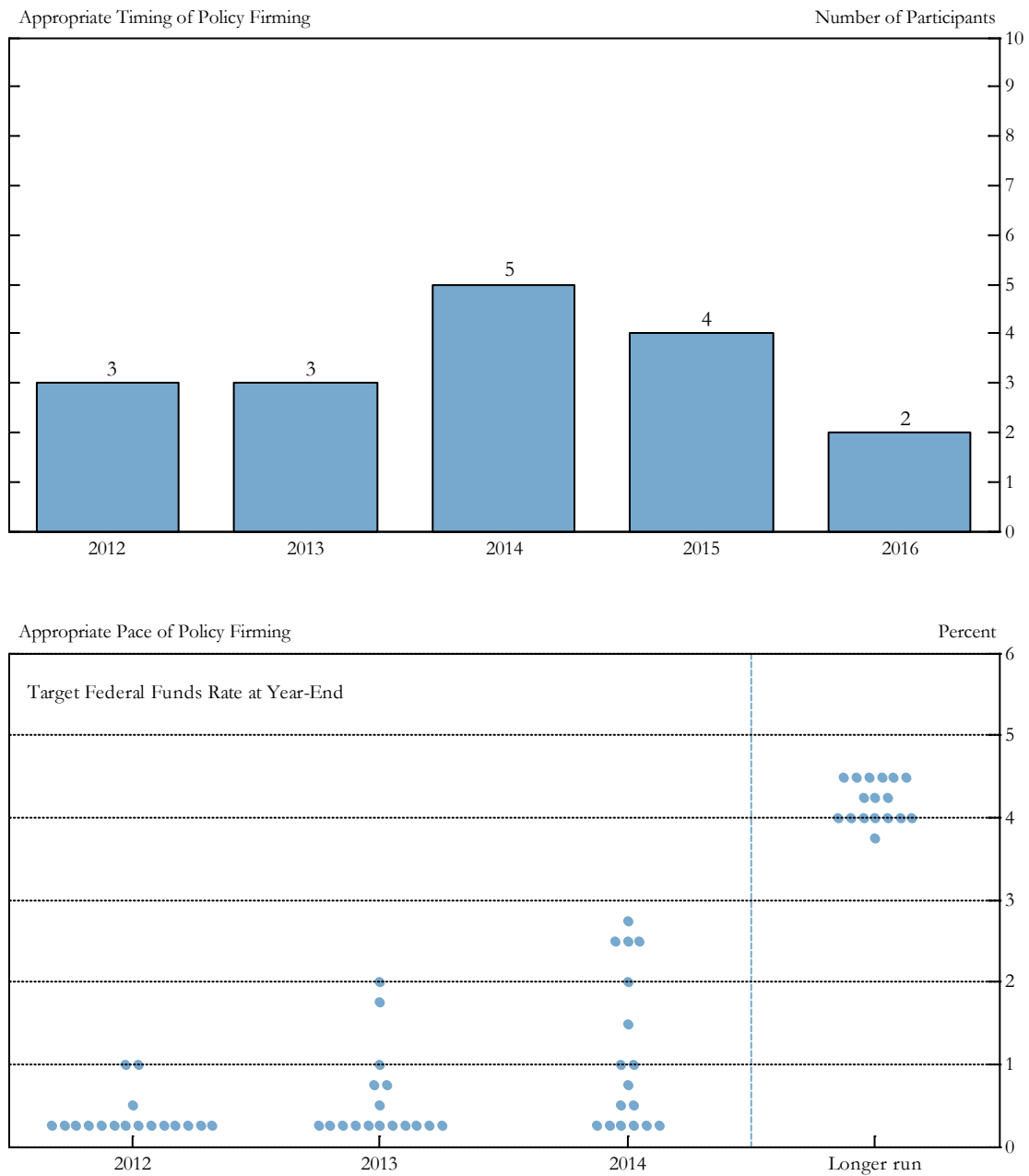
NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual. Actual fourth-quarter 2011 values for the change in real GDP and for both measures of PCE inflation have not yet been published by the Bureau of Economic Analysis; the plotted values of these variables for 2011 are the median estimates taken from the Federal Reserve Bank of New York's January survey of primary dealers.

Central tendencies and ranges of economic projections, 2012–14 and over the longer run



NOTE: Definitions of variables are in the notes to the projections table. The data for the variables are annual. Actual fourth-quarter 2011 values for the change in real GDP and for PCE inflation have not yet been published by the Bureau of Economic Analysis; the plotted values of these variables for 2011 are the median estimates taken from the Federal Reserve Bank of New York's January survey of primary dealers.

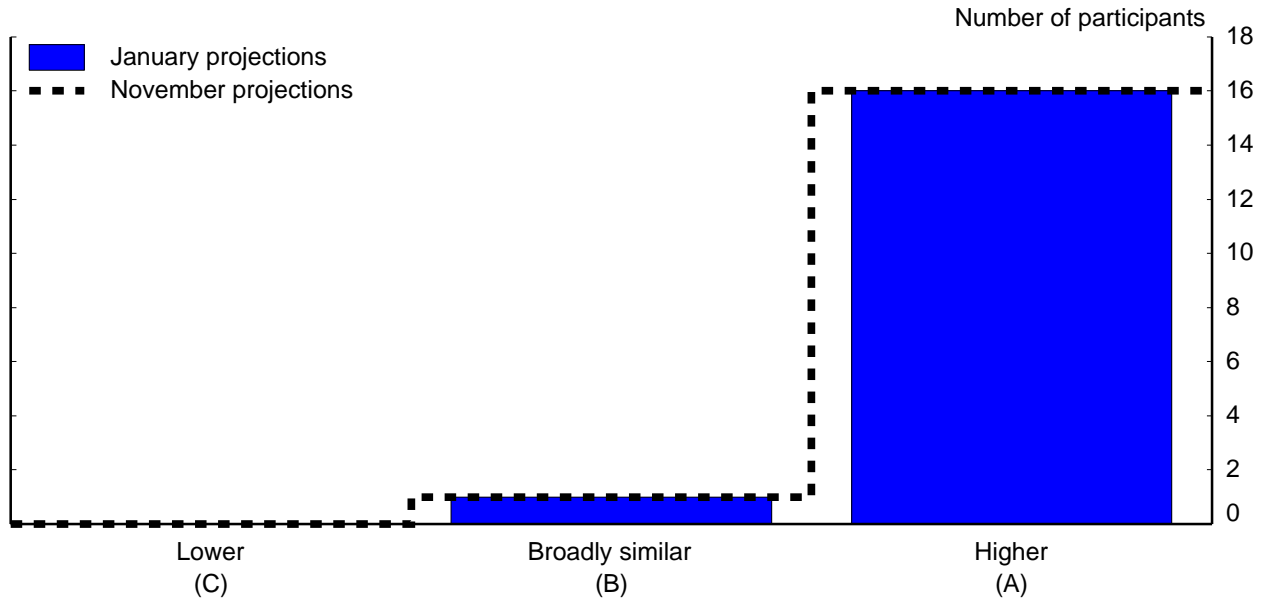
Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy



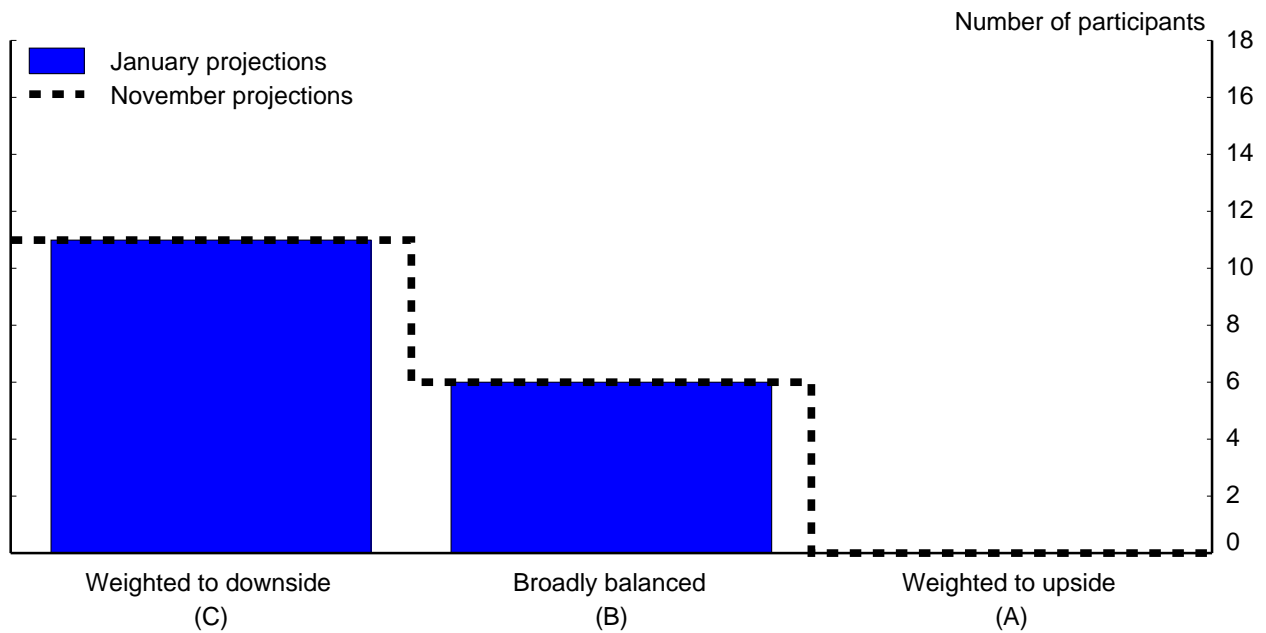
NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy and in the absence of further shocks to the economy, the first increase in the target federal funds rate from its current range of 0 to ¼ percent will occur in the specified calendar year. In the lower panel, each shaded circle indicates the value (rounded to the nearest ¼ percent) 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.

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.

