Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, December 2012

Percent

Variable	Central tendency[1]					Range[2]				
	2012	2013	2014	2015	Longer run	2012	2013	2014	2015	Longer run
Change in real GDP	1.7 to 1.8	2.3 to 3.0	3.0 to 3.5	3.0 to 3.7	2.3 to 2.5	1.6 to 2.0	2.0 to 3.2	2.8 to 4.0	2.5 to 4.2	2.2 to 3.0
September projection	1.7 to 2.0	2.5 to 3.0	3.0 to 3.8	3.0 to 3.8	2.3 to 2.5	1.6 to 2.0	2.3 to 3.5	2.7 to 4.1	2.5 to 4.2	2.2 to 3.0
Unemployment rate	7.8 to 7.9	7.4 to 7.7	6.8 to 7.3	6.0 to 6.6	5.2 to 6.0	7.7 to 8.0	6.9 to 7.8	6.1 to 7.4	5.7 to 6.8	5.0 to 6.0
September projection	8.0 to 8.2	7.6 to 7.9	6.7 to 7.3	6.0 to 6.8	5.2 to 6.0	8.0 to 8.3	7.0 to 8.0	6.3 to 7.5	5.7 to 6.9	5.0 to 6.3
PCE inflation	1.6 to 1.7	1.3 to 2.0	1.5 to 2.0	1.7 to 2.0	2.0	1.6 to 1.8	1.3 to 2.0	1.4 to 2.2	1.5 to 2.2	2.0
September projection	1.7 to 1.8	1.6 to 2.0	1.6 to 2.0	1.8 to 2.0	2.0	1.5 to 1.9	1.5 to 2.1	1.6 to 2.2	1.8 to 2.3	2.0
Core PCE inflation[3]	1.6 to 1.7	1.6 to 1.9	1.6 to 2.0	1.8 to 2.0		1.6 to 1.8	1.5 to 2.0	1.5 to 2.0	1.7 to 2.2	
September projection	1.7 to 1.9	1.7 to 2.0	1.8 to 2.0	1.9 to 2.0		1.6 to 2.0	1.6 to 2.0	1.6 to 2.2	1.8 to 2.3	

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 September projections were made in conjunction with the meeting of the Federal Open Market Committee on September 12–13, 2012.

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 2012*
(in percent)

Central tendencies and ranges

	Central tendency	Range
Change in real GDP	1.6	1.6
PCE inflation	1.6	1.6
Core PCE inflation	2.0	2.0

Participants' projections

Projection	Change in real GDP	PCE inflation	Core PCE inflation
1	1.6	1.6	2
2	1.6	1.6	2
3	1.6	1.6	2
4	1.6	1.6	2
5	1.6	1.6	2
6	1.6	1.6	2
7	1.6	1.6	2
8	1.6	1.6	2
9	1.6	1.6	2
10	1.6	1.6	2
11	1.6	1.6	2
12	1.6	1.6	2
13	1.6	1.6	2
14	1.6	1.6	2
15	1.6	1.6	2
16	1.6	1.6	2
17	1.6	1.6	2
18	1.6	1.6	2
19	1.6	1.6	2

* Growth and inflation are reported at annualized rates.

Table 1.B. Economic projections for the second half of 2012*
(in percent)

Central tendencies and ranges

	Central tendency	Range
Change in real GDP	1.8 to 2.0	1.6 to 2.4
PCE inflation	1.6 to 1.8	1.6 to 2.0
Core PCE inflation	1.2 to 1.4	1.2 to 1.6

Participants' projections

Projection	Change in real GDP	PCE inflation	Core PCE inflation
1	1.6	1.6	1.2
2	2.0	1.8	1.2
3	1.8	1.6	1.6
4	1.8	1.6	1.2
5	1.8	1.8	1.2
6	2.0	1.8	1.4
7	1.8	1.6	1.2
8	2.0	1.8	1.4
9	2.0	1.8	1.4
10	1.8	1.6	1.2
11	1.8	1.6	1.2
12	1.8	1.6	1.2
13	1.8	1.6	1.2
14	1.8	1.6	1.2
15	1.8	1.6	1.2
16	1.8	1.6	1.2
17	1.6	1.8	1.2
18	2.4	2.0	1.6
19	2.0	1.6	1.2

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

Table 2. December economic projections, 2012–15 and over the longer run (in percent)

Projection	Year	Change in real GDP	Unemployment rate	PCE inflation	Core PCE inflation	Federal funds rate
1	2012	1.6	7.8	1.6	1.6	0.13
2	2012	1.8	7.8	1.7	1.6	0.13
3	2012	1.7	7.9	1.6	1.8	0.13
4	2012	1.7	8.0	1.6	1.6	0.13
5	2012	1.7	7.8	1.7	1.6	0.13
6	2012	1.8	7.8	1.7	1.7	0.13
7	2012	1.7	7.8	1.6	1.6	0.13
8	2012	1.8	7.8	1.7	1.7	0.13
9	2012	1.8	7.9	1.7	1.7	0.13
10	2012	1.7	7.9	1.6	1.6	0.13
11	2012	1.7	7.7	1.6	1.6	0.13
12	2012	1.7	7.8	1.6	1.6	0.13
13	2012	1.7	7.8	1.6	1.6	0.13
14	2012	1.7	7.8	1.6	1.6	0.13
15	2012	1.7	7.8	1.6	1.6	0.13
16	2012	1.7	7.8	1.6	1.6	0.13
17	2012	1.6	7.8	1.7	1.6	0.13
18	2012	2.0	7.8	1.8	1.8	0.13
19	2012	1.8	7.9	1.6	1.6	0.13
1	2013	2.4	7.5	1.8	1.7	0.13
2	2013	2.5	7.4	1.6	1.6	0.13
3	2013	2.2	7.8	1.5	1.5	0.13
4	2013	2.5	7.8	1.3	1.6	0.13
5	2013	3.0	7.5	1.6	1.8	0.13
6	2013	3.2	7.0	2.0	2.0	0.13
7	2013	2.9	7.3	1.3	1.6	0.13
8	2013	2.5	7.4	2.0	1.9	0.50
9	2013	2.3	7.6	1.9	1.9	0.13
10	2013	2.8	7.6	1.5	1.7	0.13
11	2013	2.7	7.5	1.3	1.6	0.13
12	2013	3.0	7.4	1.9	1.9	0.13
13	2013	2.4	7.5	2.0	1.7	0.13
14	2013	2.7	7.7	1.4	1.7	0.13
15	2013	2.1	7.7	1.4	1.7	0.13
16	2013	2.6	7.5	1.4	1.6	0.13
17	2013	2.0	7.6	1.8	1.8	0.13
18	2013	3.0	6.9	2.0	2.0	1.00
19	2013	2.8	7.5	1.3	1.6	0.13

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

Projection	Year	Change in real GDP	Unemployment rate	PCE inflation	Core PCE inflation	Federal funds rate
1	2014	3.6	6.4	2.2	2.0	0.13
2	2014	3.2	6.8	2.0	2.0	0.13
3	2014	3.3	7.3	1.5	1.5	0.13
4	2014	3.2	7.4	1.4	1.6	0.13
5	2014	4.0	6.8	2.0	2.0	0.13
6	2014	3.2	6.1	2.0	2.0	1.75
7	2014	3.5	6.8	1.6	1.7	0.13
8	2014	2.8	6.8	2.0	2.0	1.50
9	2014	2.9	7.0	2.0	2.0	0.13
10	2014	3.2	7.1	1.7	1.8	0.13
11	2014	3.8	7.1	1.4	1.6	0.13
12	2014	3.2	7.0	2.0	2.0	0.50
13	2014	3.1	7.1	1.8	1.6	0.13
14	2014	3.4	7.2	1.6	1.8	0.13
15	2014	3.1	7.4	1.7	1.9	0.13
16	2014	3.3	7.0	1.6	1.7	0.13
17	2014	2.8	7.3	2.0	2.0	1.50
18	2014	3.0	6.2	2.0	2.0	2.75
19	2014	3.5	7.0	1.5	1.7	0.13
1	2015	3.5	5.7	2.0	2.0	1.00
2	2015	3.4	6.2	2.1	2.1	0.13
3	2015	3.5	6.8	2.2	2.0	0.50
4	2015	3.6	6.5	1.5	1.7	0.75
5	2015	4.2	6.0	2.2	2.2	0.75
6	2015	2.8	6.0	2.0	2.0	3.75
7	2015	3.8	6.1	1.9	1.8	1.00
8	2015	2.9	6.4	2.0	2.0	2.50
9	2015	3.0	6.3	2.0	2.0	1.25
10	2015	3.5	6.5	1.9	1.8	0.50
11	2015	3.7	6.0	1.6	1.8	1.25
12	2015	3.2	6.6	2.0	2.0	2.00
13	2015	3.1	6.7	1.8	1.7	0.50
14	2015	3.7	6.2	1.7	1.9	0.50
15	2015	3.6	6.5	1.9	2.1	0.50
16	2015	3.5	6.3	1.7	1.8	1.00
17	2015	3.5	6.8	2.0	2.0	3.50
18	2015	2.5	6.0	2.0	2.0	4.50
19	2015	3.4	6.2	1.6	1.8	0.75

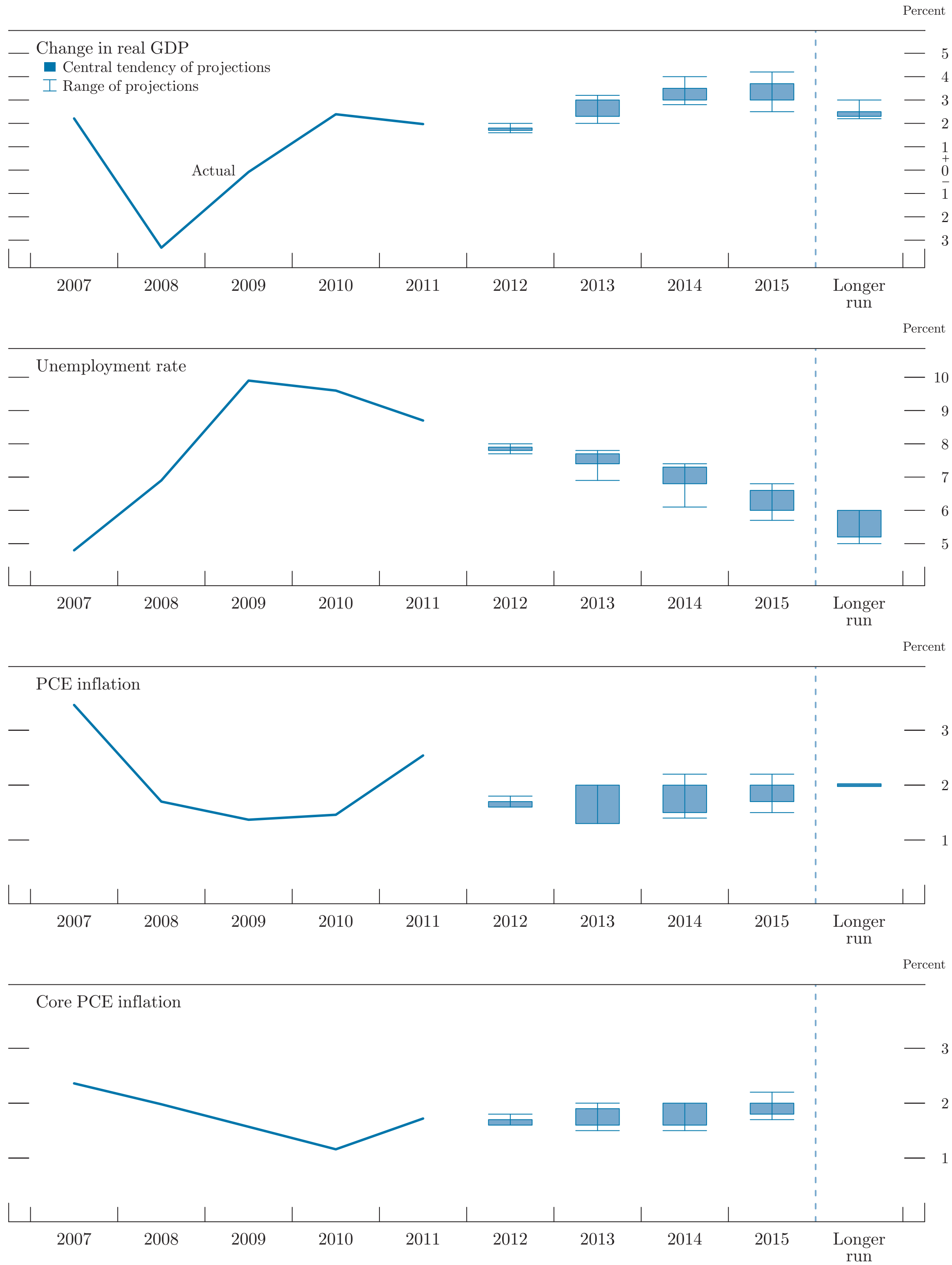
Table 2. *(continued)*

Projection	Year	Change in real GDP	Unemployment rate	PCE inflation	Core PCE inflation	Federal funds rate
1	LR	2.3	5.0	2.0		3.50
2	LR	2.3	6.0	2.0		3.75
3	LR	2.2	5.5	2.0		4.00
4	LR	3.0	5.4	2.0		3.80
5	LR	2.5	5.2	2.0		4.00
6	LR	2.3	6.0	2.0		4.25
7	LR	2.3	5.3	2.0		3.80
8	LR	2.3	5.5	2.0		4.30
9	LR	2.5	5.2	2.0		4.50
10	LR	2.3	5.5	2.0		4.30
11	LR	2.3	6.0	2.0		4.50
12	LR	2.5	5.5	2.0		4.00
13	LR	2.5	6.0	2.0		4.00
14	LR	2.5	5.3	2.0		3.00
15	LR	2.5	5.2	2.0		4.00
16	LR	2.2	5.4	2.0		4.20
17	LR	2.3	6.0	2.0		4.25
18	LR	2.5	6.0	2.0		4.50
19	LR	2.5	5.8	2.0		4.25

Table 2 Appendix. Assessments of participants who, under appropriate monetary policy, judge that the federal funds rate will not be raised until after 2015