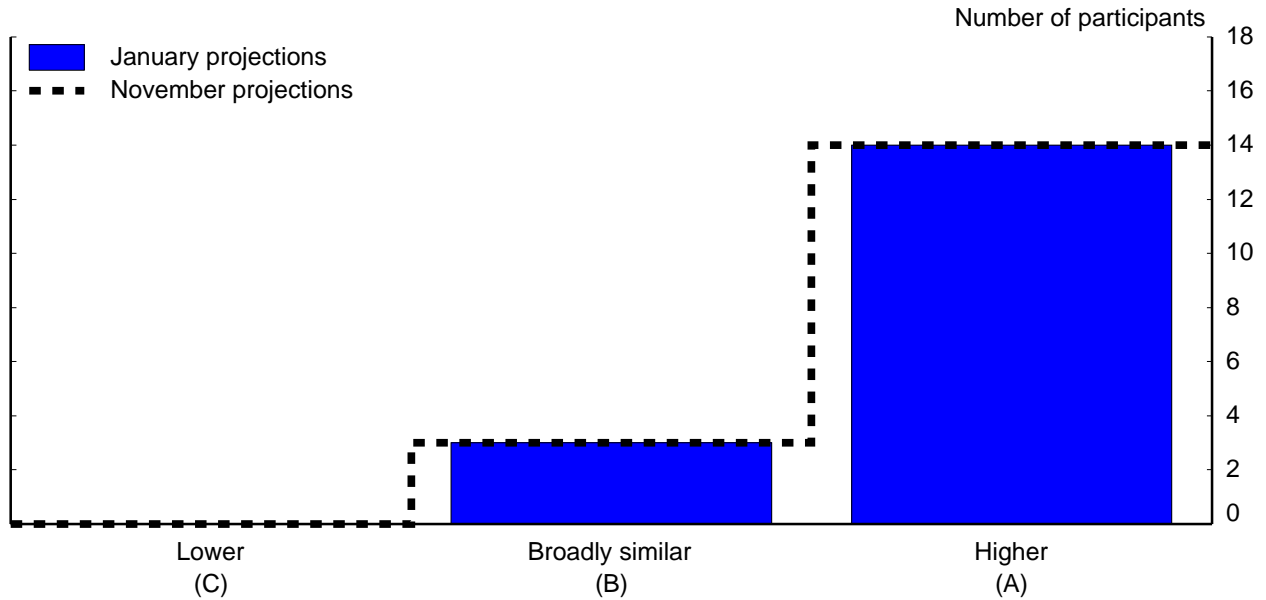


Individual Responses

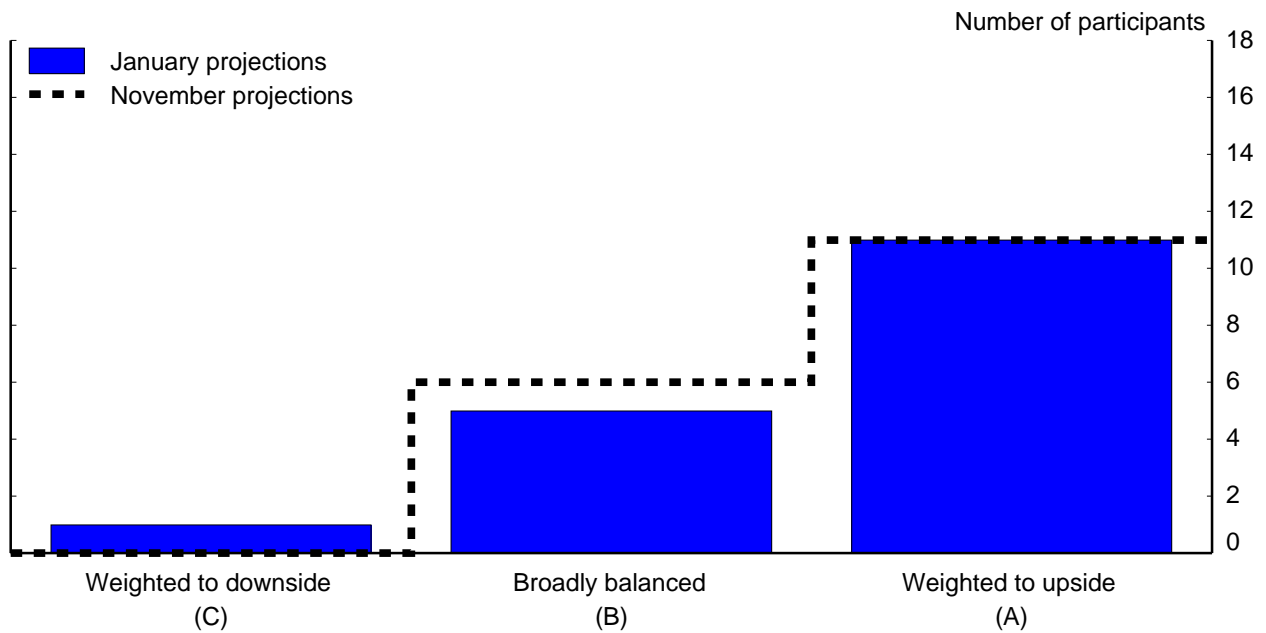
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	A	A
2(b)	C	C	C	C	C	C	C	C	C	C	B	B	C	C	B	B	B

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.

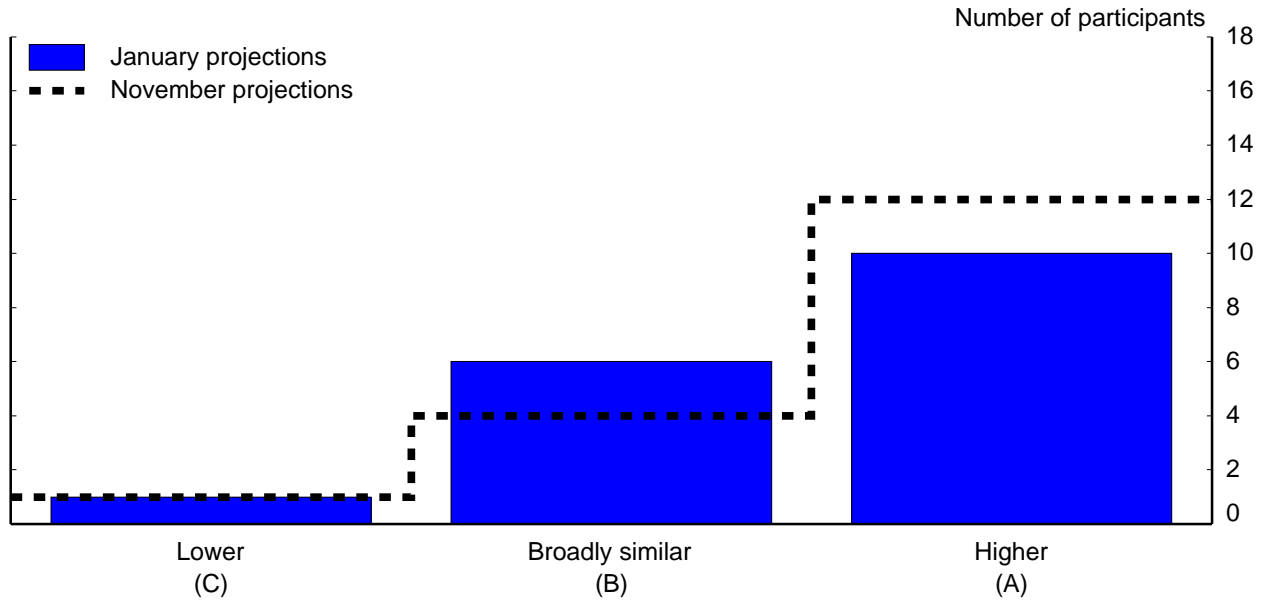


Individual Responses

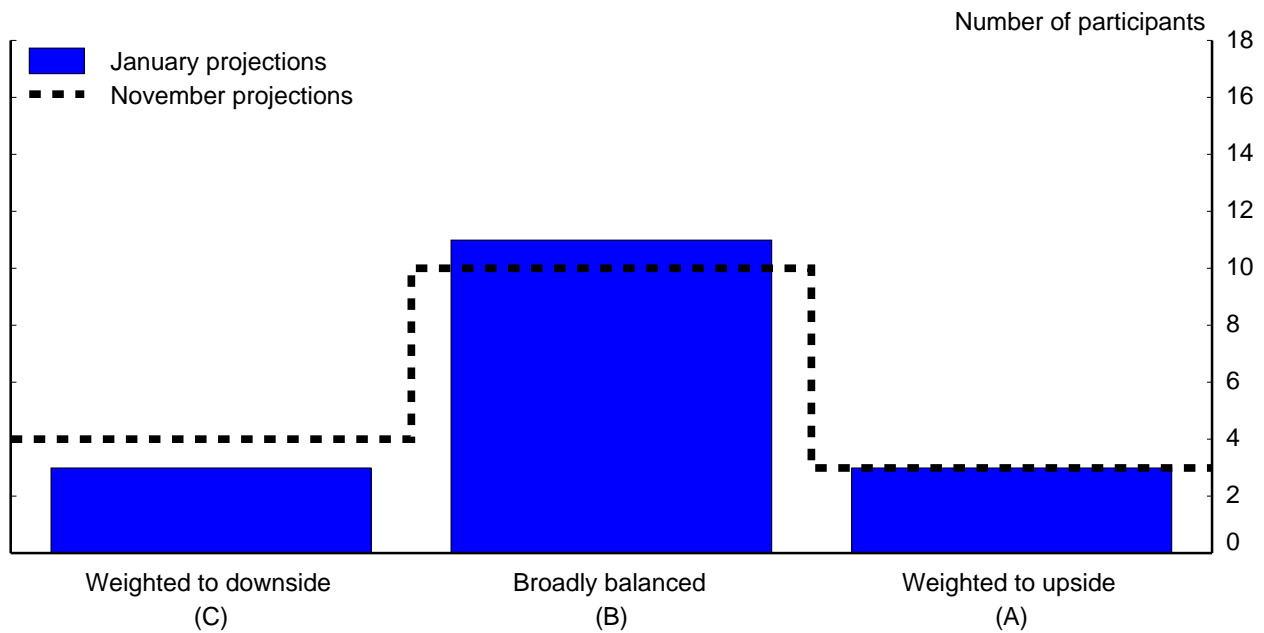
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	A	A	A	A	A	A	A	A	A	A	B	A	A	A	A	B	B
2(b)	A	A	A	A	A	A	A	A	A	C	B	A	A	B	B	B	B

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.

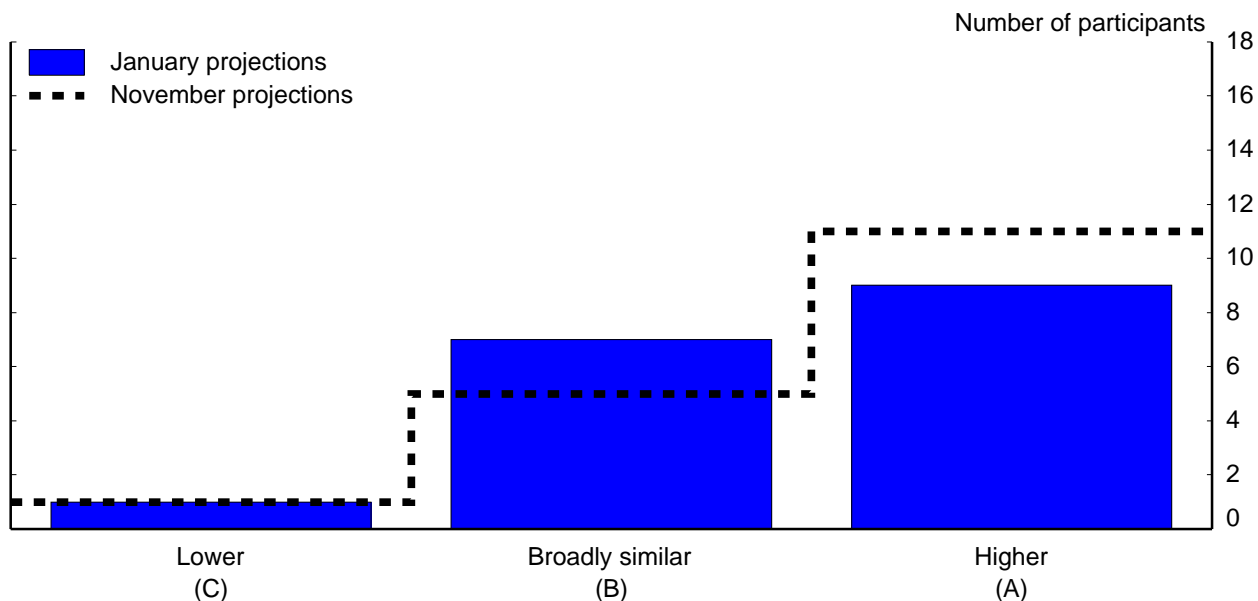


Individual Responses

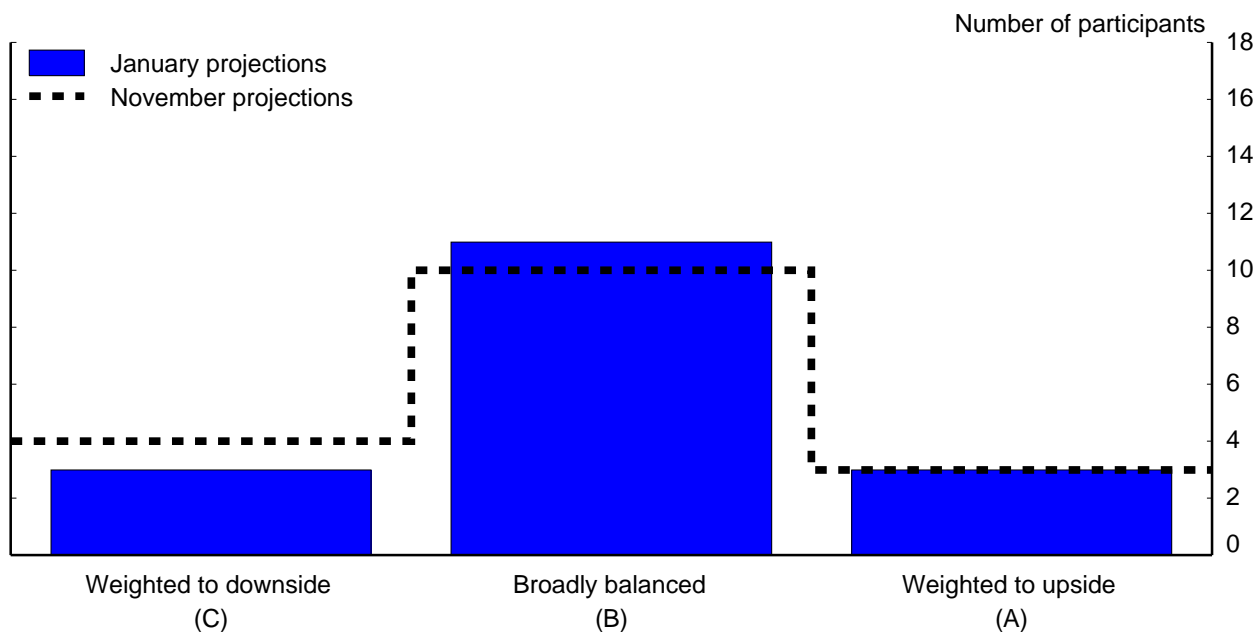
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	A	A	B	A	A	C	A	B	A	A	B	A	B	B	A	B	A
2(b)	B	B	B	B	B	B	B	B	C	C	A	C	B	B	A	B	A

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	17
2(a)	A	A	B	B	A	C	A	B	A	A	B	A	B	B	A	B	A
2(b)	B	B	B	B	B	B	B	B	C	C	A	C	B	B	A	B	A

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:

By 2016, the unemployment rate is about one percentage point above the assumed NAIRU, and inflation remains below the 2 percent target. Convergence to full employment and to the 2 percent inflation target rate is expected to take 6 to 7 years.

Respondent 2:

N/A

Respondent 3:

I believe the convergence process will take more than about five or six years. I think convergence could take two more years – to 2018.

Respondent 4:

Can't be precise. It will take more than 5 to 6 years for unemployment to reach its long run value. Inflation will be close to its long-run value over the next 2-3 years.

Respondent 5:

N/A

Respondent 6:

N/A

Respondent 7:

N/A

Respondent 8:

I expect the convergence process will be only slightly faster than in the long-run Tealbook projection. That is, it will likely to take almost a decade for the large unemployment and output gaps to completely close and for PCEPI inflation to converge to its long-run target of 2 percent.

Respondent 9:

N/A

Respondent 10:

N/A

Respondent 11:

I anticipate that the convergence process for real GDP growth and unemployment will be shorter than 5-6 years, likely on the order of 4 years. Similarly, and quite possibly even quicker, I think inflation will converge to 2 percent.

Respondent 12:

Our current estimate of the economy's potential growth rate is in the 2% to 2 $\frac{1}{2}$ % range. By 2017-18 we anticipate potential growth of around 2 $\frac{1}{4}$ %. A reasonable estimate of the long-run unemployment rate is 4% to 6%. Assuming appropriate policy and no further significant shocks, we expect the unemployment rate to be in this range and the output gap to be around zero by 2017-18.

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 is and will remain at about 2% for the PCE deflator and around 2.5% for the CPI. Under these conditions and with the output gap anticipated to be near zero, we expect inflation as measured by the PCE deflator to be around 2% in 2017-18.

Respondent 13:

The unemployment and inflation rates might not converge to their long-run values until late in the 5-6 year window.

Respondent 14:

Full convergence may well take six years, but may take place at a faster pace than I earlier anticipated.

Respondent 15:

N/A

Respondent 16:

N/A

Respondent 17:

The convergence process may be slightly shorter than 5-6 years

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:

N/A

Respondent 2:

N/A

Respondent 3:

N/A

Respondent 4:

Growth has surprised to the downside consistently, suggesting that we do not fully understand the restraints on growth. No postwar US recession is comparable. Depth of decline in employment, unusual degree of long-term unemployment and part-time employment make labor market hard to forecast. Fiscal policy is very unsettled. In all, uncertainty with respect to GDP and unemployment is higher than normal. Core PCE inflation is not particularly uncertain; although the output gap is hard to measure, inflation expectations are well anchored and core inflation has in fact been quite stable. PCE inflation is affected by commodity prices and thus global demand conditions; although commodity prices have been somewhat more stable recently, both economic and noneconomic forces could contribute to volatility in the prices of oil and other key commodities.

Respondent 5:

N/A

Respondent 6:

Inflation expectations will be more firmly anchored after the consensus statement is released announcing our inflation objective, which should reduce uncertainty about inflation, relative to the last 20 years, though it might mean a tad more uncertainty about real outcomes.

Respondent 7:

N/A

Respondent 8:

Uncertainty about our projection for economic activity appears to be somewhat elevated relative to its average over the past 20 years, in part because of ongoing developments in Europe. Inflation has been anchored, in part, by quite stable inflation expectations.

Respondent 9:

N/A

Respondent 10:

Volatility/uncertainty was unusually low over the past twenty years.

Respondent 11:

N/A

Respondent 12:

Quantitative judgment based on the standard deviation of the FRBNY forecast distribution for GDP growth

and core PCE inflation relative to the forecast errors over the last 20 years.

Respondent 13:

N/A

Respondent 14:

N/A

Respondent 15:

The European debt crisis is perhaps the greatest single source of uncertainty. Adding to uncertainty are signs of slowing in emerging markets, especially China; U.S. fiscal policy; and ongoing changes in the regulatory environment. In addition, the Federal Reserve's unconventional policies are a source of uncertainty because they have no historical precedent.

Respondent 16:

N/A

Respondent 17:

The possibility that the European debt crisis is not resolved in an orderly fashion is a concern. 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.

Uncertainty and Risks

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:

N/A

Respondent 2:

Tealbook provides a good summary of the relevant risks.

Respondent 3:

N/A

Respondent 4:

N/A

Respondent 5:

N/A

Respondent 6:

In the near term, I see a risk that the downturn in European economies is more severe than expected and our GDP growth falters. In the medium run, I believe there is a risk that the impediments to growth may be serious and persistent enough that real GDP growth rises to no more than 2.5 percent, and activity thus will track a new lower trend line, regardless of the stance of monetary policy.

Respondent 7:

N/A

Respondent 8:

Growth and unemployment risks appear skewed in large measure due to the possibility of an adverse resolution to the situation in Europe, while inflation risks are more typically balanced.

Respondent 9:

N/A

Respondent 10:

I put more weight on the possibility of a rapid decline in the unemployment rate, as has been seen in our District, relative to the possibility of a rapid increase. The various DSGE models are forecasting declines in inflation. Those forecasts have led me to put extra weight on the possibility of future disinflation.

Respondent 11:

My concern regarding inflation is that the FOMC is in somewhat uncharted territory and that it may be difficult to change our easy monetary policy quickly enough.

Respondent 12:

Quantitative judgment based on the difference between the central projection and the expected value from the FRBNY forecast distribution.

Respondent 13:

Our base case assumes a relatively modest impact of developments in Europe on activity in the United States and that there will not be a major U.S. fiscal consolidation over the projection period. However, there are significant downside risks in these dimensions. In addition, like the Tealbook, we assume that potential

output growth is recovering from sup-par rates over the past several years. This recovery might be impaired if we have underestimated the damage to labor quality from increased long-term unemployment.

Respondent 14:

N/A

Respondent 15:

The risks to GDP growth and unemployment appear broadly balanced. While risks emanating from Europe and emerging markets pose downside risks to growth (upside risks to unemployment), the resilience of the U.S. economy and signs of improvement among labor market indicators and consumer sentiment pose upside risks to the growth outlook (downside risks to unemployment). The risks to inflation on net are skewed to the upside. While there are near-term downside risks to inflation as temporary factors unwind, the current highly accommodative stance of monetary policy and long-term fiscal imbalances pose much larger upside risks to inflation farther out on the horizon.

Respondent 16:

N/A

Respondent 17:

I view the risks to inflation as weighted to the upside in the medium run and over the longer term. Longer-term inflation risks reflect uncertainty about the timing and efficacy of the Fed's withdrawal of accommodation, which could lead to inflation expectations becoming unanchored.

Appropriate Monetary Policy - Balance Sheet

3(a)&(b). Does your view of the appropriate path of the Federal Reserve's balance sheet 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
9	8

Respondent 1: Yes

The baseline forecast is conditioned on \$500 billion of additional purchases of mortgage-backed securities in the Spring of 2012. As the crisis in Europe intensifies, another round of asset purchases of similar magnitude is undertaken later in the year. The Federal Reserve's holdings of securities start to decline only after the lift off of the federal funds rate from the zero lower bound, which is expected to occur in 2015.

Respondent 2: No
N/A

Respondent 3: No
N/A

Respondent 4: No
N/A

Respondent 5: No
N/A

Respondent 6: No
N/A

Respondent 7: No
N/A

Respondent 8: No
N/A

Respondent 9: Yes

I believe that it is desirable for the Committee to engage in further asset purchases. Even with the federal funds rate held at zero through 2015, my forecast, like that in the Tealbook, envisions unemployment remaining well above NAIRU and inflation running below the Committee's 2 percent target. Projected misses in the same direction with respect to both of the Committee's objectives implies that additional policy stimulus is appropriate as long as policy actions are available whose costs do not exceed their projected benefits. A program of additional MBS purchases is warranted, in my view, unless incoming data lead to significant upward revisions to the forecast in the months ahead. My forecast incorporates a \$500 billion purchase program. Given that my forecast still envisions a prolonged period of high unemployment and inflation below target, there exists some case for a larger program.

Respondent 10: Yes

I believe that it will optimal to initiate exit more rapidly than is contemplated by the Tealbook. In particular, my optimal path of monetary policy, given my current forecast, involves stopping re-investment in early 2013 and initiating asset sales in mid-2014.

I should emphasize that I am assuming that market participants' beliefs are shaped by my preferred optimal plan, not the Committee's.

Respondent 11: Yes

My view is that the FOMC should begin reducing the SOMA portfolio in advance of raising the federal funds rate target. My judgment is that the federal funds rate should be increased in late 2013. Thus, reducing the SOMA portfolio should begin in early 2013.

Respondent 12: Yes

Because of the continued strains in financial conditions (despite official actions to address the concerns related to the more dire outcomes of the European debt crisis), a weaker foreign economic outlook, prospects for greater fiscal drag in 2013, and indications of ongoing caution from both households and business, we believe that additional monetary accommodation is necessary to lead to outcomes for economic growth, unemployment, and inflation that are fairly close to our rather tepid projections from November. Such accommodation also provides some additional insurance against some of the downside risks to our outlook. To provide that accommodation, we assume a \$500 billion MBS purchase program, beginning in 2012Q2 through the end of 2013Q1.

Respondent 13: No

N/A

Respondent 14: Yes

I am very skeptical of the usefulness of additional purchases of Treasury securities and of ongoing changes to the maturity distribution of our Treasury portfolio. As I think it desirable to begin raising short-term interest rates substantially earlier than is assumed in the Tealbook, I also think it desirable to begin shrinking the balance sheet earlier than is assumed in the Tealbook, in order to minimize the period over which remittances might be pushed to zero.

Respondent 15: Yes

Because my view of appropriate monetary policy includes an earlier liftoff from zero for the federal funds rate, I would also start the normalization process for the balance sheet earlier than in the Tealbook, in line with the exit strategy principles agreed upon by the FOMC in June 2011.

Respondent 16: Yes

Following the Committee's exit principles adopted last year, I would commence balance sheet adjustments later than contemplated in the Tealbook,

Respondent 17: Yes

If the incoming data are consistent with my forecast, I would want to consider ending the maturity extension program earlier than the end of June. Because my funds rate path is steeper than in the Tealbook, I would anticipate that following the Committee's exit strategy principles would mean that we would reduce the size of the balance sheet more quickly than in the Tealbook.

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 any comments on appropriate monetary policy here as well.

Respondent 1:

The path for the federal funds rate is informed by an objective function that balances the dual mandate's inflation and employment objectives. This projected path for the federal funds rate takes into account additional stimulus over the course of this year, in the form of \$1 trillion of asset purchases.

Respondent 2:

While unemployment is likely to remain elevated, I expect that it will be appropriate to begin raising the target for the federal funds rate in mid-2014 to prevent inflation from rising above levels consistent with price stability. Despite today's very weak economy, the underlying inflation rate is not very far below 2 percent. By 2014, the economy will have recovered enough that preserving the stability of long-term inflation expectations and, in turn, inflation will warrant some tightening of monetary policy. This view of the appropriate path of policy reflects the importance I place on keeping the underlying inflation rate close to 2 percent, to preserve our credibility and to maintain price stability.

Respondent 3:

Pushing off lift-off until 2016 provides additional monetary accommodation and improves outcomes relative to the statutory mandate.

Respondent 4:

Forecast embodies continued slow acceleration in growth, inflation at target. A modest increase in the funds rate in 2015 is roughly what is implied by Taylor (1999). The late 2015 date lies between the predictions of the outcome-based estimated rule and the optimal control simulation.