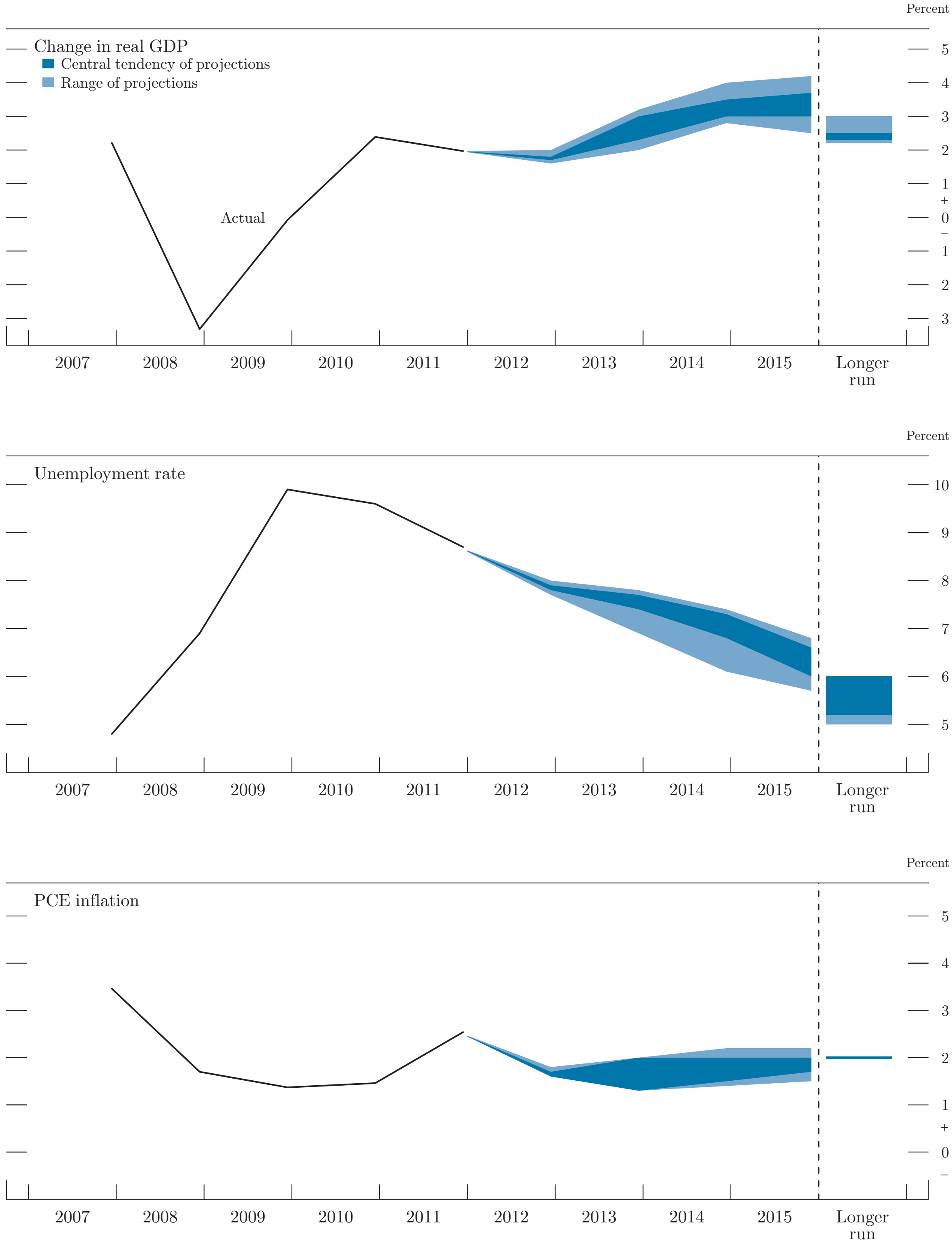
Projection	Year of first increase	Change in real GDP	Unemployment rate	PCE inflation	Core PCE inflation	Federal funds rate
2	2016	3.4	5.5	2.2	2.2	0.5

Figure 1.A. Central tendencies and ranges of economic projections, 2012–15 and over the longer run



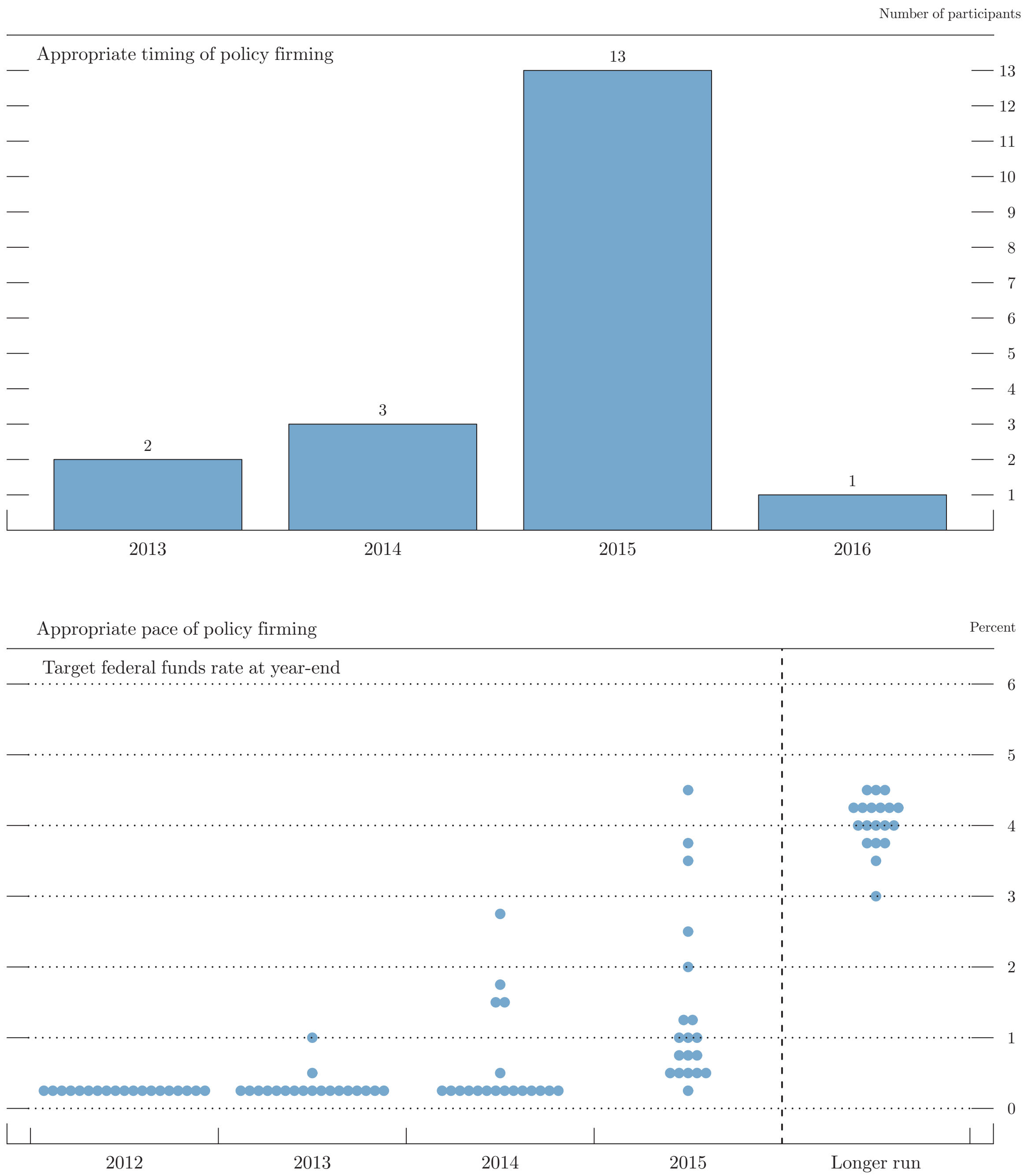
Note: Definitions of variables are in the general note to table 1. The data for the actual values of the variables are annual.

Figure 1.B. Central tendencies and ranges of economic projections, 2012–15 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.

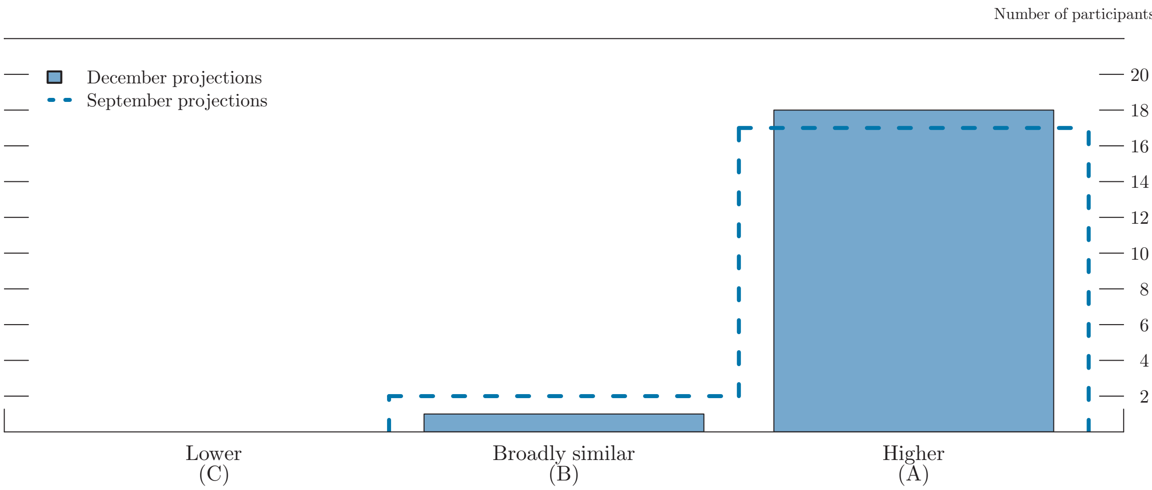
Figure 2. Overview of FOMC participants' assessments of appropriate monetary policy, December 2012



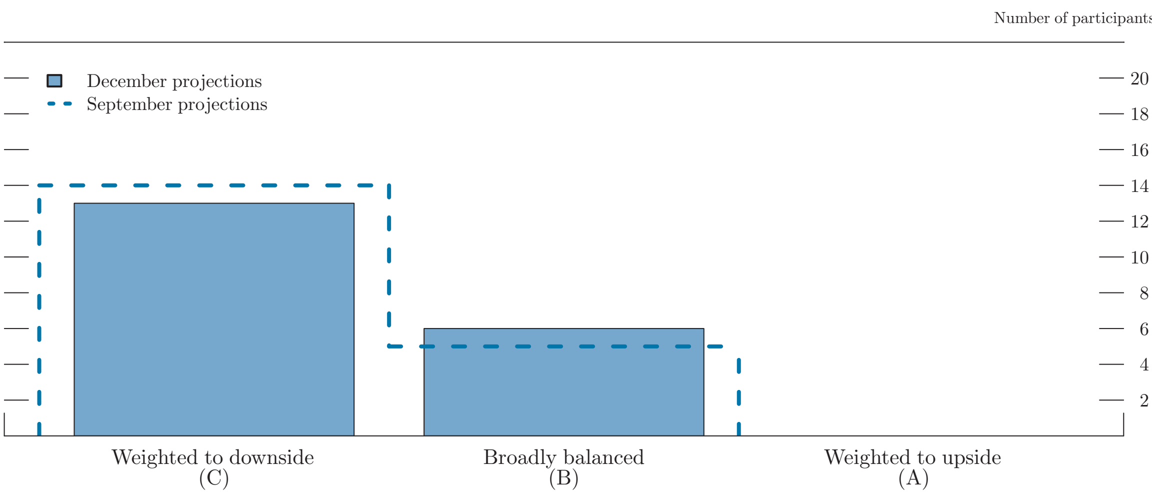
NOTE: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year. In September 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, 2015, and 2016 were, respectively, 1, 3, 2, 12, and 1. 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.

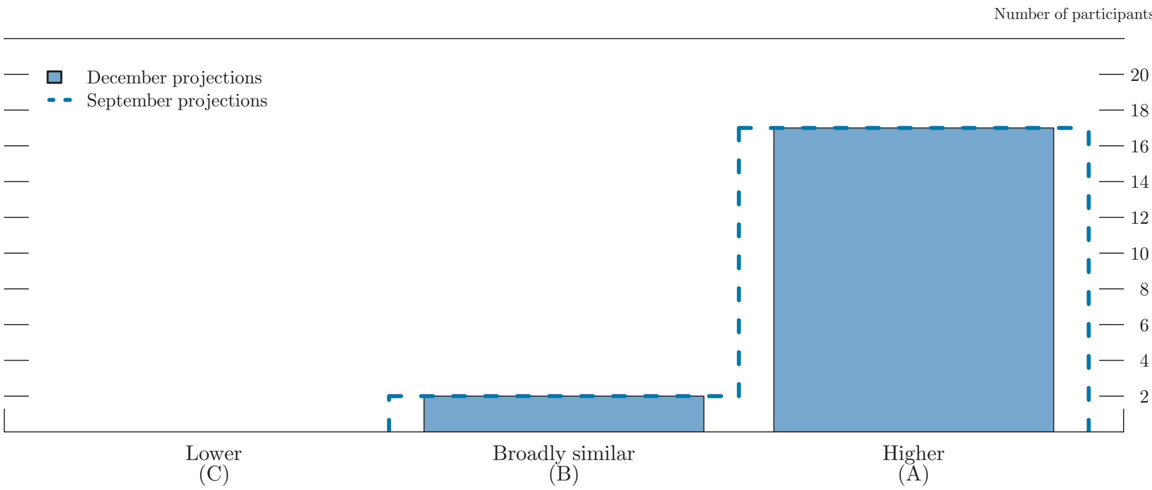


Individual responses

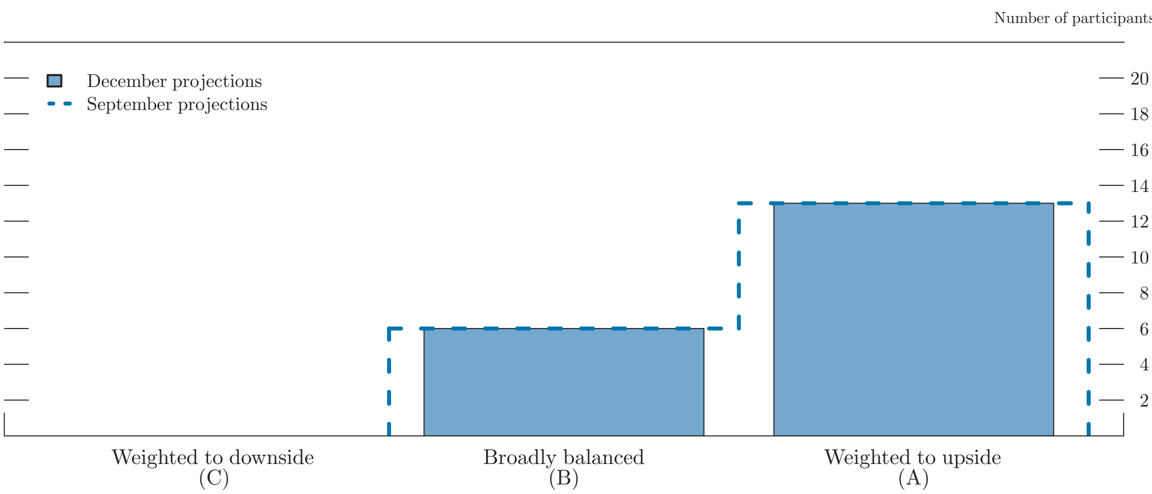
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2(a)	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A
2(b)	C	C	B	C	C	B	C	B	C	C	B	B	C	C	C	C	C	B	C

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.

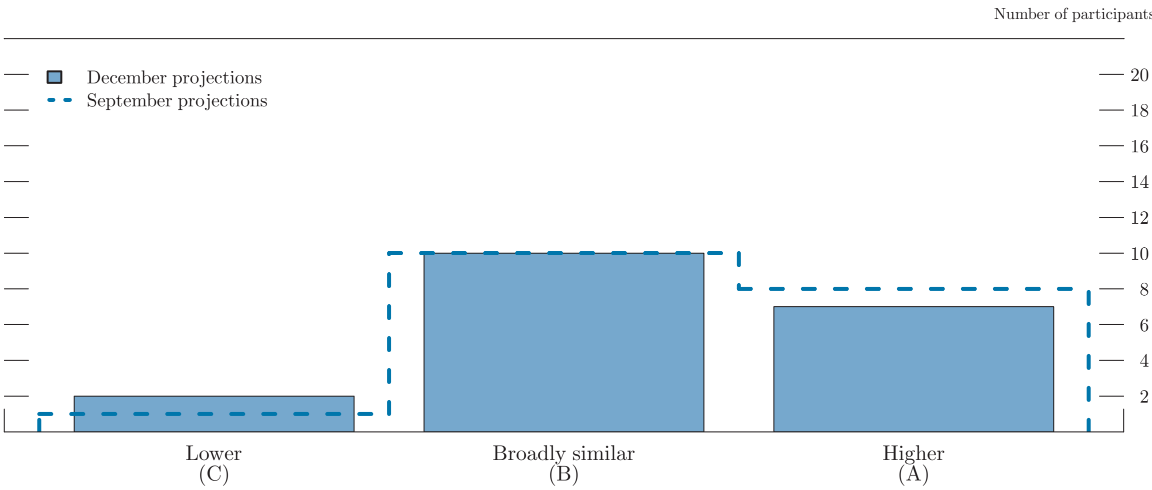


Individual responses

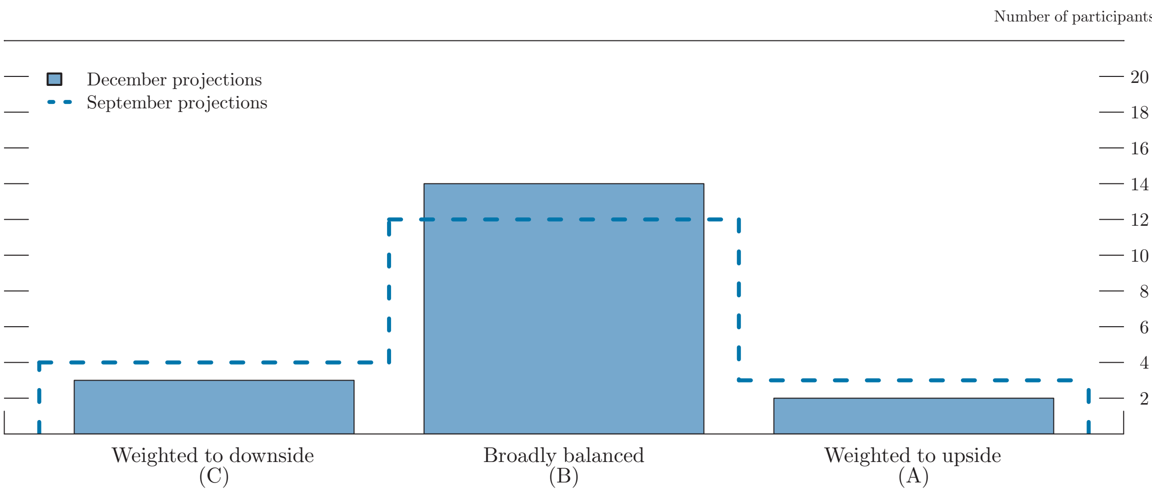
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2(a)	A	A	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	B	A
2(b)	A	A	B	A	A	B	A	B	A	A	B	B	A	A	A	A	A	B	A

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.

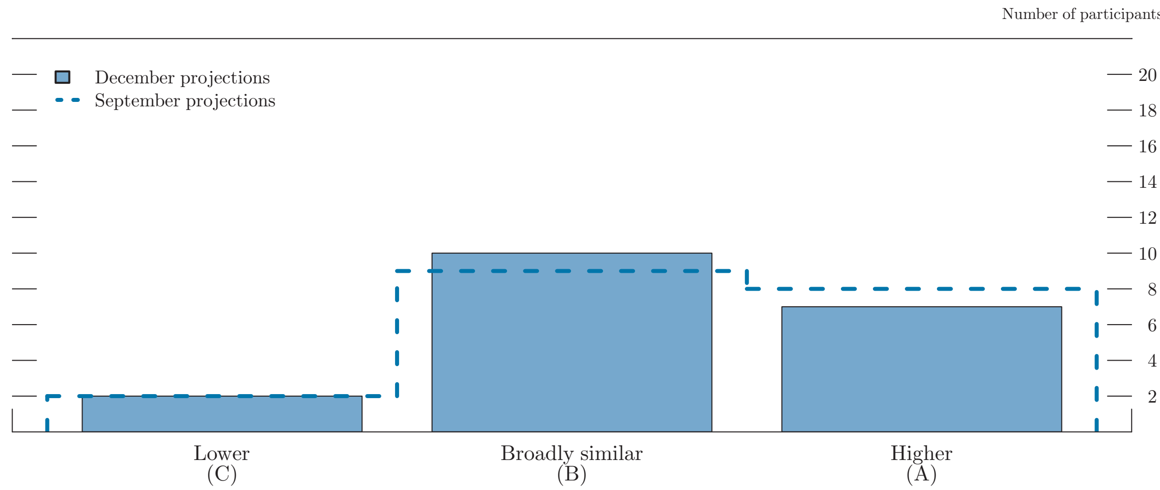


Individual responses

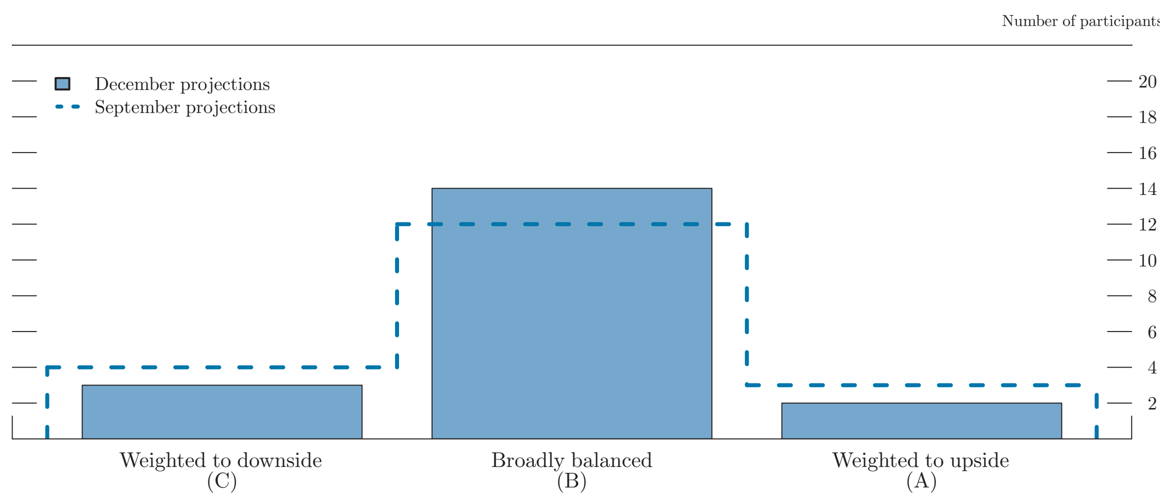
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
2(a)	A	A	B	A	B	B	A	A	B	B	B	B	B	A	B	C	C	A	B
2(b)	B	C	B	B	B	B	B	A	B	B	B	B	B	C	C	B	B	A	B

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	17	18	19
2(a)	A	A	B	A	B	B	A	A	B	B	B	B	B	A	B	C	C	A	B
2(b)	B	C	B	B	B	B	B	A	B	B	B	B	B	C	C	B	B	A	B

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: Our current estimate of the economy's potential growth rate is in the 2% to 2 1/2% range. By 2017-18 we anticipate a potential growth rate of around 2 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; analysis of recent long expansions (1980s and 1990s) suggests the unemployment rate could be somewhat below 5% in 5-6 years time.

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). Under these conditions and with the output gap anticipated to be near zero, we expect inflation as measured by the PCE deflator to be close to 2% in 2017-18.

Respondent 2: Under appropriate policy, the convergence would be faster than five years.

Respondent 3: N/A

Respondent 4: N/A

Respondent 5: N/A

Respondent 6: I anticipate a shorter convergence process than 5 years for all three variables. Real GDP growth will converge in 2016, the unemployment rate in 2015, and the PCE in 2013.

Respondent 7: Convergence to the longer-run levels of the unemployment rate and inflation is expected in about 5 years.

Respondent 8: N/A

Respondent 9: N/A

Respondent 10: N/A

Respondent 11: N/A

Respondent 12: In the absence of new shocks, convergence is likely to be completed within six years.

Respondent 13: N/A

Respondent 14: N/A

Respondent 15: N/A

Respondent 16: NA

Respondent 17: N/A

Respondent 18: The convergence process may be somewhat shorter than 5-6 years

Respondent 19: 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: Quantitative judgment based on the width of the probability intervals from the FRBNY forecast distribution for GDP growth and core PCE inflation relative to the forecast errors over the last 20 years. These measures from the FRBNY forecast distribution have not changed significantly from the September SEP. These measures also reflect our view of the appropriate monetary policy stance providing insurance against realizations of some of the downside risks; otherwise, the uncertainty would be even higher.

Respondent 2: N/A

Respondent 3: High level of uncertainty around the legislative resolution of pending fiscal issues. This political contingency carries a greater range of plausible outcomes, with substantially varying effects on the economy, than is usually the case with purely economic uncertainties.

Respondent 4: I have changed my judgment of the level of uncertainty attached to my inflation projections from "broadly similar" to "higher". My level of uncertainty is a reflection of what could constitute different inflation dynamics resulting from the longer period of monetary accommodation and a growing central bank balance sheet. While I do not concede that such inflation dynamics should in any way be different in the current policy environment, the manner in which the FOMC and future FOMC's communicate the inflation potential or lack of potential could have a bearing in how markets, businesses and households will continue to react to shocks that might otherwise represent transitory price increases.

Respondent 5: N/A

Respondent 6: N/A

Respondent 7: N/A

Respondent 8: Several factors contribute to heightened uncertainty, including the European debt crisis, U.S. fiscal policy (fiscal cliff, debt ceiling, longer-term), slowing world growth, and ongoing changes in the regulatory environment. In addition, the Federal Reserve's unconventional policies are a source of uncertainty because they have no precedent.

Respondent 9: N/A

Respondent 10: Uncertainties associated with real economic activity and employment include US fiscal policy (fiscal cliff/debt limit), developments in Europe, Iran/oil, EME growth, and our lack of experience with recoveries from financial crises in developed economies and with unconventional monetary policies. Core inflation is well anchored by stable inflation expectations, and commodity price fluctuations do not seem exceptionally unusual lately or prospectively (except possibly for Middle East developments that could affect oil prices), so uncertainty about inflation is in the normal range, possibly even slightly lower.

Respondent 11: N/A

Respondent 12: Continuing fiscal and regulatory uncertainty make forecasting how slack and GDP growth will evolve next year almost pure guesswork.

Respondent 13: I believe the uncertainty surrounding my forecasts of GDP growth and unemployment remain elevated relative to the norms of the last 20 years, primarily reflecting the recession in Europe and the fiscal problems facing the United States next year.

Respondent 14: N/A

Respondent 15: N/A

Respondent 16: Uncertainty about my projections for economic activity is elevated relative to its average over the past 20 years. Factors influencing this assessment include:

(i) The "new normal" for macroeconomic relationships going forward remains unclear. For example, there is greater uncertainty than usual about the level and growth rate of potential output.

(ii) The political resolution of the fiscal cliff remains unclear. The risk remains that fiscal policy could become abruptly more contractionary in January 2013.

(iii) Europe remains in a recession that is weighing on global growth. Although the situation looks a bit better than earlier in the year, the resolution of their financial and economic crises remains far off, and concerns could easily flare up again. Other key countries have also slowed this year and could weigh further on global growth.

(iv) In the event of adverse shocks, there is limited ability for monetary and fiscal policy to dampen the effects. This limited scope for countercyclical policy implies greater variance in outcomes.

(v) Of course, there are upside risks to the outlook as well. For example, consumer sentiment has been improving. The housing market could continue to improve even faster than I expect, which could potentially encourage a virtuous cycle of improving confidence, fundamentals, and financial conditions. Finally, a favorable outcome in fiscal cliff negotiations and further progress on resolving Europe's crises could help lift the cloud of uncertainty over the economy.

In contrast to economic activity, underlying inflation is anchored by quite stable inflation expectations. The stability of these expectations has been reinforced by the specific 2 percent numerical objective for inflation. Hence, uncertainty about inflation is lower than in the past two decades.

Respondent 17: The outlook for the federal budget and next year's fiscal drag are especially uncertain. Inflation expectations are probably more firmly anchored following the FOMC's consensus statement; under appropriate policy, uncertainty should decline further.

Respondent 18: Uncertainty about domestic fiscal policy and the possibility that the European debt crisis is not resolved in an orderly fashion continue to pose risks for the forecast. 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 19: N/A

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: 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 remain roughly balanced. The balance of risks to the real activity outlook remain to the downside. The balance of risks for inflation and real activity reflects our view that the appropriate monetary policy stance in the current environment provides insurance against tail risks; otherwise, the balance of risks for both variables would be shifted further to the downside.

Respondent 2: N/A

Respondent 3: N/A

Respondent 4: N/A

Respondent 5: Our forecast assumes that markets and the public view the Federal Reserve's statements regarding the conditions for ending the security purchase program and for lifting the federal funds rates as highly credible policy commitments. There is a risk, however, that some market participants doubt our resolve, or that future Committees may fail to carry through with the commitment. Either condition would result in both output and inflation running below our projection. In addition, we assume that budget actions to avoid the full fiscal cliff will produce only a moderate drag on growth and that the resolution will unlock some of the private-sector spending currently being curtailed due to uncertainty over the cliff. While it is possible that a fiscal-cliff resolution will strengthen aggregate demand, it is easier to envision less favorable outcomes that either produce a more pronounced near-term drag or fail to resolve uncertainty over future tax and spending policy.

Respondent 6: N/A

Respondent 7: Risks to economic activity are skewed to the downside, as the federal budget situation and financial uncertainties in Europe could impose more restraint on demand, especially in the near term.

Respondent 8: The risks to inflation are skewed to the upside due to the highly accommodative stance of monetary policy and fiscal imbalances.