Respondent 5:

Computed using a forecast-based Taylor rule consistent with the projections I submitted for this meeting. I impose an inflation objective of 2.0 percent.

Respondent 6:

In order to keep inflation near 2 percent, I believe we will need to begin to move the funds rate towards its longer run level in 2013, despite the persistence of significant "slack" in the economy.

Respondent 7:

Underlying strength of the economy is greater than the baseline but not as strong as the faster snap-back scenario. Using Taylor 99 rule for the fed funds path results in values similar to the faster snapback scenario in the Tealbook.

Respondent 8:

Large and persistent output and unemployment gaps coupled with very moderate inflation call for continuing very accommodative monetary policy through late 2014.

Respondent 9:

My policy path is designed to push out market expectations concerning the onset of policy firming until late 2015. I have also incorporated an assumption of further MBS purchases into my policy path. The onset of policy

tightening occurs at a slightly lower unemployment rate than would be called for by the Taylor (1999) rule but slightly sooner than would occur under a fully optimal policy with commitment. With inflation of 1.7%, Taylor (1999) calls for liftoff when the unemployment rate is about 7.0%. I would defer liftoff until unemployment has declined to around 6.5%. I also assume a slightly shallower path of tightening for several years than would be called for by Taylor 1999. I believe that additional stimulus, over and above what would be called for by the Taylor (1999) benchmark, is appropriate under conditions in which monetary policy has been long constrained by the zero lower bound. In particular, substituting future policy accommodation for the easing that would have occurred in the absence of the lower bound is a strategy that has been studied in the research literature (e.g. Reifschneider and Williams) and it could prove effective in promoting a somewhat stronger recovery. A strategy of holding the funds rate below values that are called for by a rule such as Taylor 1999 as the recovery proceeds is appropriate in light of asymmetric downside risks to the forecast.

Respondent 10:

Over the course of 2012, I'm expecting the unemployment rate to fall by 50 basis points (from 2011:Q4 to 2012:Q4). According to Taylor (1999), such a fall should result in a decrease in accommodation equivalent to a 100 basis points increase in the fed funds rate (given an Okun's Law coefficient of 2). I'm achieving that reduction in accommodation over the course of the year in two ways: increasing the fed funds rate by 50 basis points, and reducing the length of time over which the Fed plans to hold its securities.

Respondent 11:

Assuming appropriate policy and my forecast of above-trend growth in the near term, my judgment is that the federal funds rate should be increased in late 2013.

Respondent 12:

Over the near to medium term, the path and composition of the SOMA will be a factor influencing our assessment of the appropriate path for the target federal funds rate (FFR). As stated in the economic projections, we assume that the Federal Reserve will initiate a new \$500 billion MBS purchase program in 2012Q2 that will last approximately one year.

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. Some indicators of economic and financial conditions have improved since the November trial run, and we see previous policy accommodation as a contributing factor to this improvement. Nevertheless, we still see the combination of substantial resource underutilization; a forecast of slow growth, high unemployment, and below-objective inflation; and downside risks to the real activity and medium-term inflation outlooks as calling for continued policy accommodation. In the current environment where the policy rate is constrained by the zero lower bound and the financial system remains somewhat impaired, such accommodation will lead to the target FFR remaining near zero until late 2014. 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 depend upon our assessment of economic conditions and inflation expectations as well as upon credit spreads and overall financial conditions.

An important 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 the equilibrium real rate is in the range of 1% - 3%; adding our objective for inflation (2%) then gives our estimate of the longer-run rate given in the table above. However, given the weak state of the economy and continued strained financial conditions, our assessment of the current equilibrium real rate, and thus the "neutral" FFR, is below that range and is expected to remain so for some time.

Respondent 13:

My appropriate policy is premised on a loss function which equally weights deviations of inflation from target and unemployment from its natural rate. I maintain a flexible inflation targeting framework, in which a deviation in inflation or unemployment from its longer-run goal could be allowed in order to facilitate a more prompt closure in an oversized or persistent deviation in the other objective.

We assume that the economic outlook will justify that the period of exceptionally low policy rates will run well into 2015. Our projection is that the unemployment rate will fall below 7 percent sometime in the first half of 2015, but that the outlook for inflation over the medium-term would not require policy lift off until late in the year.

In addition to low rates, we assume that appropriate policy will incorporate forward guidance that ties changes in the policy rate to economic outcomes. Such forward guidance may need to be complemented by additional asset purchases if, as we move through the forecast period, progress towards our policy objective is slower than anticipated.

Respondent 14:

At the December FOMC meeting, I spoke to my concerns about the proposed expansion of the SEP exercise to include funds rate projections.

To summarize, I believe that the exercise risks damaging our credibility and is more likely to confuse private-sector decision makers than to provide useful guidance on the future conduct of monetary policy.

I agree that monetary policy should be based on the state of the economy, and should not be time dependent (e.g. stating that we expect interest rates will remain low at least until mid 2013, an initiative I argued against). Yet I also recognize that forecasting the likely state of the economy-- even one year forward but especially over the intermediate and longer time intervals--is largely guesswork, informed by models of various degrees of sophistication at the Board, the twelve Federal Reserve Banks, and the private sector, all of which have poor records.

Moreover, not all policy-relevant economic variables are included in the SEP, making it unrealistic to expect the public to draw valid inferences about the future conduct of policy from the funds-rate paths that are to be reported. The inference problem is exacerbated by the zero bound and the fact that the SEP policy paths will not be linked to specific projections of real activity and inflation.

In the corporate world, any CEO will tell you that providing "forward guidance" is vexing; at best, they might get it correct for the next quarter; at worst they manage to their guidance and can miss opportunities for fear of disappointing "the Street". To be sure, there are some corporations that have internal exercises that forecast out three years but as one of the most prominent of the former champions of this exercise at one of the largest and richest corporations admonished me this week, "what happens is that even with all the sophistication and economic expertise we can buy, you end up projecting forward a bias shaped by the current economy; in the end, the projections have to be re-based frequently. You then have to spend time explaining publically why you were wrong and what you missed, taking your eye off what you actually do rather than what you said you would do." Nearly every CEO I have talked to in preparing for the January FOMC, echoed this warning, unsolicited: to a person, they think we have lost our marbles. Our job of forecasting forward is even harder than that of an Exxon or a WalMart: they at least have control over many of the variables they work with. The business leaders I talk to are amused that we somehow think we can do a better job in providing forward guidance than can the very best run corporations in the country.

I submit the requested projections with the misgivings articulated above.

For the purpose of this exercise I assume that the funds rate is governed by a Taylor rule keyed to movements in the unemployment rate and inflation. Barring some dramatic exogenous shock, the rule suggests that it will become appropriate to begin moving the funds rate upward sometime during 2012. This prescription accords with my belief that zero-bound interest rates are distorting savings and investment decisions in the economy and are having a perverse impact on the banking system without stimulating economic activity.

Respondent 15:

Key factors informing my judgments regarding the appropriate path of monetary policy are achieving an inflation objective of 2 percent and ensuring a sustainable economic recovery that reduces unemployment. To preempt the potential for rising inflationary pressures and the buildup of risks in the financial system that could impede the achievement of these goals, I currently anticipate it will be necessary to begin removing accommodation in the first half of 2013.

Respondent 16:

Continued relatively slow pace of recovery, combined with expectation of fiscal consolidation.

Respondent 17:

Inflation and inflation expectations will be the main drivers of the removal of accommodation. Economic growth will be slightly above trend in 2012 and beyond and unemployment will decline slowly. The Committee will find it necessary to adjust policies to prevent inflation from rising above its target.

Forecast Narratives

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

Respondent 1:

Recent data remain consistent with an economy growing at a pace close to potential. As a result, scope for further improvements in the labor market remains limited. Households' income growth has been disappointing of late, and this, together with unfavorable developments in households' net worth in the first half of this year, is expected to restrain spending in the near term. The limited scope for monetary and fiscal policy actions in Europe is likely to induce a noticeably more severe Euro-area recession than what financial markets are currently pricing in. In the coming months, we thus expect an increase in uncertainty and risk premia, in the context of a still fragile U.S. recovery. The worsening of financial conditions prompts two rounds of monetary policy stimulus this year, which we have embedded in our baseline forecast. This additional stimulus is expected to lower the unemployment rate by roughly half of one percentage point over the course of the forecast horizon.

We continue to expect an acceleration in the pace of growth starting in 2013, as the crisis in Europe moderates and credit supply constraints recede. However, the speed of the recovery is tepid by historical standards as fiscal policy remains contractionary. The unemployment rate is projected to reach about 7.5 percent by the end of 2014. With considerable slack in the labor market, inflation is subdued over the course of the forecast horizon.

Risks to the projection for real activity remain highly skewed to the downside. The baseline forecast is predicated on a pessimistic outlook for Europe. The recession in Europe has increased the risks of a disorderly sovereign default and/or the failure of a large financial institution significantly. The potential downside risks to the real outlook also remain costlier than the potential upside risks. Ongoing developments in Europe run counter to the view that fiscal contractions are expansionary, and any worsening of the economy in the current situation would be aggravated by the limited scope for further fiscal and monetary policy actions. Moreover, tensions with Iran could lead to disruptions in oil markets that would threaten the stable outlook for oil prices that underpins our baseline forecast. This outcome is not as unlikely as we had previously thought.

Respondent 2:

I expect the economy to recover at a slow to moderate rate from 2012 through 2014, reflecting a range of forces. The positive forces include considerable monetary stimulus and the economy's usual self-correcting forces. The negative forces include: consumer de-leveraging; the struggles of the housing sector; cutbacks in state and local government spending; and uncertainty about the effects of a recession in Europe, the resolution of federal, state, and local budget problems, and the regulatory environment.

In this environment, I expect inflation to remain at or below 2 percent from 2012 through 2014. This projection reflects incoming inflation data for a broad range of products that have been soft, commodity prices that are no longer trending higher, stable inflation expectations, and wage growth that continues to be moderate. With the job market still weak, there is unlikely to be much wage or inflation pressure over the next couple of years.

I continue to see the outlook for growth, unemployment, and inflation as highly uncertain. The key risk to growth (downside) and unemployment (upside) is a severe recession in Europe and the additional financial stress the recession would cause. For inflation, the weakness of the economy could create more disinflation than expected. On the other hand, the potential for renewed volatility of commodity prices and extremely accommodative monetary policy are upside risks to the inflation outlook.

Respondent 3:

While some data sets indicate better growth in the economy, others indicate that growth remain sub par. Growth in consumption, while modestly higher than expected, continues to not be supported by the fundamentals of higher disposable real income. In fact, disposable real income edged down .5% in the second quarter of 2011 and 2% in the third quarter of 2011. Consumer sentiment has improved from its historic lows, but remains pessimistic. Home equity values remain depressed, and non monetary policy obstacles to refinancing remain attenuating factors in translating home wealth into greater consumption. Accordingly, the engine for further growth does not yet seem to be propelled by sustainable consumption.

At the time of this current projection, I am concerned about higher oil prices which could further hurt income, demand and GDP. I also am concerned about a renewed worsening of the European crisis which could further exacerbate the risks of a European recession and lead to further drops in our ability to drive growth through greater net exports.

In terms of relative bright spots, state and local government payrolls, which remain pressured, may begin to stabilize in 2012 as tax receipts increase, stimulus measures stop their phase out and house prices hit bottom. These factors could bring state and local payroll cuts to an end in 2012, although any meaningful growth in this segment of the labor market may not occur until 2013 or 2014.

Respondent 4:

Although recent news regarding GDP and employment has been somewhat better, much of the strength of Q4 reflects factors that are temporary or likely to be temporary, including increased inventory investment and a significant increase in auto sales. Growth in the near term is still likely to be restrained by problems in financial and credit markets (notably, in Europe) and in the housing market. Consumer spending looks likely to continue at a moderate pace – although household fundamentals have improved since last summer (sentiment up, wealth up, labor market a bit better, some deleveraging accomplished), household income and employment expectations remain downbeat and strength of durables purchases won't be continued. Business sentiment has also improved somewhat but firms do not see much need to expand capacity. Fiscal factors are becoming an increasing drag, global growth and thus US exports are slowing somewhat. As mentioned, Europe poses significant downside risks — although the news there is a little better lately, fundamental problems have not been solved. Commodity prices are down (though still high in absolute terms), which is a boost. Unemployment is closely tied to overall growth, and indeed has been slightly better than one would expect given the pace of the expansion. Going forward, unemployment should fall faster than implied by Okun's Law because of the phasing out of EEB.