Respondent 9: N/A

Respondent 10: Factors cited above regarding uncertainty are mostly downside risks, including US fiscal, Europe, Iran/oil, and possible structural damage remaining from the financial crisis. In addition, there is the asymmetric downside risk created by slow growth and a binding ZLB. However, these risks seem on the whole to have moderated somewhat since the last SEP, except that US fiscal risks remain significant. Indeed, unexpected strength in housing, improving household sentiment, and the possibility that US fiscal issues or the European situation may be less bad than expected are mild upside risks to real activity. Upside risk to inflation comes primarily from commodity prices and possibly underestimation of the natural rate of unemployment, but there are also downside risks from persistent weakness in labor and product markets, as illustrated by relatively low recent readings on wage and price inflation.

Respondent 11: N/A

Respondent 12: N/A

Respondent 13: I believe the risks are weighted primarily to the downside for GDP growth and to the upside for unemployment. In the medium term, the potential for a severe crisis in Europe and a fiscal meltdown in the United States pose large downside risks to growth and upside risks to unemployment. I judge the overall risks to inflation to be balanced, with a downside risk that a slowing of the economy could pull down inflation and an upside risk that our large balance sheet could eventually cause inflation expectations and, in turn, inflation to rise.

Respondent 14: I consider the risks to the outlook for growth to be weighted to the downside due to the continuing potential for European developments to threaten financial stability and also due to the potential adverse consequences for economic growth of a failure by Congress to successfully deal with the impending fiscal cliff. The risks to unemployment are weighted to the upside. Downside risks to growth translate into downside risks to inflation. Moreover, while there is ample scope to tighten monetary policy should upside inflation risks materialize, the scope for policy to offset disinflation is quite limited.

Respondent 15: For 2013, I see downside risk to growth and inflation.

Respondent 16: Risks to growth are skewed to the downside and, consequently, to the upside for unemployment. Key downside risks to the outlook are the looming U.S. fiscal cliff as well as Europe's recession and still-unresolved crises. In addition, negative shocks could have particularly severe effects, because of the continuing vulnerability of the financial system as well as the limited ability of fiscal and monetary policy to respond to offset them. Inflation risks, in contrast, are more typically balanced.

Respondent 17: In the near term, there is a non-negligible likelihood of a lengthy stalemate in federal budget negotiations. Beyond that, other impediments to growth may be serious and persistent enough to pull GDP growth below the path given above.

Respondent 18: 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. There remains uncertainty about the effect of the fiscal cliff in the near term, but as that uncertainty abates, we could see a rebound in investment spending.

Respondent 19: N/A

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: 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. While there has been somewhat more noise around them (in part because of the effects associated with Superstorm Sandy), indicators of economic conditions generally have indicated that the expansion remains tenuous. Financial conditions are still strained and the improvement that has occurred since mid-year is susceptible to sharp reversals if government policy actions (both here and abroad) do not meet expectations. In these circumstances, we still see appropriate monetary policy as "doing whatever it takes" to strengthen the economy and establish a truly self-sustaining recovery; under such a policy, it will be the economic outcomes that will dictate the path of the policy stance. Under 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, longer-term inflation expectations, and overall financial conditions.

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 recent behavior of nominal and real Treasury yields and productivity growth, 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 the still-weak state of the economy and our expectations of continued strained financial conditions, our assessment of the current "neutral" FFR is below our estimate of the longer-run FFR and is expected to remain so for some time.

As discussed in our answer to question 3(e), our policy path is predicated on the assumption that after the completion of the Maturity Extension Program (MEP) at the end of the year, the FOMC will begin a flow-based, open-ended purchase program of long-term Treasury securities to supplement the current agency MBS purchase program.

Respondent 2: Many (most?) of us have been comfortable with our price stability performance even when the medium-term inflation outlook is as much as 20 or 30 basis points below 2%. Presumably, we would be just as comfortable with our performance if the medium-term outlook for inflation is as much as 20 or 30 basis points above 2%. With that in mind, I don't see any reason to begin removing accommodation until the medium-term outlook for inflation rises above 2.25%. I don't see the outlook for inflation as being that high until the latter half of 2016. Such an (appropriately) accommodative policy will produce a faster decline in the unemployment rate - it will fall to 5.5% by the end of 2016.

Respondent 3: N/A

Respondent 4: The key factors informing my judgment regarding a slow lift-off of the federal funds rate in 2015 include review of a set of economic indicators that together do not yet suggest that a "virtuous cycle" is firmly underway that would justify an early monetary policy contraction. While firms are hiring, they seem to be doing so tentatively, and their level of confidence in a stronger economy remains low. For their part, households are enjoying more wealth effects, but confidence has dropped and real disposable incomes remain flat. Government spending is uncertain, but fiscal impetus will likely not be substantial enough to provide necessary stimulus. Investment spending is poor and net exports are not showing through as significant. Accordingly, my view of appropriate monetary policy is that it must remain accommodative as long as it can continue to deliver growth-supporting benefits that exceed any costs in terms of price stability, financial stability and market functioning.

Respondent 5: Our appropriate path for monetary policy includes an explicit numerical threshold commitment to maintain the funds rate at its current level at least as long as the unemployment rate remains above 6-1/2 percent and the outlook for inflation over the next two years remains under 2-1/2 percent. We feel these markers would be achieved some time after the economic recovery strengthens and there has been a substantial improvement in labor markets.

Under appropriate policy, reaching such thresholds would not automatically trigger an increase in the funds rate. For example, policy could remain on hold if the outlook for inflation fell well short of our 2 percent target upon reaching the 6-1/2 percent unemployment mark.

With regard to our balance sheet, we assume that the "substantial improvement in labor market conditions" condition for ending the open-ended asset purchase program would be met when gains in payroll employment averaged at least 200,000 per month for a period of about 6 months, with these gains accompanied by GDP growth in excess of potential and sustained downward momentum in the unemployment rate. Under our projection, this occurs at the end of 2013.

Respondent 6: Assuming appropriate policy and my views on the convergence process, my judgment is that the lift-off of the federal funds rate should occur in Q2/2014.

Respondent 7: Liftoff from the zero-lower-bound occurs around mid-2015, when the unemployment rate is expected to fall below 6.5 percent and the economy continues to grow above potential.

Respondent 8: Key factors informing my judgment regarding the appropriate path of monetary policy are achieving an inflation objective of 2 percent and ensuring a sustainable economy recovery that reduces unemployment. To maintain the stability of long-run inflation expectations and financial stability, I anticipate it will be necessary to begin the process of normalizing the federal funds rate in late 2013.

Respondent 9: I expect the federal funds rate to remain in the 0 to 25 basis point range at least as long as the unemployment rate exceeds 6 1/2 percent, providing that inflation is projected to be close to the Committee's 2 percent objective in the medium term and longer-term inflation expectations continue to be anchored.

Respondent 10: Projected path consistent with thresholds guidance and optimal control simulations. I assume asset purchases continue into the second half of 2013.

Respondent 11: Unemployment reaches 6.5% in mid-2015 and lift-off begins. The fed funds target at the end of 2015 is consistent with the outcome based rule and with the inertial Taylor rule in Tealbook Book B. I have assumed increases in the fed funds target of .25% at each meeting once lift-off begins.

Respondent 12: "Appropriate policy" cannot be captured by a time-path for the federal funds rate. An important part of "appropriate policy" is communicating a long-run strategy for monetary policy that does a better job of resisting imbalances and excesses than did past strategy, and which is not so dependent for its success on large downward movements in short-term interest rates. The formulation and communication of such a strategy would strengthen the recovery more reliably than either our current form of forward guidance or another LSAP program, allowing us to move away from the zero bound more quickly.

For purposes of this exercise, I considered the implications of a variety of policy rules, including the 1993 version of the Taylor rule with a temporary downward adjustment to the equilibrium real interest rate, the 1999 Taylor rule with inertia, and a targeting rule for nominal GDP.

Respondent 13: I expect that, in the second half of 2015, the economy will have recovered enough that preserving the stability of long-term inflation expectations and, in turn, future inflation will warrant beginning to take steps to gradually reduce monetary stimulus. More specifically, my view of the appropriate path of policy reflects my judgment that, with a 6 percent long-run rate of unemployment, it will be necessary to begin raising the federal funds rate when the unemployment rate hits 7 percent in order to keep future inflation close to the long-run goal of 2 percent.

Respondent 14: My assessment of economic conditions accords closely with Tealbook. However, an appropriate monetary policy, in my view, would entail a larger volume of asset purchases and a more gradual increase in the federal funds rate after tightening commences than along the Tealbook path. Similar to Tealbook, I would hold the fed funds rate at its current low level until the fourth quarter of 2015, although the unemployment rate, at the time I assume first tightening is about 6.25%–somewhat lower than in Tealbook. Finally, I have assumed that the longer-run normal level of the funds rate is notably below its historical average, consistent with staff estimates that the expected nominal short rate ten years ahead is now 3.07%–well below the staff's assumed 4.25% equilibrium nominal rate.

Respondent 15: My expectations are close to those in the "weaker demand" scenario, which calls for liftoff in Q4 '15 under both the outcome based rule and the inertial Taylor '99 rule. In my forecast unemployment will be 6.5% at Q4 '15, which would also be consistent with liftoff under the proposed thresholds.

Respondent 16: Output and unemployment gaps are large and persistent, and inflation remains moderately 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 second half of 2015, when the unemployment rate falls below 6-1/2 percent. My judgment on appropriate policy is informed by looking at simple rules that adjust for the zero-lower-bound and for the effects of unconventional policy; and it is informed by my assessment of risks to the economy (which are large and skewed to the downside). In addition, it is informed by my assessment of the costs and benefits of continuing unconventional actions.

Respondent 17: I believe that in order to achieve an inflation rate of 2 percent we would want to begin raising the federal funds rate in the first half of 2014.

Respondent 18: Inflation and inflation expectations will be the main drivers of the removal of accommodation. Economic growth will be slightly above trend in 2013 and beyond; unemployment will decline slowly. The Committee will find it necessary to adjust policies to prevent inflation from rising above its target.

Respondent 19: I am assuming the FOMC decides to adopt a thresholds approach, with values of 6.5% for unemployment and 2.5% for inflation. My funds rate path is consistent with this assumption. In particular, I have unemployment dropping below 6.5% in mid 2015, and hence the funds rate lifts off before the end of 2015.

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
December survey	12	7
September survey	11	8

Respondent 1: Yes
As noted above, in part to reinforce the forward guidance on the target FFR, we assume that, after the completion of the MEP at the end of the year, the FOMC institutes a flow-based, open-ended purchase program of long-term Treasuries with an initial pace of purchases set at about $45 billion per month. Consequently, the pace of total purchases of long-term securities would be about $85 billion per month, similar to the purchase pace of these securities under the MEP and the MBS purchase program. In addition, we assume that the FOMC statement and other communications will continue to signal that purchases will continue at least until the FOMC observes substantial improvement in the outlook for the labor market, provided that the medium-term inflation outlook and longer-term inflation expectations remain consistent with the FOMC's longer-run objective. Based on our outlook, we currently expect that these purchases will last about one year and total about $1 trillion, which is a longer duration program with a larger ultimate size than that assumed in the Tealbook. However, that total can easily change depending upon the progress toward the FOMC objectives–it is the progress toward objectives that is important in our assumed policy stance rather than a particular size of the balance sheet. In our overall strategy for appropriate monetary policy, we believe that a collective emphasis of an accommodative stance based on a portfolio of tools would enhance the efficacy of policy in these circumstances.

Respondent 2: No
N/A

Respondent 3: Yes
I assume approximately $250 billion more in asset purchases than assumed in the Tealbook.

Respondent 4: No
N/A

Respondent 5: Yes
As noted above, we assume the open-ended LSAP program continues at an $85 billion per month pace through the end of 2013, 2 quarters longer than the Tealbook assumption.

Respondent 6: Yes
I would not expand the balance sheet by as much as assumed by the staff in the Tealbook. Moreover, I would begin reducing the balance sheet sooner and proceed at a faster pace.

Respondent 7: Yes
Appropriate monetary policy entails additional LSAP at a pace of roughly $85 billion per month until the end of 2013. At that point, the labor market recovery is well in train, with the unemployment rate at 7.3 percent as a result of a sustained increase in the pace of hiring .

Respondent 8: Yes
I believe the MEP should be allowed to expire and we should cease purchases of MBS at this meeting. Maintaining these balance sheet policies provide little, if any, additional support to labor markets and they increase the risks of higher inflation, higher inflation expectations, and growing financial imbalances. I believe the resulting stance of monetary policy would provide sufficient accommodation for achieving our long-run goals.

Respondent 9: No
N/A

Respondent 10: No
N/A

Respondent 11: Yes
My view of the total amount of LSAP purchases does not differ materially from the Tealbook. However, I am concerned that the market expectation for purchases does differ from the path assumed in the Tealbook and I am not certain that it will be possible to gradually change market expectations as is assumed in the Tealbook. Rather than a path of purchases that continue at the rate of $85 billion per month until mid 2013 when they stop altogether, I assume that purchases will be gradually reduced but will continue for longer. The total of purchases will likely be in the $800 billion to $1 trillion range. I also assume that the reduction will be accomplished primarily by reducing Treasury securities while the purchase of mortgage backed securities continues at the same level until the end of 2013.

Respondent 12: Yes
No additions to SOMA Treasury security holdings to be made once the MEP is completed at the close of 2012. However, MBS purchases to continue into 2013 at a pace of $40 billion per month, and maturing Treasury securities to be rolled over at auction.

Respondent 13: No
My view of appropriate policy includes a balance sheet path that is modestly different from the Tealbook's, but not materially so. Under my view of appropriate policy, the pace of LSAPs in the first half of this year would be more gradual than assumed in the Tealbook.

Respondent 14: Yes
I assume that asset purchases continue at a level of around $85 billion per month through the end of 2013, the earliest time at which I would consider it appropriate, in the context of my forecast, to say that there has been a significant improvement in the outlook for the labor market. In my forecast, unemployment at the end of 2013 stands at 7.7%, a very slight decline from its present level. However, my forecast for 2014 shows a very meaningful pickup in the pace of GDP growth to 3.7% and projects a decline in unemployment of about 3/4 percentage points during 2014–i.e, a significant improvement in the outlook for the labor market.

Respondent 15: No
I assume that we will begin to reduce LSAP purchases by mid-2013, and stop them completely by roughly the end of Q3. I do not expect a great deal of progress in reducing unemployment in 2013. In my view, we are very near the point at which the risks of a larger balance sheet will outweigh the likely benefits. I therefore support the end of LSAP purchases in mid-2013. Further increases to the balance sheet should be reserved for cases in which we need to go "all in", in particular the case of another recession and with it the danger of deflation.

I believe that further Treasury purchases are of little, if any, efficacy in reducing unemployment. In contrast, I believe that MBS purchases are likely having an effect on mortgage rates and on the real economy through housing prices, sales and construction. These effects, in turn, are likely affecting the sentiments and behavior of consumers as well as financial institutions and other businesses. Nonetheless, I would also reduce and then cease MBS purchases beginning at mid-year because the housing recovery will be well under way by then.

Respondent 16: Yes
Relative to Tealbook, I expect LSAPs to continue at least through September 2013 at a rate of $85b per month.

Respondent 17: Yes
I believe that under an appropriate monetary policy we would allow the MEP to expire and would end the MBS purchase program at this meeting. Once the MBS purchases in the pipeline have settled, the combined effects of the size of our balance sheet, the low federal funds rate, and the low interest rate on reserves will provide sufficient stimulus for achieving the FOMC's goals in a timely manner. In addition, the proceeds of maturing MBS would be reinvested in US Treasuries rather than in agency MBS as presently planned.

Respondent 18: Yes
My forecast does not incorporate any additional Treasury purchases.

I anticipate following the Committee's 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 19: 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: 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 real foreign GDP growth (GDP weighted) at 1.7% in 2012, at 2.7% in 2013, and at 2.8% in 2014. Our assumptions concerning the nominal dollar exchange rate are similar to those in the Tealbook. Reflecting intermeeting developments, our assumed path of WTI oil prices, based on recent futures quotes, has moved down to $88.00 for 2012Q4 and $91.00 for 2013Q4, and $90.00 for 2014Q4. We adopt the same federal fiscal assumptions as in the Tealbook, which are unchanged from recent meetings. Under these assumptions, there is a federal fiscal drag of 1.2 percentage points of GDP in 2013, declining to 0.5 percentage points in 2014. We also adopt the Tealbook assumptions regarding equity and home prices.

Outlook: The conceptual underpinnings of our forecast for growth and inflation in 2013 and 2014 are little changed from those in September. As mentioned above, the fiscal policy assumptions are that fiscal drag will increase substantially in 2013 as the payroll tax cut and extended unemployment benefits are allowed to expire at the end of 2012. This depresses the growth rate of real PCE and the personal saving rate over the first half of the year. At the same time, however, the effects of the drought on farm output will be subsiding and rebuilding after Hurricane Sandy will be ramping up. Growth of real GDP over 2013H1 is likely to be around 2%, with average monthly gains of payroll employment around 170,000.

By 2013H2, we expect growth to firm to around 2 3/4% (annual rate) as the headwinds, such as household deleveraging and restricted access to credit, more fully subside. Also contributing to this firming of growth is the turnaround in the housing market, leading to gains in residential investment as well as to greater confidence that has a positive impact on consumer spending. Uncertainty about the US fiscal path is likely to diminish as the year progresses while world growth picks up as the Euro area emerges from recession and emerging economy growth responds to fresh policy stimulus. Finally, the substantial monetary accommodation begins to have a more substantial impact on the US economy. For all of 2013, we expect growth of real GDP of around 2 1/2%, with the unemployment rate ending the year around 7 1/2%.

By 2014 the fiscal drag is expected to be greatly diminished, allowing the full force of monetary accommodation and the natural healing of the economy to be realized. Growth in that year is likely to be around 3 1/2%, with the unemployment rate declining by about one full percentage point to 6 1/2%. These trends continue into 2015, with projected growth at a similar rate as in 2014 and the unemployment rate falling below 6%.

The increase of the total PCE deflator in 2012 is now expected to be 1.6%, reflecting larger declines in energy prices than previously expected. The projected increase of the core PCE deflator in 2012 is also 1.6%. In 2013 and 2014, as the economy begins to establish greater forward momentum, we expect both total and core inflation to move gradually higher, with total PCE deflator inflation moving to around 1.8% in 2013 and 2 1/4% in 2014. The gradual decline of slack in the economy along with the expected decline of the exchange value of the dollar and resulting more rapid increase of nonpetroleum import prices contribute to the expected increase in inflation. With inflation expectations anchored, inflation is at its objective in 2015.

Respondent 2: I think that my central outlook is not all that different from the Tealbook's. The economy has been hit by a mix of shocks. Some of these push down on both employment and inflation - we can think of these as "demand" shocks. These shocks present no dual mandate tensions: a monetary policy that returns inflation exactly to target in the face of these shocks will also return the economy to full employment.

But there have been other shocks that push up on inflation while pushing down on employment - we can think of these as "supply" shocks. Typically, when responding to these shocks using a balanced approach to the dual mandate, appropriate monetary policy will give rise to above-target inflation for some period of time.

There are several key risks to this outlook. Others, I'm sure, will mention Europe, Asia, and the US fiscal situation. Let me mention a couple of others that don't get as much attention.

1. We have been lucky - inflation expectations have stayed well-anchored. A movement in inflationary expectations in either direction, but especially downward, would be challenging for us to deal with.

2. The long-run unemployment rate consistent with 2% inflation may well move upwards in the next year or two, especially if growth turns out to be slower than expected. We need to stay alert to evidence of wage and compensation pressures, and be responsive to them.

Respondent 3: Despite some weaker than expected data on consumption, and the undoubtedly related recent declines in consumer confidence, underlying conditions continue gradually to improve. Housing in particular seems to have gained some traction, though persistent inventory overhang and difficulties in obtaining mortgages for purchasers with less than stellar credit ratings suggest the pace of improvement will not likely accelerate too rapidly. Labor market conditions also continue to improve, though again only gradually and with no apparent signs of significant acceleration.

The obvious elephant in the room is the set of legislative fiscal changes that will be triggered in the absence of congressional action. Although for modelling purposes, the Tealbook had to make certain assumptions about the outcome, I don't think there are very good grounds for believing that a particular outcome is likely. There is some, hopefully modest, chance that we do drive over the cliff, with potentially substantial effects on growth depending on the duration of the free fall and its impact on confidence. Yet there are also plausible outcomes that could simultaneously relieve businesses and consumers, on the one hand, while making a credible start to longer-term fiscal consolidation needs, on the other. In such an instance, the steady progress in housing and the moderate progress in labor markets might be boosted by a surge in investment and spending heretofore held back until the fiscal situation and thus overall growth prospects clarify.

Eurozone-generated risks of a major financial dislocation remain, though they have, in the latest movement in their undulating pattern, receded somewhat recently.

Respondent 4: My central economic outlook is currently shaped by the fact that indicators do not yet point to the existence of a virtuous cycle that could provide the momentum necessary to move the recovery to a faster pace. Many indicators have improved; i.e., employment is improving, and household wealth driven by improvements in shareholder value and home values are growing. However, other indicators that need to move in tandem, such as improvements in business confidence and capital expenditures and growth in real disposable income, are not robust.

Respondent 5: Even in the absence of the fiscal cliff, we would be projecting only moderate growth in the current quarter. Adding in the cliff's depressing effect on confidence and spending and some modest reduction in output from Hurricane Sandy, we are left with a growth forecast in the neighborhood of 1 percent in the current quarter.

Looking ahead, the key factors shaping the forecast are the same as they have been for some time. Our baseline assumption is that resolution of the fiscal cliff will involve restraint on the order of magnitude assumed in the Tealbook. We also assume the resolution will be clear enough to release a modicum of spending that was put on hold during the second half of 2012. Furthermore, under our baseline scenario, Europe will muddle through without a financial meltdown, and so over time will exert a diminishing drag on confidence and spending. More fundamentally, with the support of accommodative monetary policy, households and businesses will eventually make enough progress in shoring up their balance sheets to resume spending more briskly. Some of this will reflect pent-up demands for capital goods and consumer durables, which will provide an impetus for above-trend growth as the associated stock-adjustment process takes place. Demand from abroad also is assumed to firm in 2014 and 2015, as Europe emerges from recession and growth in Asia recovers to a more robust pace.

Under our view of appropriate policy, sufficient accommodation will be in place–and will be expected to remain in place–to result in inflation drifting up some over the projected period. Importantly, a credible commitment to our accommodative policy stance should support inflation expectations and push inflation back up to a bit above our target by late in the projection period. Still, given we expect resource gaps to remain substantial even into 2015, this projected increase in inflation is quite modest, with the PCE price index rising just 2.2 percent in 2015.

Respondent 6: I continue to think the convergence process is progressing. Nonetheless, the recent growth and inflation data have caused some slight changes in my outlook. I am assuming a reasonable resolution of the fiscal cliff.

Respondent 7: Incoming data have been slightly softer than expected, but overall in line with expectations. Some of the recent softness is likely related to the temporary effects of the hurricane and the drought, which will reverse early next year. Labor market improvements remain unsatisfactory, with declines in the unemployment rate being importantly influenced by declines in the labor force participation rather than by increases in the employment to population ratio. The sluggish pace of growth in the second half of this year was influenced importantly by the uncertainties surrounding the domestic fiscal outlook and the financial situation in Europe. The December drop in consumer sentiment is just one indication of how uncertainty about fiscal policy affects spending decisions. The modal economic outlook is predicated on the resolution of the fiscal impasse, and on the situation in Europe not deteriorating dramatically. If this indeed occurs, uncertainty and pessimism about current and expected conditions will decrease, leading to a higher pace of demand and hiring. As a result, after modest gains in the first months of next year, the pace of growth is expected to accelerate as headwinds diminish and the effects of the stimulative monetary policy actions become more apparent.

Risks to the real economic outlook continue to be skewed to the downside. In the near term, as uncertainty remains high and the effects of the fiscal restraint become more pronounced, growth is expected to stay modest. Therefore, any significant improvement in activity is, at this point, only in the outlook. Given the challenges facing the economy in the near-term, monetary policy should remain highly accommodative to ensure a more robust and self-sustaining recovery. For this reason, the outlook is conditioned on additional LSAP at a pace of $85 billion per month until the end of 2013. This additional stimulus contributes to a more robust upturn starting in the second half of next year, so that GDP growth in 2013 is expected to be close to 3 percent despite the important restraint from fiscal policy. By the end of next year, a faster and sustained pace of job creation leads to the unemployment rate falling to 7.3 percent. The additional $1 trillion of quantitative easing over the course of 2013 also helps stimulate growth beyond next year: The unemployment rate is expected to near 6 percent, with inflation running somewhat below target, at the end of the forecast horizon.

Respondent 8: While Hurricane Sandy has disrupted many lives and introduced some volatility to high frequency data releases, on net it should have little impact on fourth quarter real GDP growth.

I continue to expect a moderate economic recovery over the next several years with a gradual reduction in the unemployment rate reflecting strengthening housing activity and consumer confidence. In addition, the labor market continues to heal. Even with the effects of Hurricane Sandy, employment rose an average of 158 thousand over the previous 5 months (July – November). Finally, an extremely accommodative monetary policy contributes to growth.

Uncertainty about how the fiscal cliff will be resolved, a slowdown in global growth, and expectations of higher taxes and more regulations will likely weigh on growth. On the upside, the increases in housing activity and auto sales are consistent with a household sector that may be even more supportive of growth going forward.

Turning to inflation, I expect that maintaining our accommodative monetary policy (funds rate, forward guidance, asset purchases) would lead to an increase in inflation in 2014 and 2015. Therefore, I think an end to asset purchases and an earlier lift-off in the funds rate is needed to maintain inflation close to our 2 percent objective.

Respondent 9: I expect the economy to remain on a subdued growth path over the medium-term owing to a number of restraining influences. The rebalancing of household balance sheets is likely to play out several more years and continue to hold down consumer spending. Policy and other outlook uncertainties will check the expansion of capital and retard employment growth. Fiscal austerity at all levels will restrain government spending. Nevertheless, I think growth will be sufficient to gradually bring down unemployment. Unusually slow growth over the next several quarters will exert more downward pressure on prices, holding inflation a little under the longer-term target during the first half of 2013. Inflation expectations, however, are expected to remain well anchored and this deviation from target will likely be short-lived.

Respondent 10: Pattern of sluggish growth in production and income continues. Cyclical gaps remain wide but there has likely been at least a temporary reduction in potential growth as well. Labor market improving only slowly, leading in turn to slow gains in wage income and in household spending. Unemployment has improved a bit in recent months, however, notwithstanding very slow growth. Fiscal policy, both federal and state and local, are applying drag and are likely to continue to do so in 2013. In the short run, federal fiscal policy is having adverse effects on confidence and spending, especially firm spending. The effects of the European situation on trade and finance, including indirect effects through other trading partners, are a headwind, although the situation has moderately improved with ECB actions. The drought and hurricane Sandy subtracted from growth recently but there will be payback in early 2013. Housing is clearly improving and is poised to help the overall recovery. Higher house prices are adding to the pace of improvement in household wealth and balance sheets. Housing, improved consumer sentiment, and resolution of fiscal issues should lead to somewhat stronger growth in 2013 than in 2012.

Core inflation remains very well anchored by stable expectations and modest downside pressure from labor market slack and slow wage growth. Pressure on commodity prices has been limited, reflecting both supply (e.g., in the case of oil, increased US production, good Middle East supply) and demand (weaker global growth, increased efficiency in the US). Stable commodity prices implies stable overall inflation.

Respondent 11: My forecast is consistent with the factors outlined in the "Robust Housing Recovery" alternative scenario. I believe that housing will continue to strengthen. I give less weight to the potential drag from shadow inventory coming on to the market, more weight to the potential for stronger household formation and I have assumed more support from MBS purchases than in the Tealbook baseline. I also assume that consumer confidence will be bolstered by rising house prices but not to the extent described in the "Housing Reverberations" alternative scenario.

Respondent 12: Drags on growth from excess household debt continue to ease, and residential investment is now making consistently positive growth contributions. However, extreme tax and regulatory uncertainty limits the pace of the expansion and retards the impact of a highly accommodative monetary policy. Down-side risks stemming from economic and financial problems abroad have eased, somewhat, but remain substantial, as does the uncertainty stemming from it that impacts U.S. business decision making and budgeting. Pending resolution of these uncertainties, U.S., businesses are avoiding new spending commitments and holding above-normal levels of cash. If the uncertainties remain unresolved, I would expect to lower my growth projections and raise my unemployment estimates, perhaps significantly. Conversely, an unexpectedly rapid and favorable resolution would produce faster GDP growth than I am currently projecting. Recovery and rebuilding after hurricane Sandy will give a noticeable boost to 2013:H1 GDP growth. On the other hand, threatened steep cuts in government purchases, if implemented, would subtract significantly from growth.

Respondent 13: I expect the economy to recover at a moderate rate from 2013 through 2015, reflecting a range of forces. The positive forces include considerable monetary stimulus, improvement in the housing sector that will gradually spill over to consumer spending, and the economy's usual self-correcting forces. The negative forces include fiscal restraint and uncertainty about fiscal policy and conditions in Europe.

In this environment, I expect inflation to remain near 2 percent from 2013 through 2015. This projection reflects recent PCE price trends, stable inflation expectations, and slow growth in wages. With the job market still weak, there is unlikely to be much upward pressure on inflation coming from wages over the next couple of years. The stability of inflation and inflation expectations around 2 percent indicate there is unlikely to be much downward pressure on inflation.

As to uncertainty and risks, the fiscal cliff and the recession in Europe make the outlook for GDP growth and unemployment more uncertain than normal. Both the fiscal cliff and Europe's problems pose downside risks to the pace of recovery in the U.S. For inflation, I believe the uncertainty surrounding the forecast to be consistent with historical norms and the risks to be balanced. As I noted above, if downside risks to the pace of the recovery were to materialize, inflation could slow. Alternatively, the continued expansion of our balance could eventually cause inflation expectations and, in turn, inflation to rise.