Core inflation is receding as expected, as commodity price passthrough wanes and special factors (e.g., auto prices) unwind. Uncertainty about commodity prices translates into uncertainty about headline inflation, although the expected commodity price profile seems relatively flat and volatility has been somewhat less lately. Factors affecting core inflation, including slack, unit labor costs, other costs, inflation expectations, are all suggesting that inflation will be quite tame, barring much faster growth or a commodity price spike that passes through to the core.

Respondent 5:

Deleveraging is continuing and holding down the economy's performance. Uncertainty about the outlook and other concerns are restraining household and business confidence. Demand for labor and capital expansion have been especially hard-hit. The slowdown in Europe combined with shifts in the growth and composition of emerging economies is restraining demand for U.S. exports.

Nevertheless, the economy is well on the way to recovery and economic activity is strengthening as a result. Jobs growth is slowly improving.

Price pressures have eased recently, in part because of declining commodity costs during the second half

of 2011. Wage growth remains moderate and inflation expectations appear to be reasonably well anchored. As a result, my outlook for inflation remains steady at, or slightly below 2 percent over the forecast horizon.

My assessment of the risk to the growth outlook has improved some since my last forecast submission, but still remains weighted to the downside as a result of potential adverse developments in Europe and energy markets.

Regarding inflation, I see the risks as being broadly balanced.

Respondent 6:

Growth in the second half of the 2011 was notably above growth in the first half. The firming we have seen in the labor market, along with improving consumer confidence, will support a gradual improvement in consumer spending. Business fixed investment should continue to expand. Although excess inventories continue to weigh on the single-family housing market, modest expansion is occurring in multi-family construction and in home improvements. Government consumption and investment will be held down by the dismal budget outlook.

Respondent 7:

Underlying strength of the economy is greater than the baseline but not as strong as the faster snap-back scenario. Using Taylor 99 rule for the fed funds path results in values similar to the faster snapback scenario in the Tealbook.

Respondent 8:

The economic recovery appears to be proceeding, but at a disappointing pace. Continuing monetary stimulus, improvements in banking and financial market conditions, and improvements in household balance sheets should support a moderate expansion over the next few years, even as fiscal policy at all levels turns increasingly contractionary. Still, it will take years of above-trend growth to return the economy to full employment. In terms of inflation, significant slack in labor and goods markets will keep underlying cost and inflation pressures low. In addition, well-anchored inflation expectations should help avoid significant pass-through of any volatility in food and energy prices to wage and prices inflation more generally.

Respondent 9:

U.S. economic growth has strengthened somewhat in recent months and the labor market shows some improvement. In part, recent growth has benefitted from a reversal of the temporary factors that weighed on activity earlier in the year. Even so, unemployment remains exceptionally high and the pace of growth is disappointingly slow. My forecast for growth going forward is that it will be weak—barely at trend during 2012 and strengthening only gradually over time as the effects of the financial crisis ebb and household deleveraging proceeds. Persistent factors weighing on growth include numerous impediments to recovery in the housing sector, a shift from fiscal stimulus to fiscal drag, continued sluggishness in nonresidential construction and state and local spending, and weakness in foreign growth, particularly in Europe, that will take a toll on U.S. export growth. I anticipate the sovereign debt crisis in Europe will continue to produce strains in financial markets for a long time to come. It is difficult to rule out extremely disruptive scenarios which could trigger a financial crisis. I therefore see exceptionally large downside risks to my forecast. At a minimum, continued uncertainty about Europe and the path of fiscal policy are likely to have a chilling effect on investment. Inflation has come down considerably over the last six months as the impact of commodity prices and supply disruptions has ebbed and is now running at levels below 2%. With a continued large output gap and slack in the labor market, I anticipate that inflation will be under 2% for the next several years. With downside risks to my forecast for growth, I consider the risks pertaining to inflation to be weighted to the downside.

Respondent 10:

Growth will continue to be constrained by both demand and supply forces. On the demand side, household

spending will continue to be constrained by the significant loss of wealth and net worth. On the supply side, there have been significant changes relative to four years ago. Firms are finding it harder to find appropriate workers. Entrepreneurs lack resources to initiate start-ups, which robs the economy of an important source of employment growth. The high level of corporate profits suggests that firms enjoy more market power, which reduces labor demand. Finally, of course, there is considerable uncertainty about future taxes and regulations.

Both demand and supply forces push up - temporarily - on the unemployment rate. They operate in opposite directions on inflation, and the upward impact of the supply considerations on inflation can be amplified by downward real wage rigidities.

If low demand alone were responsible for the elevated unemployment rate, I believe that current and past inflation rates would have been considerably lower than what we've seen. Hence, I tend to put more weight on the supply effects that I've listed above than does the Tealbook. As a result, my forecast for inflation is higher than that in the Tealbook.

Several of the supply side forces that I mention will result in a permanently lower level of the employment-population ratio.

Respondent 11:

The improvement in the labor market - job growth and reduced unemployment - is the key to my view that the economy has momentum and that the convergence to steady state is well underway.

Respondent 12:

Although some recent economic indicators have been a bit stronger than they have been, the economic data still generally point to only a gradual improvement in real economic conditions. We project real GDP growth of around 3% to $3\frac{1}{2}\%$ (annual rate) in 2011Q4, which would be the best performance since the first half of 2010. However, our projection of real final sales growth is only around $2\frac{1}{4}\%$ (annual rate), which is actually slightly less than the average of 2011Q2 and 2011Q3. The continued tepid final sales growth reflects ongoing caution from both households and businesses.

Similarly, while there has been some improvement in labor market conditions, it has been gradual and there remains considerable slack in the labor market. The unemployment rate has declined 0.5 percentage point in the past three months, aggregate hours worked rose smartly in 2011Q4, and payroll growth picked up in December. Even so, wage growth remained subdued and the labor force participation rate (particularly in the 25-54 age group) as well as the employment-population ratio remained at weak levels, indicating that conditions remain far from satisfactory.

Financial conditions also have improved from November, which probably reflect that official actions—the changes in the conditions of the foreign currency swap lines, the 3-year LTROs offered by the ECB, and reductions in the ECB policy rate—have reduced momentarily the perceived probability of market participants of a more dire outcome in the European debt crisis. Nevertheless, indicators of dollar funding pressures remain strained and susceptible to changes in sentiment about official commitments. Moreover, the low nominal yields of longer-term U.S. and German government debt suggest that financial market conditions remain tenuous.

Against this backdrop, there are two major factors that influence our outlook: the path of fiscal policy and the foreign economic outlook, particularly that of Europe.

As far as fiscal policy, we now assume that the payroll tax cut and emergency unemployment benefits will be extended for all of 2012. Nevertheless, the stance of fiscal policy at the federal level has become contractionary. We expect that it will exert a significant drag in 2013 as the payroll tax cut and emergency

unemployment benefits expire that year, and federal spending remains constrained. Beyond 2013, fiscal policy is still expected to exert some drag because of constraints on spending, but we expect that drag to be less than in 2013. The decline in state and local government spending and employment has continued in recent months, although we envision this decline ending soon. However, a greater fiscal consolidation at the federal as well as the state and local levels is a risk to our outlook.

Our foreign economic outlook has deteriorated some since November. In particular, we now expect a mild recession in the euro area as a consequence of the debt crisis and increased austerity measures in many nations in the area. There have also been signs of slowing in some emerging market countries. To this point U.S. export performance has been strong, but these developments can be expected to have some adverse impact on exports. Moreover, a further significant deterioration in the foreign outlook, particularly in Europe, could have significant economic and financial market spillovers on the U.S. economy that represent a significant risk to our outlook.

With this background, we believe that the economy continues to face significant near-term impediments to a robust recovery. In our modal forecast, we anticipate growth of real GDP of about $2\frac{1}{4}\%$ (annual rate) over the first half of 2012, slightly less than that over the second half of 2011. Then, as the year progresses and the impediments to growth gradually recede, growth is expected to rise to around 3% (annual rate) over the second half of 2012.

As the economy enters 2013, we expect the US economy will have entered a more self-sustaining growth phase, assisted by the additional monetary accommodation from our assumed MBS purchase program. Foreign GDP growth should pick up as the fiscal crisis in the euro area reaches a more permanent resolution. Domestic credit supply conditions will have significantly improved, helping to promote stronger growth of many components of expenditures. Combined, these forces could be expected to generate well above potential growth given the large amount of slack we still see. However, the outlook for 2013 is clouded by the fact that while it is likely that fiscal policy will exert a substantial drag on growth, the amount and composition of that drag is unknown at this time, but we assume fiscal drag in 2013 will be in the order of about 1 percent of GDP. Under these assumptions, real GDP growth is expected to be around $3\frac{1}{4}\%$ (Q4/Q4). With impediments to growth receding further and somewhat less fiscal drag, real GDP growth in 2014 is projected to be somewhat higher. Because of the risks previously cited, the balance of risks to our real activity outlook is to the downside.

With growth expected to be significantly above our estimate of the economy's potential growth rate starting in 2012H2, we should see a more pronounced decline of the unemployment rate, which we expect will average about 8% in 2012Q4. It is then expected to fall to around $7\frac{1}{2}\%$ in 2013Q4 and finally fall below 7% by the end of 2014.

Regarding the inflation outlook, the economy continues to have a large amount of slack. Once again, this large amount of slack is showing through in the trend inflation data. After rising in the first half of 2011—reflecting some pass through of higher commodity prices, rapidly rising import prices, and temporarily large increases of motor vehicle prices associated with supply disruptions—inflation has slowed over the second half of 2011 such that in the fourth quarter the core PCE deflator rose at just a 0.9% annual rate. Because of the continued impact of this slack, we expect the four-quarter percent change of the core PCE deflator to bottom out around 1% in mid-2012 and then begin edging higher, reaching around $1\frac{1}{4}\%$ by 2012Q4. Then as slack dissipates and inflation expectations remain well anchored, PCE inflation should rise to just above $1\frac{1}{2}\%$ in 2013 and 2% in 2014. Largely reflecting the downside risks to the real activity outlook, the balance of risks to our inflation outlook also is to the downside.

Respondent 13:

While overall economic activity has improved in the second half of 2011, we have yet to see a breakout in household or business spending—growth appears to be recovering to rates only modestly above our view of

potential (which is similar to the Tealbook's). The list of headwinds contributing to the disappointing pace of recovery is familiar.

In the absence of a major shock and with support from accommodative monetary policy, we expect the recovery to gain momentum as we move through 2012 and 2013. The financial repair process will eventually reach the point that households will feel confident enough to pick up their pace of spending, including a more pronounced increase in housing markets. Once businesses see such stronger household spending, there should be a commensurate increase in BFI and hiring.

Our forecast is premised on slower growth in potential during the recession and first several years of recovery; nonetheless, we still are projecting a significant degree of resource slack throughout the projection period. Even with a fairly flat Phillips curve, this slack is large enough to keep inflation contained. We are not seeing any signs of inflation pressures today: Wage gains remain muted and inflationary expectations are in check. Indeed, models we run that use the term structure of interest rates to estimate inflation expectations are forecasting very low medium-term inflation throughout the projection period. (For example, the expected three-year forward inflation rate in 2014 is still below 1.5 percent.)

Respondent 14:

We continue to suffer from overhangs of housing and of household debt, though there are signs that these drags on consumer spending and residential investment may be easing. The sharp deterioration in the fiscal outlook that has occurred as a result of the recession means that cuts in government purchases and prospective tax increases are likely to continue to limit the pace of the expansion. Energy prices remain high, and banks continue to be squeezed by the low, flat yield curve. Although they are generally flush with liquidity, and overseas labor costs are rising, businesses continue to be more interested in foreign than in domestic expansion. The potential for job-creating investment within the U.S. is stymied by uncertainty over fiscal policy and concerns about regulatory excess. Judging by long-term government bond yields, underlying structural problems in the euro area remain unresolved. Emerging markets have shifted to a slightly slower growth gearing. For all of these reasons, U.S. growth is likely to be subdued in 2012.

Respondent 15:

I continue to expect a modest economic recovery over the next several years with a gradual improvement in unemployment. As a testament to the economy's resilient nature after some adverse events in the first half of the year, economic growth picked up over the course of 2011, and recent data releases suggest improving conditions in labor markets, brightening household sentiment, and even some signs of hope in residential investment. Pent-up demand, accommodative monetary policy, and improving labor markets will support economic growth over the forecast horizon. However, financial headwinds, deleveraging by households, reductions in government spending, and the slow healing of the housing market will weigh on growth. Considerable uncertainty about the European sovereign debt crisis and U.S. fiscal policy remains unresolved. But barring a financial crisis, I expect slowdowns abroad will have only a moderate impact on U.S. exports.