Respondent 14: A number of special factors, including Hurricane Sandy, the summer drought, and the distortion in seasonal factors due to the recession, make it difficult to discern the underlying momentum in aggregate demand and trends in the labor market. That said, incoming data suggest that the economy, on balance, has been expanding, and is likely to continue to expand over the next year, at a trendlike pace. The growth rate of payroll employment has improved somewhat, and the unemployment rate has edged down, but I do not see sufficient momentum in demand to forecast any meaningful further improvement in labor market conditions during the coming year. Consumer spending growth and growth in disposable income have surprised to the downside, and there has been a notable deterioration in consumer confidence as households appear to be realizing that taxes are poised to rise. Rising house prices should serve as a support to consumer spending going forward, but recovery in the housing market and residential investment is likely to be quite gradual. Even with a successful resolution of the fiscal cliff, fiscal policy is poised to serve as a significant drag on spending over the coming year due to the end of the payroll tax cut and extended unemployment benefits. Slow growth in the global economy, and continued contraction in the euro area is a further important drag on growth. With respect to inflation, core inflation appears to be running under the Committee's 2 percent objective and with well-anchored inflation expectations and very modest increases in wages and labor compensation, my expectation is that inflation will run below 2 percent over the next several years even with a highly accommodative monetary policy.

Respondent 15: I expect that the economy will eventually produce a run of "above trend" growth to move us closer to full utilization of resources. I no longer expect that this run will begin in H1 2013. I see another 2% year, give or take, despite the help we get in Q1 from the drought and hurricane rebounds. I also see more down side than upside risk.

It seems very likely that the fiscal negotiations will drag on and be quite contentious. In particular, I fear that we may have another debt ceiling crisis in late February, and with it another negative confidence shock. If so, growth could be even lower than the "weak demand" case. Even if there is no crisis moment, the year will probably be dominated by these messy and contentious negotiations, which could undermine consumer and business activity.

If the fiscal negotiations conclude quickly and successfully, there could be a positive shock to confidence. I now view that as unlikely.

I see a substantial output gap and no persuasive evidence of damage to potential output.

I see inflation running below mandate with risk to go lower if the economy weakens.

Respondent 16: 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. Some headwinds are slowly easing. For example, banking and credit conditions are improving; and housing is likely to continue its gradual improvement. At the same time, however, other headwinds remain intense. For example, fiscal policy is turning increasingly contractionary – the ongoing negotiations regarding the Federal fiscal cliff are mainly about how contractionary it will actually be. The global economy remains a drag on activity. Uncertainty about economic prospects continues to weigh on consumer and, especially, business spending.

In this environment, I expect the economic recovery will proceed at a moderate pace, which will allow us to continue making modest progress on closing output and unemployment gaps over the next few years. Even with substantial monetary stimulus, it will take many years 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 somewhat below the FOMC's 2 percent inflation target for the next few years.

Respondent 17: GDP growth has been disappointing. Fiscal drag will restrain growth in the first half of 2013. Later, there will be additional firming in the labor market that will be reflected in gradually improving personal income growth and consumer spending. Uncertainty over the federal budget and regulatory actions will dampen business investment. Residential investment is likely to continue to contribute to growth in overall activity. The upward trajectory in home prices should bolster consumer sentiment; however, weak income growth will dampen consumer spending in the near term. Government consumption and investment will be held down by large, persistent federal deficits. Demand for US exports is likely to increase.

Respondent 18: Uncertainty about U.S. fiscal policy has been a significant drag on growth. Once this uncertainty fades I expect that business spending will pick up. Although household deleveraging continues, I expect it to become less of a drag going forward as household balance sheets improve.

I expect 3 percent growth over the medium term, slightly above my longer-term trend. 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 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 be 1.8 percent in 2012 and then edge up to 2 percent over the remainder of the forecast horizon. 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 purchases by mid-2013 and then beginning to raise rates in the second half of 2013.

Respondent 19: I anticipate a marked acceleration in growth beginning in the second half of 2013, and continuing into 2014, under the assumption that the fiscal cliff is at least partially resolved, and that the situation in Europe continues to stabilize. In this scenario, the gains that we have seen recently in consumer confidence, in the housing, retail and auto sectors, all begin to provide a stronger impetus to growth, and I expect the business sector to begin to fall into step, increasing hiring and capital expenditures. At the same time, I expect the first half of 2013 to be slow, so that growth for the calendar year overall is only modest, as is progress on unemployment.

Forecast Narratives (continued)

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

Respondent 1: The revisions to Q3 GDP data indicate that the starting conditions for 2012Q4 were weaker than we previously expected, and we have reduced our projection for the quarter to between 1/2% and 1% (annual rate). If realized, that would bring the growth rate of real GDP for the second half of the year to 1.6% (annual rate), the same as over the first half of the year but below our previous projections. This has little effect on projections for subsequent quarters.

Overall, the data on consumer spending has been a little weaker than we had expected in September, hence we have lowered our near-term projection for real PCE. However, unlike the Tealbook, it has less effect on subsequent quarters. In contrast, the recovery of the housing sector appears to have gained momentum, and we have raised our residential investment forecast somewhat.

Indicators of real business fixed investment have been softer than expected, leading us to lower our near-term investment forecast to be flat for 2012H2. We also see investment growth in the first half of 2013 to be slower than previously anticipated.

The decline in the unemployment rate in the second half of the year was a surprise to us, and we have lowered our near-term unemployment rate projections. However, the behavior of other labor market data over recent months indicate that the labor market and the overall economy is still rather sluggish. The growth of hours worked and average hourly earnings remained soft, and the level of hours is still well below its pre-recession level. The labor force participation rate and the employment-population ratio have not changed substantially over the year and remain at low levels. Consequently, we have made little change to our medium-term unemployment forecasts.

The inflation data so far in the second half of 2012 has been somewhat lower than we projected in September. In response, we have reduced modestly our projections for the second half of the year. However, because some of the reduction reflects temporary factors (including weakness in nonmarket components of the PCE deflator), we have not changed our medium-term inflation projections.

A final note: many of the high frequency indicators released recently have been subject to negative impacts from Hurricane Sandy. As such we have discounted some of the recent weaker data.

Respondent 2: My assessment of inflationary pressures is now more closely aligned with, although still higher than the Tealbook's. My estimate of long-run growth is slightly lower, as is my estimate of the long-run unemployment rate.

These relatively small adjustments have resulted in a large change in what I judge to be the appropriate length of time before the first increase of the fed funds rate. To me, this is another strong argument why calendar-based guidance should be abandoned in favor of guidance based on economic conditions.

Respondent 3: Not much change. A little downgrade based on incoming data and growing likelihood since September that the fiscal issues will continue well into next year.

Respondent 4: Since the September SEP, my forecasts have become more conservative for several reasons. First, I think that structural impediments in the economy (such as credit constraints) will attenuate the speed in which financial market variables transfer to effects in the real economy. However, at some point in time, the credibility of the FOMC to communicate effectively its intent to provide growth-enhancing support could improve, to the ultimate benefit of possibly assisting in the ability to see more positive effects on the real economy. Should this improvement in communication occur prior to the occurrence of some of the costs associated with unconventionally accommodative monetary policy – like problems of price stability, financial stability and market functioning – then I would expect the forecast to improve.

In addition, the ability of monetary policy to support financial markets will likely be attenuated next year as markets gradually realize that cumulative purchases might be about $500 billion less than they currently appear to have factored in. Over time, this realization could lead to a small amount of upward pressure on long-term interest rates and dollar appreciation, and a small amount of downward pressure on stock market prices.

My forecasts have also become more conservative because downside risks to the outlook– particularly from issues relating to fiscal policy and emanating from Europe – have remained elevated. Continued uncertainty about these scenarios could be restraining household spending and business investment.

Respondent 5: Our outlook for growth in 2012 is 0.3 percentage point less than in the September SEP. A bit of this reflects the weather (a larger effect of the drought and disruptions from Hurricane Sandy). But most of the revision is due to a more fundamental softness in household and business spending, some of which is assumed to spill into next year. Furthermore, we have revised down our estimates of potential output growth somewhat. Together, these result our forecast showing a bit less growth in 2013 and 2014 than in our September submission.

We were surprised by the decline in the unemployment rate in 2012:H2, and have marked our projection for the rate in 2012:Q4 down 0.4 percentage point relative to the September SEP. However, after factoring in the GDP forecast revisions noted above, our projection for the unemployment rate in 2015:Q4 is the same as in September.

The incoming price data have been running below our previous projection, and we have revised down our projection for 2012 inflation by 0.2 percentage point. Given the persistence in the inflationary process, we have nudged down our forecast by a tenth or two over the projection period.

Respondent 6: Slower real GDP growth recently than I anticipated has caused some adjustments in the timing of growth - some reductions in my growth forecasts for 2012 and 2013 and an increase in growth in 2014. Lower inflation data recently than I anticipated has caused some reductions in my inflation forecasts for 2012.

Respondent 7: Incoming data have been, by and large, consistent with my expectations at the time of the previous SEP. As a result, my views about appropriate monetary policy has not changed significantly.

Respondent 8: My forecasts for real GDP and inflation are relatively unchanged. However, my unemployment rate forecast has been revised down by 0.4 percentage point reflecting recent (September - November) unemployment rate reports.

Respondent 9: Incoming data suggest slightly less growth for 2012:H2 than I had assumed in September. Resolutions that allow us to avoid the full impact of the fiscal cliff will nevertheless introduce some spending drag early in 2013. I expect this modestly lower growth trajectory to put a little additional downward pressure on wage and price growth in the first half of 2013.

Respondent 10: Not much overall change. Slightly better data in labor market, housing. Reduced tensions over Europe. However, businesses remain very cautious and fiscal tensions are particularly high in the near term.

Respondent 11: Continued evidence of strength and momentum in house prices.

Respondent 12: Hurricane Sandy has caused me to revise 2012 GDP growth slightly downward, while recent favorable data have caused me to lower the projected path of the unemployment rate. Inflation has been coming in a bit lower than I had anticipated. As GDP growth picks up, in 2013, inflation should return to target levels.

Respondent 13: The data received since the September SEP have been largely consistent with the moderate pace of recovery and near-target inflation rate I projected at the time. However, in light of recent developments regarding the fiscal cliff, I have boosted the amount of fiscal restraint assumed in the forecast. In particular, I have adjusted the forecast to fully incorporate the end of the payroll tax holiday and extended unemployment compensation. By themselves, these changes have modestly lowered my growth forecast and edged up my unemployment forecast. However, my forecast for the unemployment rate is now a little lower than it was in September because the effects of the surprising fall in unemployment in August and September have outweighed the effects of additional fiscal restraint.

Respondent 14: My forecast has not changed materially since the previous SEP.

Respondent 15: I have significantly reduced my growth projection for 2013. I think 2013 looks like another 2% year, in light of current momentum, the pending fiscal negotiations, recession and possible turmoil in Europe, and slow growth in some major emerging economies.

Respondent 16: Since September, the data have been mixed but, on balance, consistent with my forecast. Both unemployment and inflation have come in lower than I expected, and Hurricane Sandy has affected near-term activity. Beyond the next few quarters, I see a bit faster momentum in the economy and somewhat faster progress on reducing unemployment. Housing indicators have come in above my expectations, and the tail risk associated with Europe has receded. Oil prices are lower, which will help support consumer spending.

In addition to a faster momentum, my unemployment path falls faster because I have lowered my estimate of potential growth for the next few years. Hence, the economy closes output and unemployment gaps more quickly.

My inflation forecast is a bit lower, reflecting recent data as well as the lower path for oil prices.

Respondent 17: The growth of wage and salary income was revised down significantly. Business investment has been weaker than I anticipated. The likelihood of achieving meaningful progress on establishing a sustainable federal budget trajectory has diminished. My long run growth estimate is lower, due to lower expected growth in composition-adjusted labor hours.

Respondent 18: My economic forecast is little changed. But given the current stance of policy, I've pushed out the date of liftoff from 2012 to 2013 and steepened the policy path..

Respondent 19: Overall, my forecast for GDP growth is very close to that in the previous SEP. My forecast for the unemployment rate is essentially shifted down by 0.30, in light of the drop we have had since September, but the trajectory going forward remains very similar.

Forecast Narratives (continued)

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

Respondent 1: As stated in our response to question 3, we assume (based on our modal economic forecast) that the asset purchase program (MBS plus long-term Treasuries) lasts through the end of 2013 rather than through mid-2013 as the Tealbook assumes. Because of the greater size and duration in the balance sheet over the forecast horizon, we thus assume that term premia rise to normal levels more slowly than in the Tealbook.

We see some of the headwinds restraining economic growth subsiding somewhat more quickly in 2014 than in the Tealbook. Thus we expect the output gap to begin to close more quickly that year, and our 2014 real GDP growth forecast is modestly above that of the Tealbook.

For 2013 and 2014, the Tealbook expects somewhat stronger real PCE growth (even though the Tealbook has marked down its PCE forecast) and notably weaker business fixed investment growth than our forecast. In part, the differences in PCE growth forecasts reflect somewhat different views of the effects of the expected fiscal consolidation on household behavior. As far as investment, it appears that in the Tealbook the restraints that have held down fixed investment recently will fade more slowly than in our projections.

On balance in 2014, our projection of stronger investment growth more than offsets the weaker projected PCE growth, which implies that we forecast stronger final domestic demand growth than does the Tealbook. Consequently, we project higher import growth for that year. With foreign GDP growth and exchange rate projections similar in the two forecasts, this means that net exports are a drag for GDP growth in our forecast for that year instead of being a neutral factor as in the Tealbook forecast.

We expect a greater decline in the unemployment rate in 2014 than is projected in the Tealbook, even accounting for the differences in the GDP forecasts and having similar projections for the labor force participation rate. The source of this difference appears to be a different interpretation of labor market dynamics as expansions mature; that is, we do not place as much weight on Okun's Law as the Board staff does.

We 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 for 2012, but beyond that we see total and core inflation remaining near 2% whereas the Tealbook has inflation declining in 2013 and remaining near the 2013 level in 2014. This difference may also partially reflect the differing monetary policy assumptions in the two forecasts.

Both the Tealbook and our outlook see a downside balance of risks to real growth. For inflation, we agree that the risks are broadly balanced, but we see uncertainty as still higher than normal whereas the Tealbook sees uncertainty at a near normal level. This assessment reflects our view that the unusual nature of the current expansion leaves uncertainty about both real activity and inflation above normal levels.

Respondent 2: I see unemployment falling more rapidly, and inflation being higher, than does the Tealbook. In large part, this is because my path of appropriate policy is different from the policy path that underlies the Tealbook forecast.

Respondent 3: No major analytical differences.

Respondent 4: None.

Respondent 5: Our projection for growth is stronger than in the Tealbook. The differences largely reflect our assumption that the open-ended LSAP continues until the end of 2013 and our somewhat stronger growth rate of potential output.

Our forecast for inflation is 1/2 to 3/4 percentage point higher than in the Tealbook. This is due to the more robust growth in demand in our forecast as well as to our assumption that a credible commitment to accommodative policy will help buoy inflation expectations and thus elevate actual inflation.

Respondent 6: I anticipate faster real GDP growth for 2013 and slower real GDP growth for 2015 than the Tealbook. For 2013 through 2015, I anticipate a lower unemployment rate than the Tealbook.

Respondent 7: My forecast is conditioned on more policy stimulus than in the Tealbook, and this results in a faster pace of growth in my forecast than in the Tealbook. When conditioned on the same policy assumptions, fading headwinds are expected to lead to a slightly faster pace of growth than projected in the Tealbook starting in the second half of next year.

Respondent 8: In comparison to the Tealbook forecast, I see greater inflationary pressures in the next few years from a continuation of the currently highly accommodative stance of policy. In response to these pressures that threaten the stability of long-term inflation expectations, my view of appropriate policy calls for a lift-off of the federal funds rate in late 2013, two years earlier than in Tealbook. In addition, my forecast assumes that the MEP program and MBS purchases end.

Respondent 9: While my forecast is broadly in line with the current Tealbook baseline, I expect a bit more progress in reducing unemployment over the next two years. I also project inflation to follow a path closer to our longer-term inflation objective owing to a strong adherence of wage and price growth to longer-term inflation expectations.

Respondent 10: A bit more optimistic about growth in 2013, assuming reasonable resolution to fiscal issues and no unexpected shocks. I remain a bit more pessimistic than the Tealbook about the extent to which activity will accelerate in the out years, in light of the slow pace of recovery experienced thus far and the likelihood of continued headwinds from Europe and US fiscal policy.

Respondent 11: N/A

Respondent 12: I see somewhat faster GDP growth in 2013 than does the Tealbook, with a correspondingly larger reduction in the unemployment rate. My inflation forecasts converge to 2 percent more rapidly than the Tealbook's. These differences imply that there is less need for monetary-policy accommodation.

Respondent 13: My current forecast is quite similar to the Tealbook's. The biggest difference, which isn't material, is in the headline inflation forecast. Compared to the Tealbook, I expect less downward pressure from food and energy prices.

Respondent 14: N/A

Respondent 15: I expect lower growth in 2013. My expectations are close to the "weaker demand" forecast.

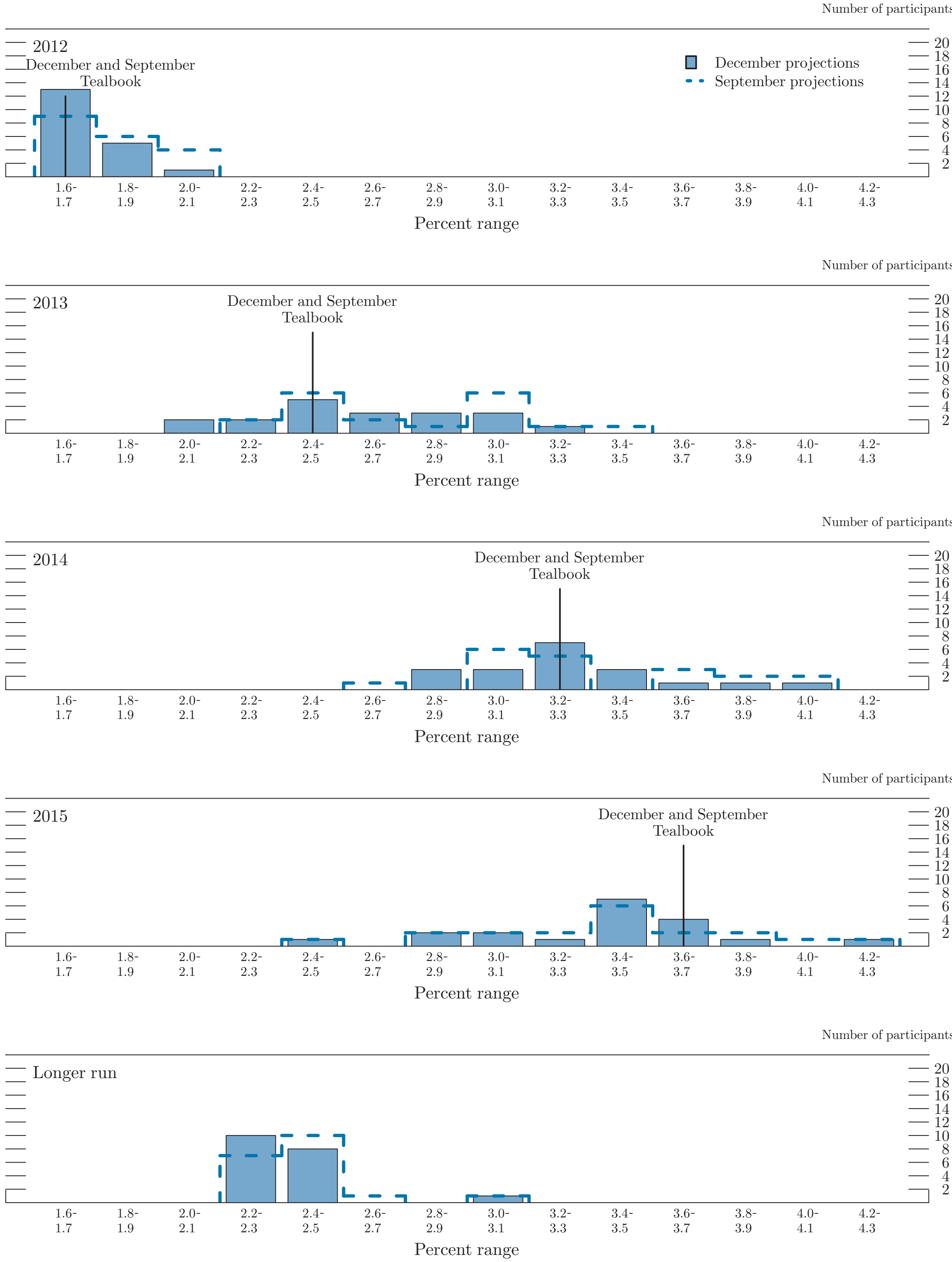
Respondent 16: My forecast is broadly similar to the Tealbook projection on a policy-consistent basis. My forecast for GDP is a touch stronger, in part because I have more monetary stimulus.

Respondent 17: Growth is lower next year due in part to greater fiscal drag, Also, uncertainty over the federal budget and regulatory actions will restrain private spending even after the fiscal cliff negotiations are completed. Inflation is higher next year due to well-anchored expectations.

Respondent 18: My forecast calls for a stronger economy in 2013 and tighter monetary policy than the Tealbook. I anticipate a lower unemployment rate than the Tealbook in 2013 and 2014.

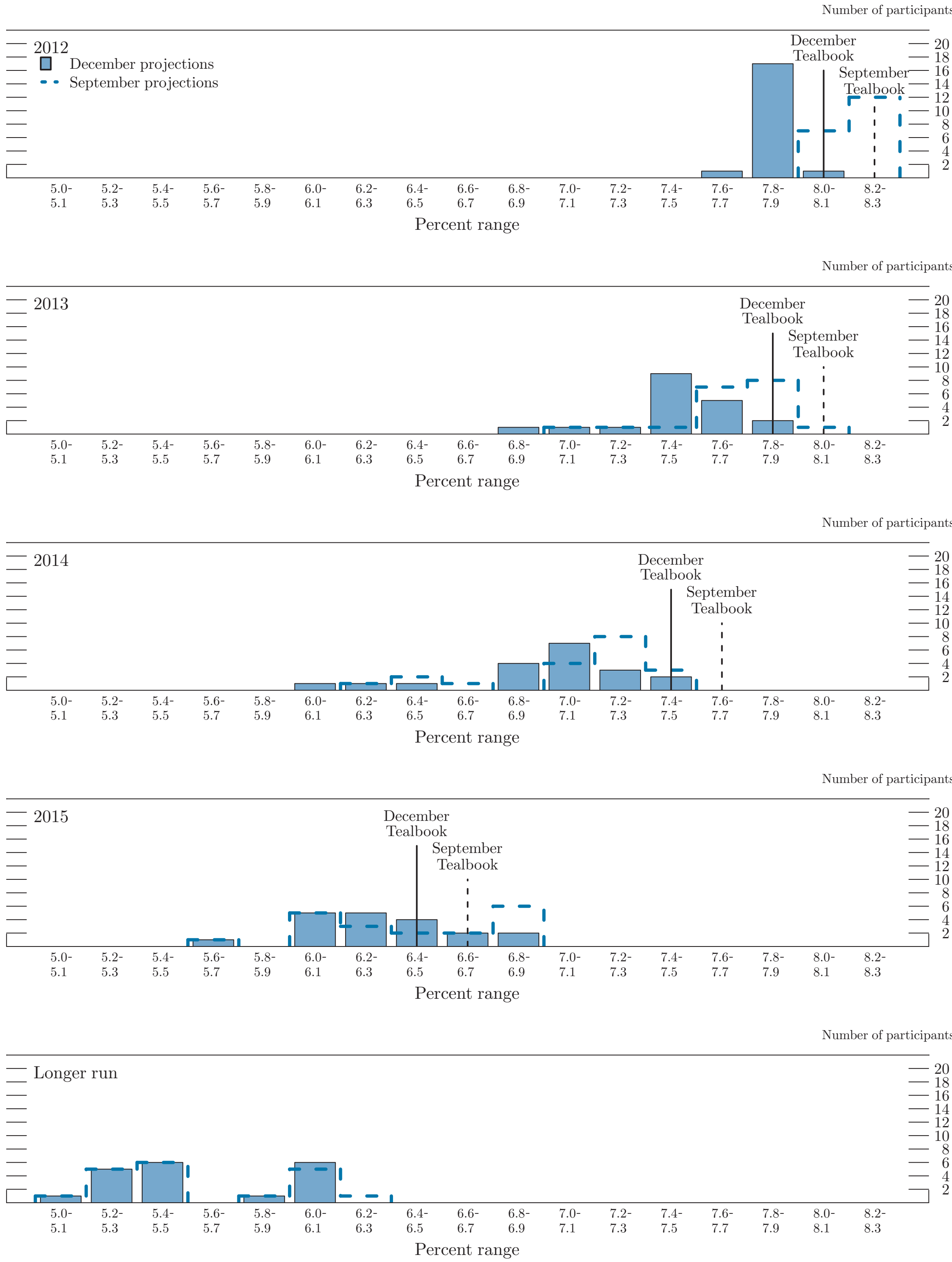
Respondent 19: I am a touch more optimistic for growth in 2013, for the reasons described above, but other than that, am quite close to the Tealbook.

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–15 and over the longer run



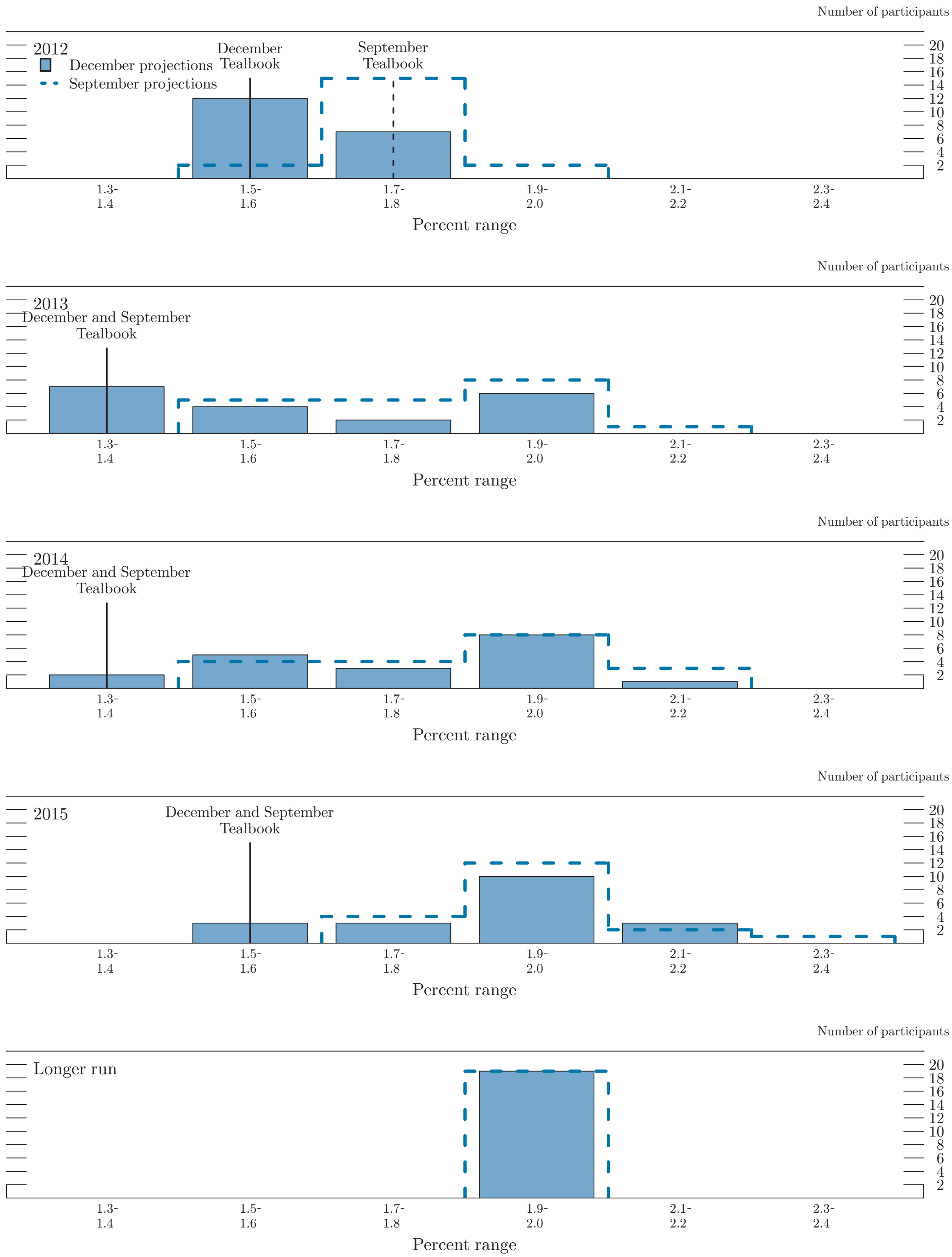
Note: Definitions of variables are in the general note to table 1.