The recent deceleration in inflation from its elevated levels in early 2011 is a welcome development. While it is likely to run below 2 percent for a time, I expect that a gradually improving economy and stable inflation expectations will pull inflation back toward 2 percent over the forecast horizon. Over the medium term, a highly accommodative monetary policy and large long-run fiscal imbalances pose upside risks to inflation expectations and, hence, inflation. In addition, the current extraordinary level of monetary policy accommodation raises the possibility of distortions in financial markets and the mispricing of risk that could eventually destabilize the economy.

Respondent 16:

As of yet, no fundamental change in the pattern of a slow-moving recovery with enough momentum to ward off recessionary risks (in the absence of external shocks), but not enough to achieve significantly above-trend growth, at least over the next five or six quarters. Considerably more uncertainty attaches to my projections

for the middle of 2013 and 2014. It seems possible that, by then, the balance sheets of households, smaller banks, and small businesses will have improved sufficiently that a clear bottom to the housing market could combine with improved business and consumer confidence to spark a somewhat stronger recovery. However, the Tealbook expectation that this modest takeoff will not occur until 2015 seems equally plausible right now. In any case, the odds of a sustained period of rapid growth still seem low.

Major downside risks continue to be external. Despite some helpful measures, particularly by the ECB, Eurozone risks are still high, with Greek negotiations coming to a head soon and large amounts of sovereign debt rollovers looming in the first half of this year. It appears that risks of military action in the Middle East are also increasing, with concomitant risks to energy prices and confidence more generally.

Respondent 17:

Incoming data on economic activity have been largely consistent with my forecast of slightly above trend growth. The unemployment rate has declined faster than I anticipated in October. The economy has rebounded from the negative shocks earlier in 2011 such as higher oil prices, bad weather, European sovereign debt developments, and the supply chain disruptions associated with the Japan disaster and is now poised for moderately above-trend growth in 2012.

I expect 3 percent growth over the forecast horizon, slightly above my longer-term trend. The unexpected strength in the recent labor market data led me to revise down my path for the unemployment rate. But 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 6.3 percent by the end of the forecast horizon, at which time it remains above my estimate of the natural rate of unemployment. I anticipate that headline inflation will pull back to a 2 percent pace in 2012 and remain at that level in 2013 and 2014. 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 that begins some time in 2012.

Forecast Narratives (continued)

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

Respondent 1:

The forecast for real activity entails somewhat faster growth than in the Tealbook, largely as a result of the additional monetary policy stimulus that is factored into our forecast.

Respondent 2:

My 2012-2013 outlook for economic activity (both GDP growth and unemployment) is modestly more optimistic than Tealbook's forecast. The difference in the forecasts appears to be due in part to consumer spending. While I certainly see headwinds slowing consumption, I don't see them as being quite as strong as does Tealbook.

Respondent 3:

N/A

Respondent 4:

Very similar at this point. I don't see any basis to expect a sharp increase in growth in 2014, so I have a smoother path of improvement. See a little more core inflation, in part because of the attractive power of anchored inflation expectations.

Respondent 5:

My growth and inflation forecasts are both higher than the Tealbook in 2012 and 2013.

Respondent 6:

Inflation is a notch higher in my forecast, since I put less weight on slack as a determinant of inflation.

Respondent 7:

N/A

Respondent 8:

My forecast is broadly similar to the Tealbook projection, though with slightly stronger GDP growth in 2013 and slightly slower growth in 2014.

Respondent 9:

I have forecast a slightly more rapid pickup in growth than Tealbook largely because I have assumed a more accommodative monetary policy.

Respondent 10:

I expect unemployment to be lower at the end of 2014 (my forecast is close to 7%, as opposed to 7.8%). I expect inflation to be higher at the end of 2014 (close to 2%, as opposed to 1.4%).

Respondent 11:

I anticipate faster near-term GDP growth, lower unemployment, and higher inflation.

Respondent 12:

As stated above, we now assume a MBS purchase program to provide additional monetary accommodation over the forecast horizon.

We continue to assume lower inflation persistence than does the Tealbook. Given changes in both our forecast and the Tealbook forecast, this differing assumption has little impact for the 2011-13 forecasts. However, at the 2014 horizon and beyond, under the assumption of well anchored inflation expectations,

we project that core and overall inflation will move more quickly toward the 2% objective than does the Tealbook forecast.

We have a somewhat lower path for the personal saving rate than the Tealbook despite similar consumption paths. Apparently this reflects a somewhat lower path of disposable income in our forecast as we expect the profit share to remain higher than in the Tealbook.

Based on our assumptions of modest increases in the labor force participation rate and average weekly hours, we expect a somewhat greater decline in the unemployment rate than is projected in the Tealbook, particularly in 2013 and 2014.

Respondent 13:

Our baseline does not include as much fiscal restraint from the caps on discretionary spending in the Budget Control Act as the Tealbook. We also have not built in as much spillover to the cost and availability of credit to U.S. firms from developments in Europe.

Respondent 14:

I am somewhat more optimistic about near-term growth prospects than is the Tealbook, and this difference is reflected in a slightly lower path for the unemployment rate, a somewhat higher path for the inflation rate, and a steeper trajectory for the funds rate.

Respondent 15:

My forecast is now quite different from Tealbook, whereas they were more similar at the last SEP submission. Tealbook expects a weaker outlook, higher unemployment, and lower inflation than are contained in my forecast.

Respondent 16:

I am even less confident than usual that oil prices will remain subdued over the projection period.

Respondent 17:

My forecast calls for a stronger economy over the next two years and tighter monetary policy than the Tealbook.

Forecast Narratives (continued)

4(d). Please describe the key factors causing your forecast to change since the previous quarter's projections.

Respondent 1:

The contours of the forecast have not changed significantly. The unemployment rate is now lower than the level we were expecting at the time of the previous projections, but we view some of the recent decline as transitory. The recession in Europe is now a reality, and more stimulative policy is needed to achieve roughly the same unemployment rate outcome by the end of 2014 as in the previous projections.

Respondent 2:

The changes in my forecast are primarily driven by data received between meetings. In particular, the unemployment rate fell unexpectedly in November and December, while inflation (both overall and ex food and energy) slowed more than I anticipated.

Respondent 3:

N/A

Respondent 4:

Forecast is very similar to the last round. Data have been a little stronger than I expected, especially in the labor market, but weak consumer fundamentals and the other restraints on recovery (financial, housing) remain similar to November. A weaker global economy offsets some signs of domestic strength.

Respondent 5:

I have not revised my growth or inflation forecast in a significant way since the November submission.

Respondent 6:

Impediments to growth seem to be a little stronger. For example, a lower path for output in Europe will pull down U.S. exports in the near term.

Respondent 7:

steady improvement in credit, signs of firming in labor and beginning signs of improvement in housing

Respondent 8:

Since October, we have made relatively modest downgrades to our outlook for GDP growth. Some data on labor markets have shown more improvement than expected, but most indicators have been largely in line with expectations. At the same time, our projections for the global economy as well as for fiscal policy are less optimistic, which is tempering the outlook. The recent data led us to lower our unemployment path in the near term, but slower growth and a higher long-run NAIRU have led us increase the unemployment path farther out. Data on inflation have come in largely in line with expectations in recent months.

Respondent 9:

Both consumer and investment spending have proven to be less robust than I assumed in my last forecast. In addition, the global outlook has weakened substantially. As a consequence, I have revised down my estimates for growth and revised upward my estimates for unemployment over the forecast horizon. In light of my weaker growth projection and incoming data I have revised down my forecast for inflation.

Respondent 10:

N/A

Respondent 11:

My forecasts have changed little. However, to reflect inflation targeting, I have modified my long-term in-

flation goal and made corresponding changes in the long-run federal funds rate.

Respondent 12:

Our forecast for real GDP growth would be further below that of November except for the additional monetary accommodation from the MBS purchase program we now assume will occur in our outlook.

Relative to November, we now assume that the payroll tax cut and emergency unemployment benefits will be extended through the end of 2012. Consequently, we assume less fiscal drag in 2012 but more drag in 2013 than in the November SEP. We also assume greater fiscal drag in 2014 than in the November SEP, which is a major factor in the lower 2014 real GDP growth forecast.

We also now assume a mild recession in Europe that was not a feature of our outlook in November. The slower foreign growth and the continued associated financial strains contribute to constrain U.S. growth in 2012.

The assumed path of oil prices is above our assumptions in November, contributing somewhat to the lower forecast path for real GDP growth. The projected inflation path is little different from November despite higher oil prices because they are offset by other factors, including the low inflation data in 2011Q4.

Because of the decline in the unemployment rate in recent months, we have lowered the projected path of the unemployment rate compared to November. The effect is most evident in the near-term projections as the slower projected growth leads to a somewhat slower fall in unemployment in subsequent years.

Core inflation in 2011Q4 has been slightly below our projections, but it has had only very minor effects on our inflation forecasts.

Respondent 13:

Our forecast has not changed a great deal since the November SEP. The recent pickup in economic activity is broadly in line with that earlier projection. Europe still poses significant downside risks, but we do not think the developments over the past two months have changed the distributions of possible outcomes very much. Inflation has come down as we had expected. The biggest surprise has been the decline in the unemployment rate, and we have reduced our projection for the unemployment rate in 2012 accordingly. However, our forecasts of the rates for the out-years have not changed much, in part reflecting some reassessment of the effects of the EUI program.

Respondent 14:

We have seen a larger-than-anticipated decline in the unemployment rate. Private sector businesses are slowly becoming more confident; they have become extremely productive, have improved their financials and have tightened their cost structures dramatically. The private sector is poised for job creating expansion under improved conditions for final demand and with greater clarity about fiscal and regulatory matters, which I presume will occur after the election of 2012, regardless of who captures the White House. In response, I have shifted downward the projected path of the unemployment rate without much change to its slope. In addition, my forecasted paths for inflation and the funds rate reflect a 50-basis-point increase in my preferred long-run inflation objective.

Respondent 15:

On net, my forecast is little changed from the last SEP submission. On the negative side, economic growth abroad appears to be a little weaker than anticipated which will weigh on exports, and recent softness in retail sales and business capital spending suggest less momentum heading into 2012. On the positive side, a number of labor market indicators have shown more improvement than anticipated, consumer sentiment has rebounded sharply, and cyclically sensitive auto sales in the fourth quarter averaged their best pace since mid-2008.

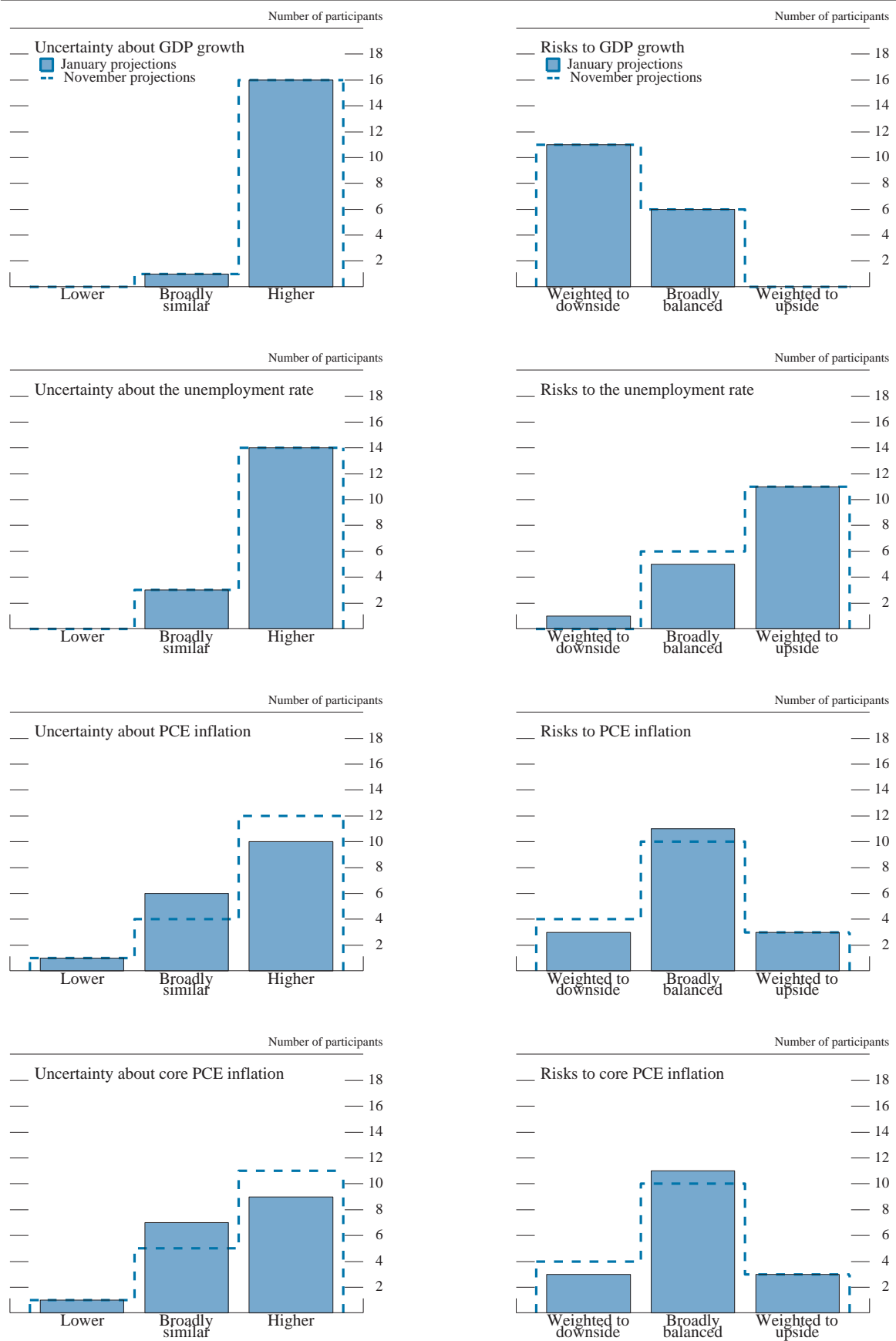
Respondent 16:

My forecasts haven't change materially since the last quarter's projections. Recent spate of slightly better than anticipated data doesn't offset the basic patten described in response to 4(a).

Respondent 17:

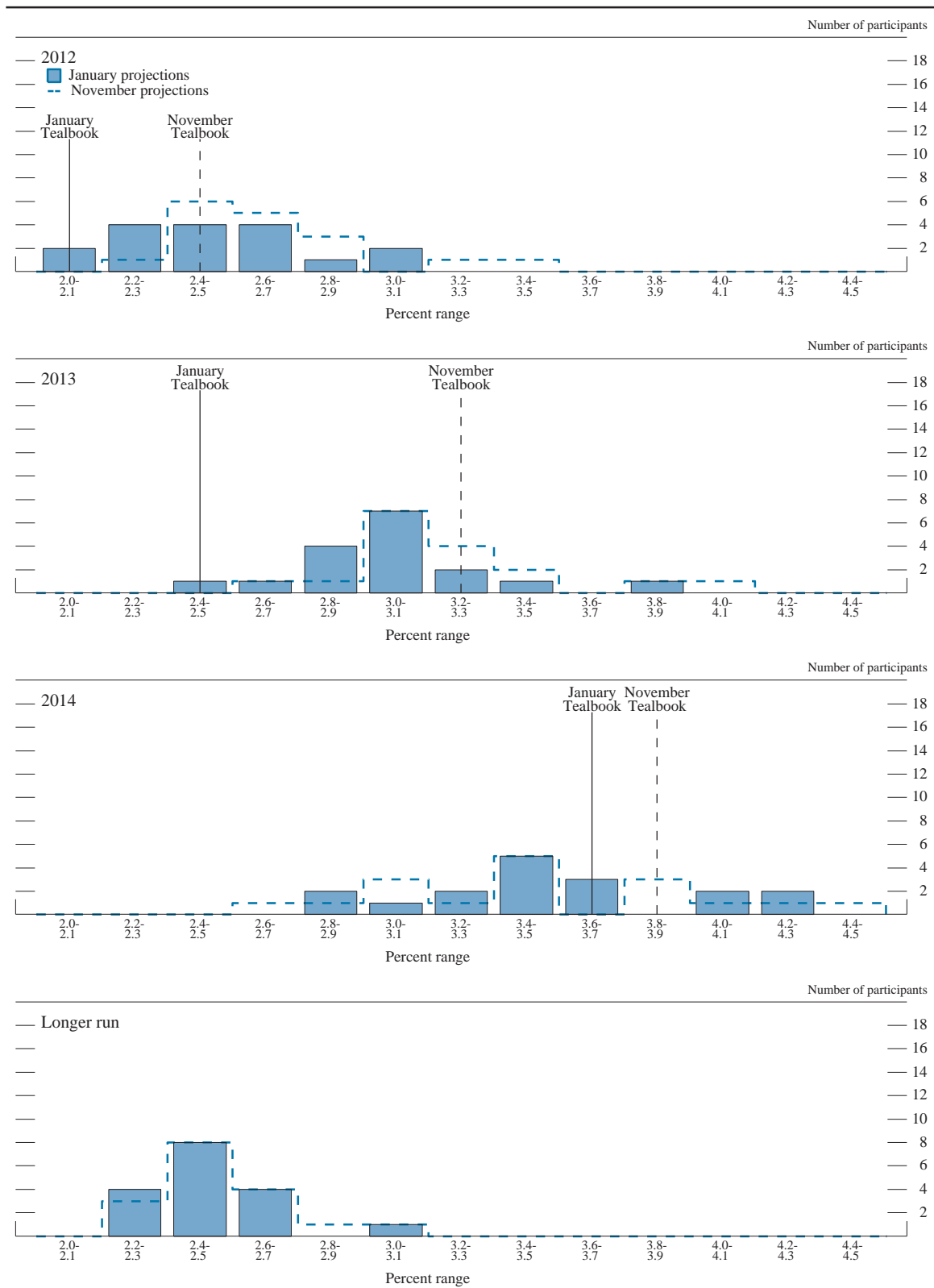
Recent labor market data have led me to revise down my forecast for the unemployment rate.

Figure 3. Uncertainty and risks in economic projections



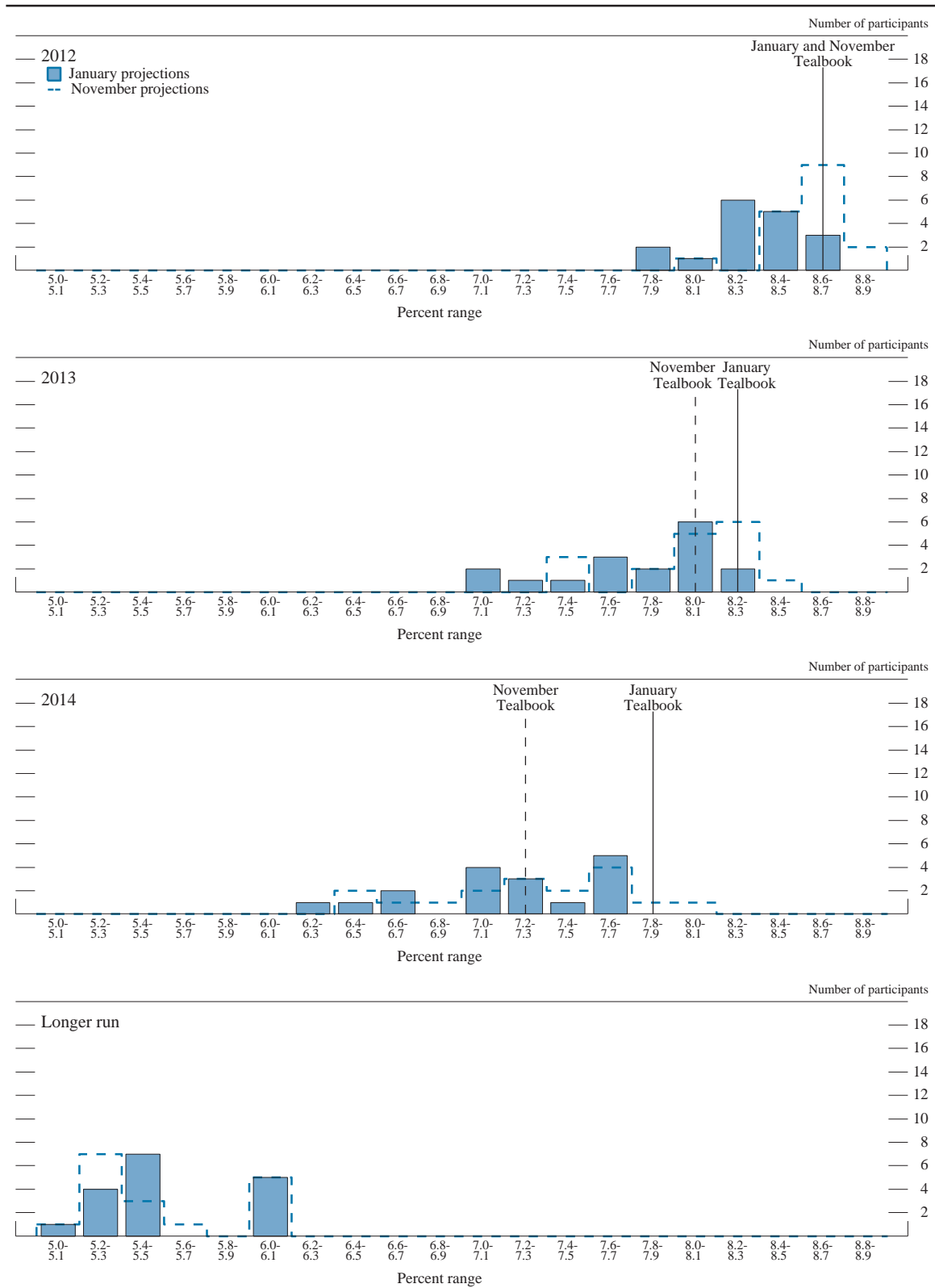
NOTE: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1.

Figure 4.A. Distribution of participants' projections for the change in real GDP, 2012–14 and over the longer run



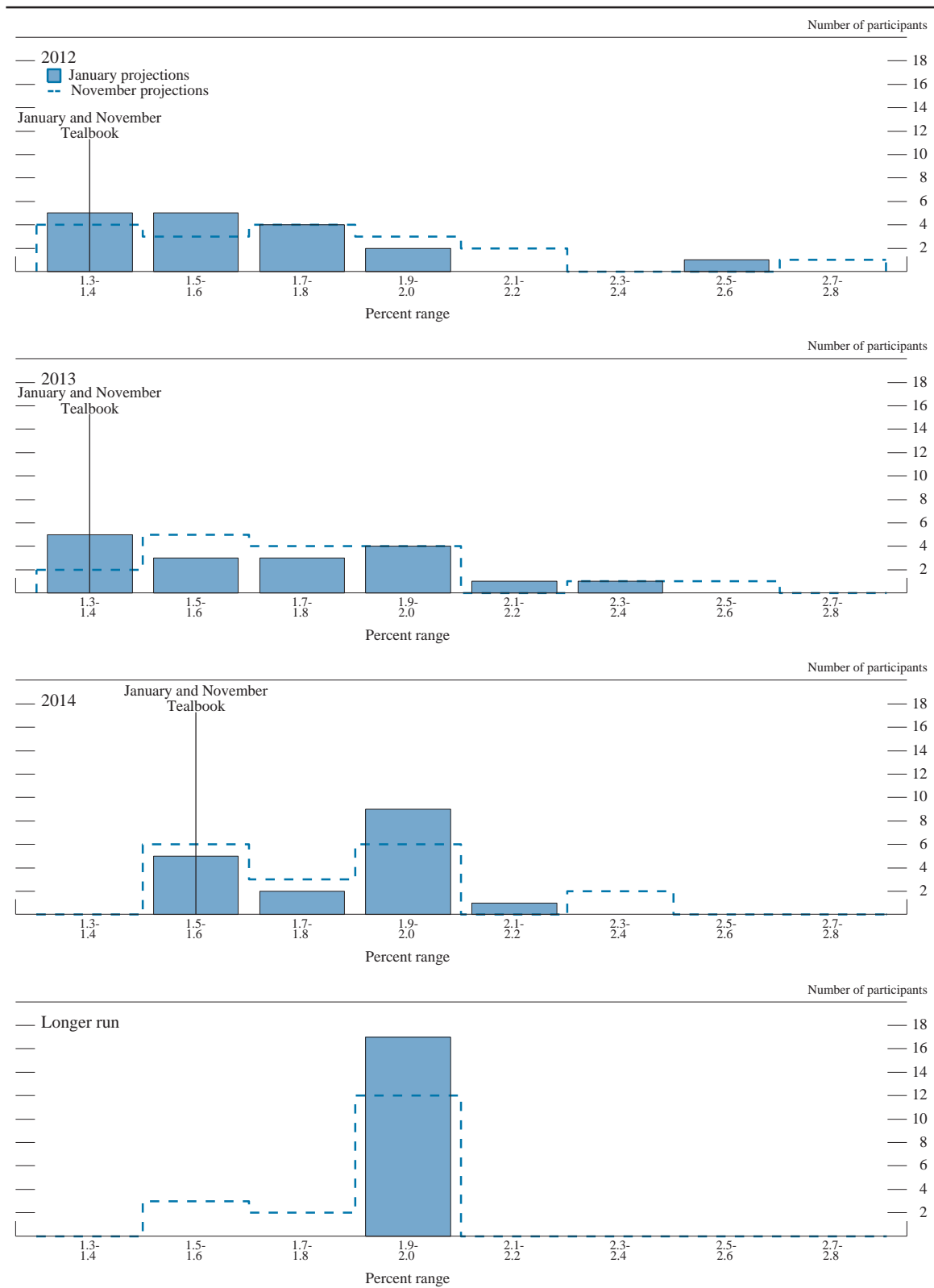
NOTE: Definitions of variables are in the general note to table 1.