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2012–15 and over the longer run



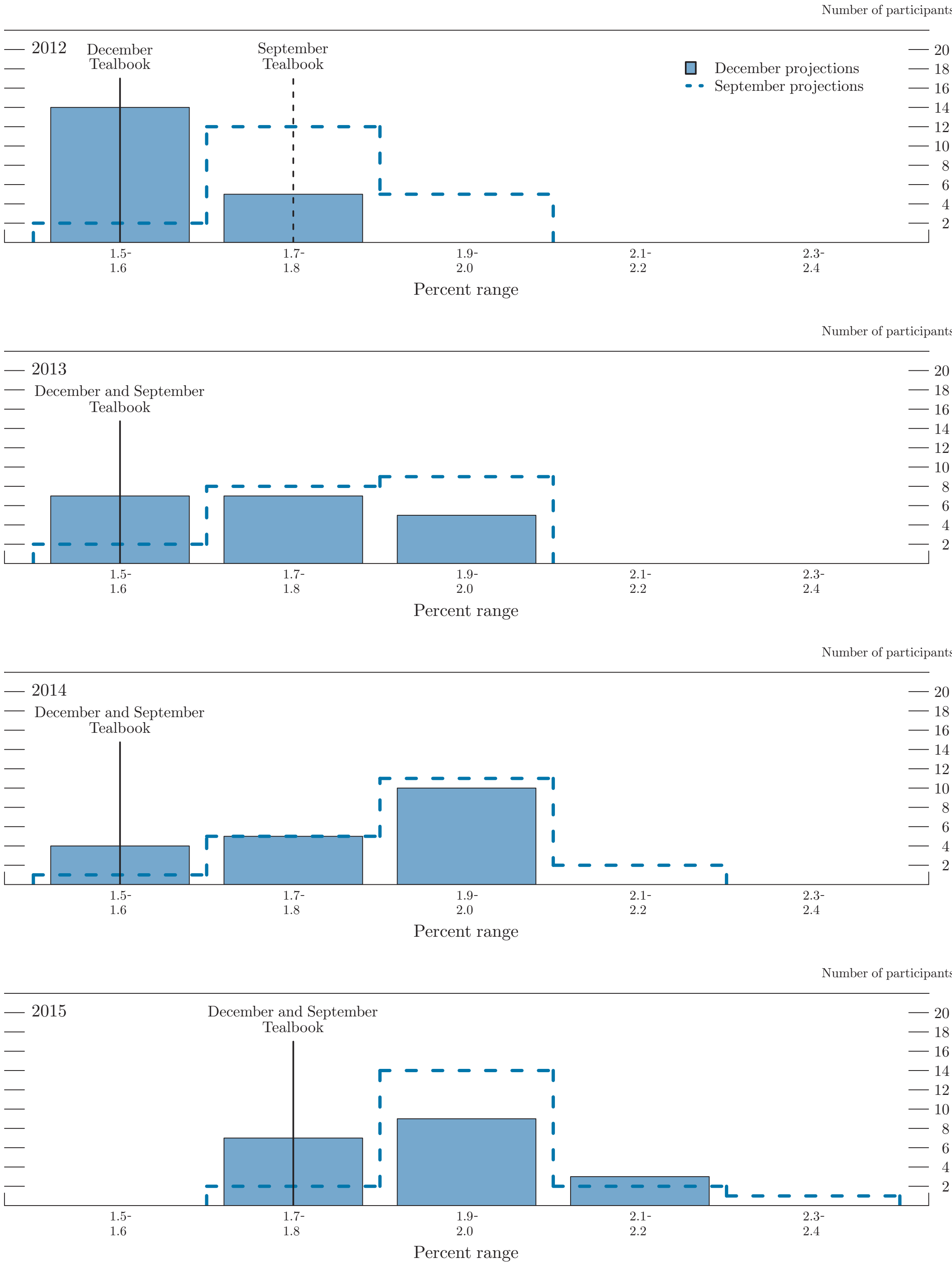
Note: Definitions of variables are in the general note to table 1.

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–15 and over the longer run



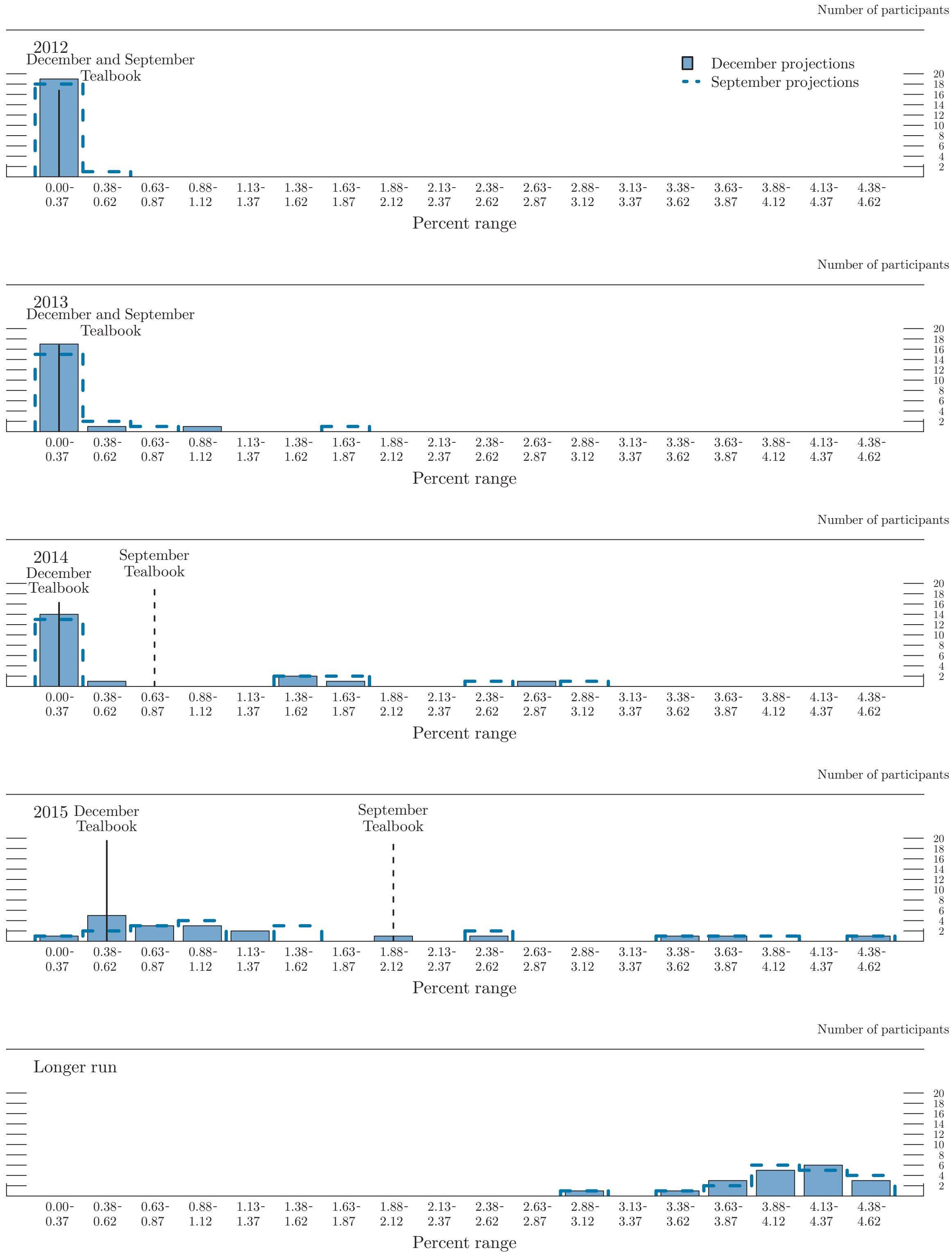
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2012–15



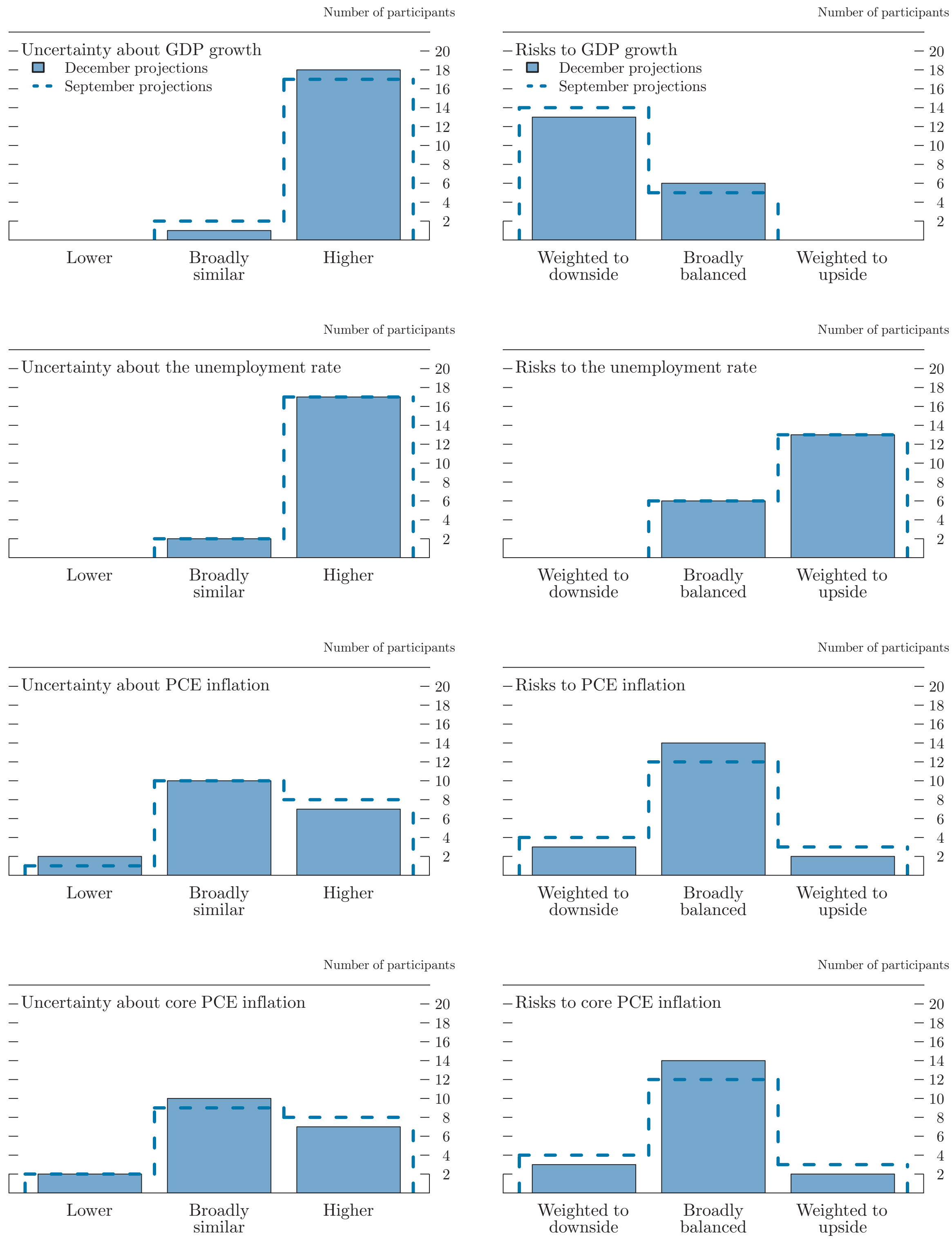
NOTE: Definitions of variables are in the general note to table 1.

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2012–15 and over the longer run



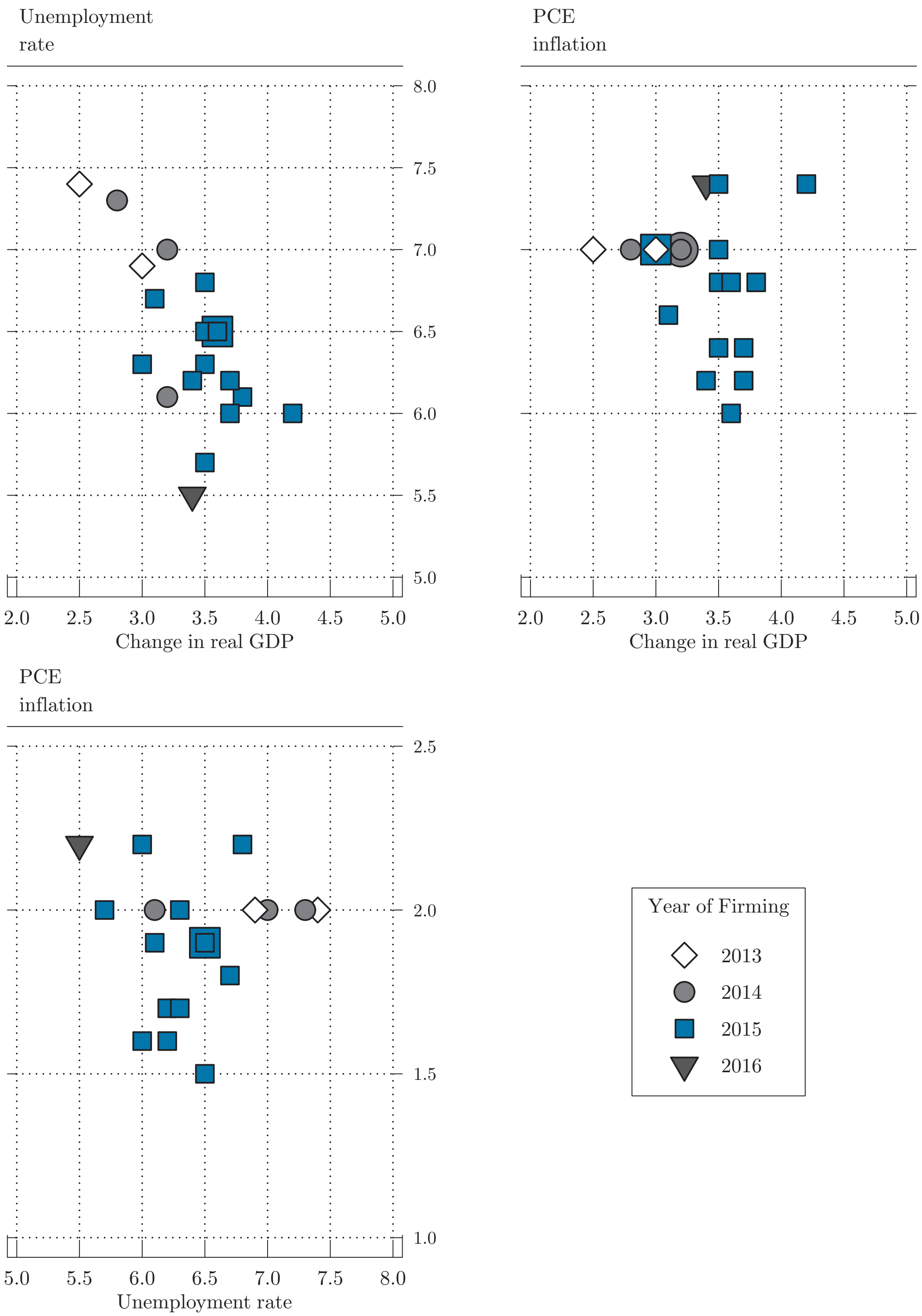
NOTE: The target federal funds rate is measured as the level of the target rate at the end of the calendar year or in the longer run.

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.