Figure 4.B. Distribution of participants' projections for the unemployment rate, 2012–14 and over the longer run



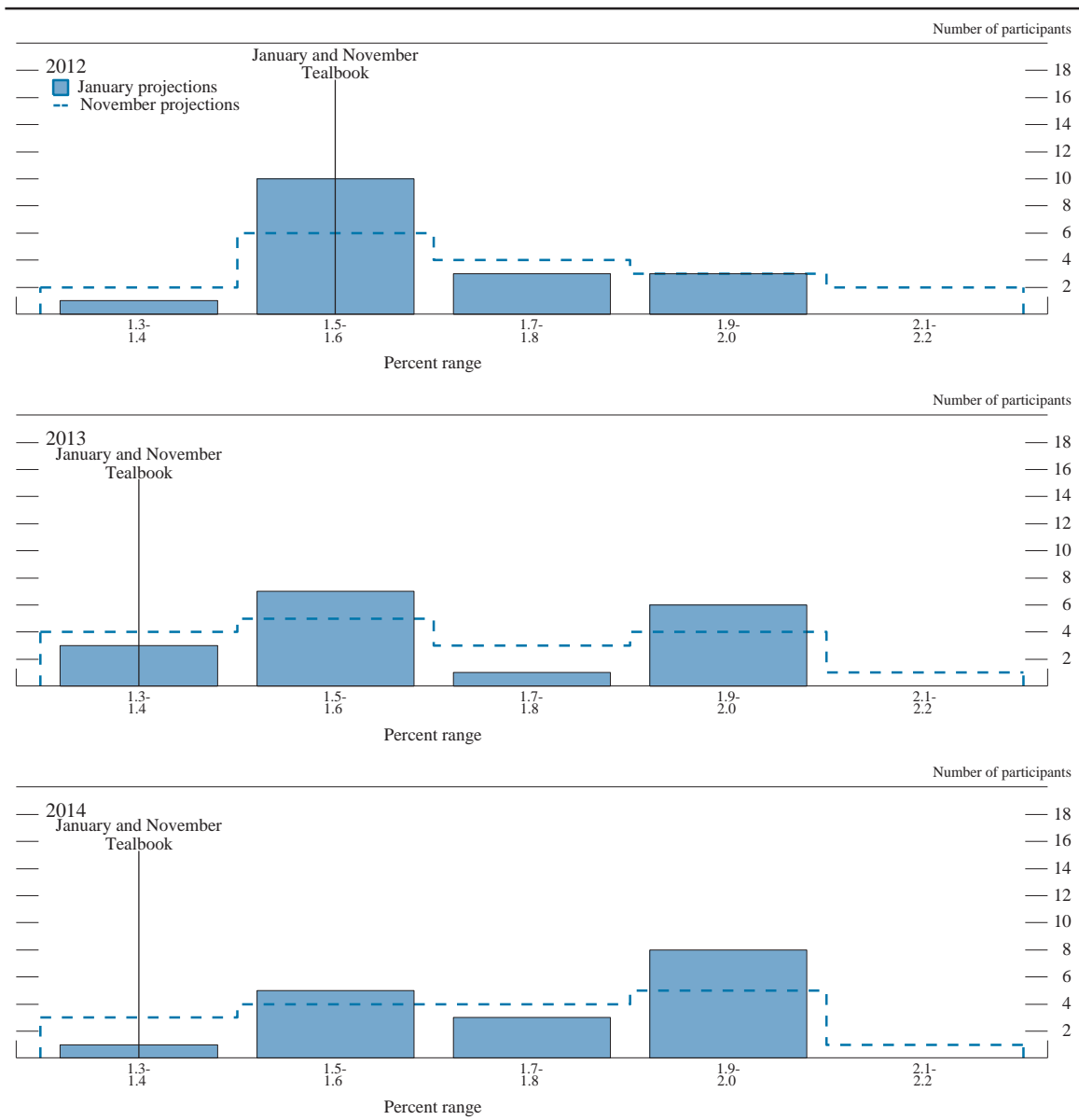
NOTE: Definitions of variables are in the general note to table 1.

Figure 4.C. Distribution of participants' projections for PCE inflation, 2012–14 and over the longer run



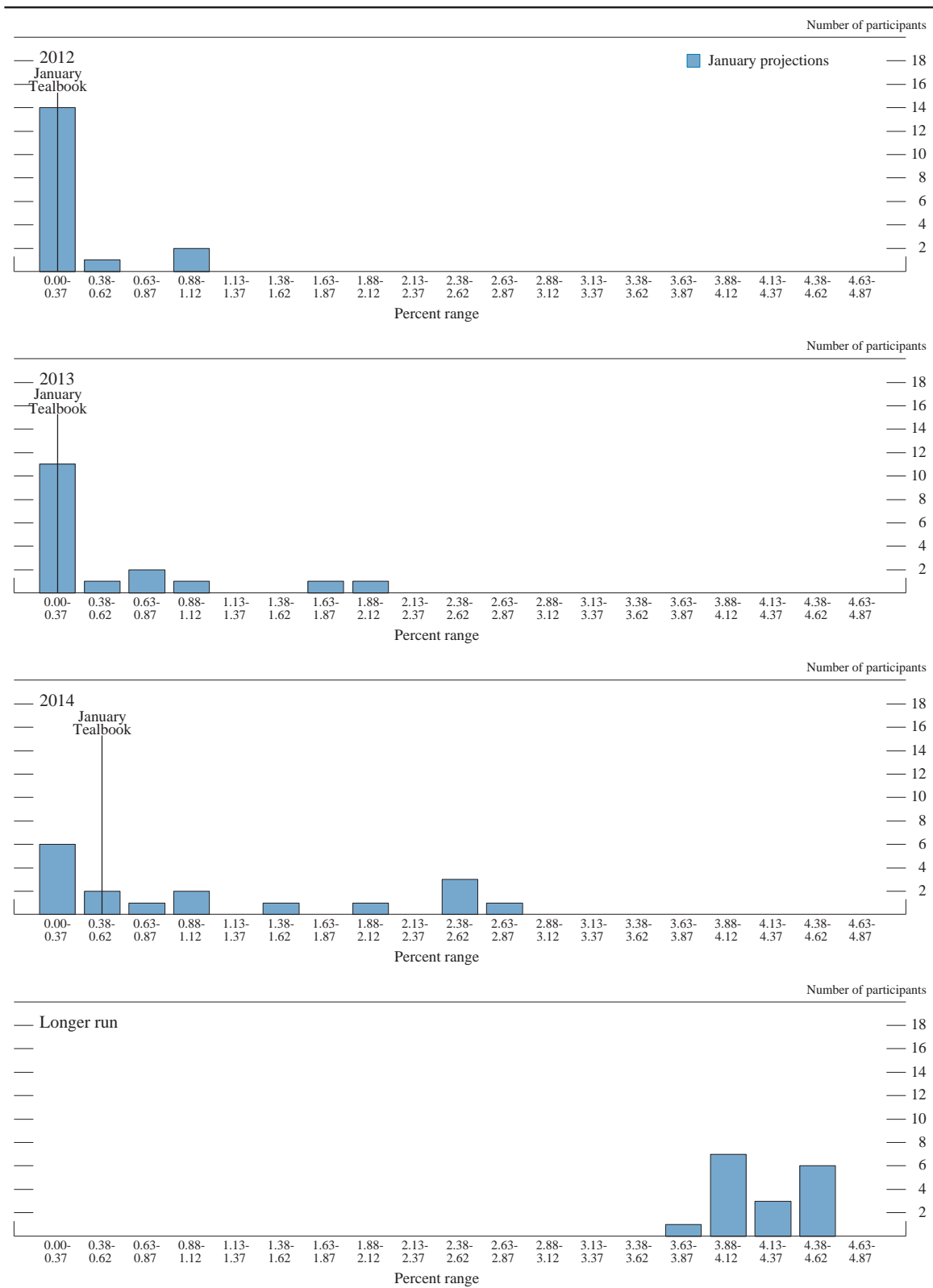
NOTE: Definitions of variables are in the general note to table 1.

Figure 4.D. Distribution of participants' projections for core PCE inflation, 2012–14



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

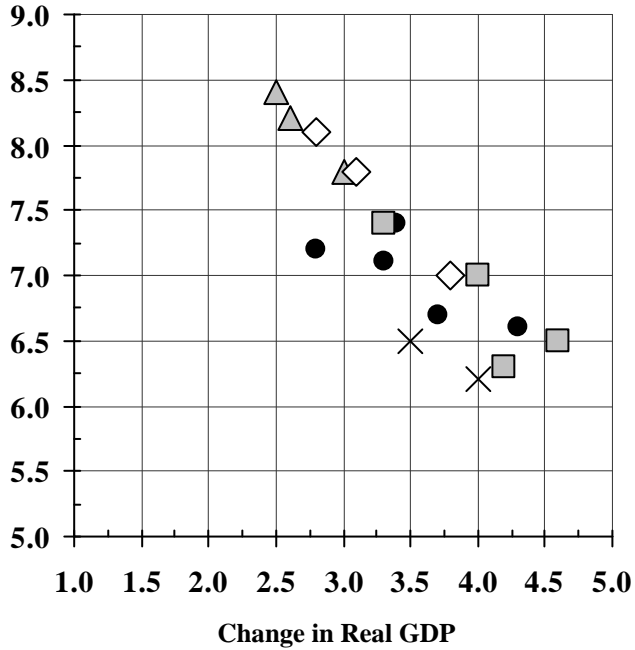
Figure 4.E. Distribution of participants' projections for the target federal funds rate, 2012–14 and over the longer run



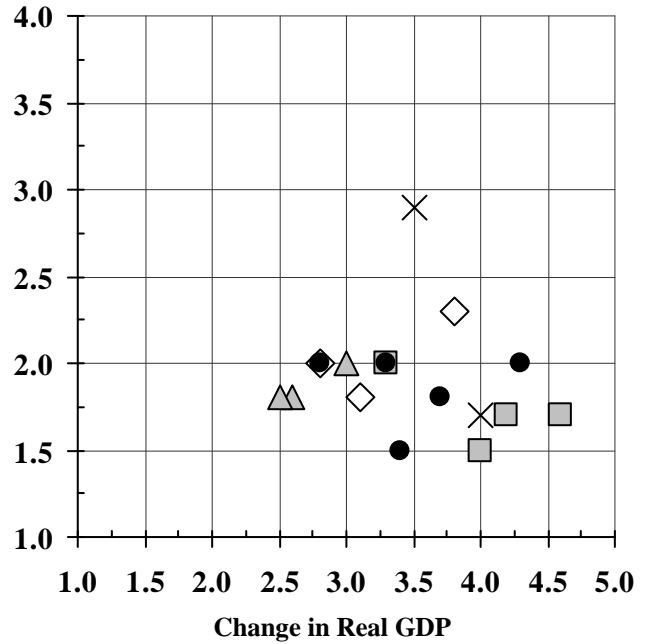
NOTE: The target funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

Scatter Plots of Projections in the Liftoff Year

Unemployment Rate



PCE Inflation



PCE Inflation

