

**Table 1: Economic Projections of Federal Reserve Governors and Reserve Bank Presidents, November 2009**

Percent

Variable	Central tendency <sup>1</sup>					Range <sup>2</sup>				
	2009	2010	2011	2012	Longer Run	2009	2010	2011	2012	Longer Run
Change in real GDP. . . . .	-0.4 to -0.1	2.5 to 3.5	3.4 to 4.5	3.5 to 4.8	2.5 to 2.8	-0.5 to 0.0	2.0 to 4.0	2.5 to 4.6	2.8 to 5.0	2.4 to 3.0
June projection. . . . .	-1.5 to -1.0	2.1 to 3.3	3.8 to 4.6	n/a to n/a	2.5 to 2.7	-1.6 to -0.6	0.8 to 4.0	2.3 to 5.0	n/a to n/a	2.4 to 2.8
Unemployment rate. . . . .	9.9 to 10.1	9.3 to 9.7	8.2 to 8.6	6.8 to 7.5	5.0 to 5.2	9.8 to 10.3	8.6 to 10.2	7.2 to 8.7	6.1 to 7.6	4.8 to 6.3
June projection. . . . .	9.8 to 10.1	9.5 to 9.8	8.4 to 8.8	n/a to n/a	4.8 to 5.0	9.7 to 10.5	8.5 to 10.6	6.8 to 9.2	n/a to n/a	4.5 to 6.0
PCE inflation. . . . .	1.1 to 1.2	1.3 to 1.6	1.0 to 1.9	1.2 to 1.9	1.7 to 2.0	1.0 to 1.7	1.1 to 2.0	0.6 to 2.4	0.2 to 2.3	1.5 to 2.0
June projection. . . . .	1.0 to 1.4	1.2 to 1.8	1.1 to 2.0	n/a to n/a	1.7 to 2.0	1.0 to 1.8	0.9 to 2.0	0.5 to 2.5	n/a to n/a	1.5 to 2.1
Core PCE inflation <sup>3</sup> . . . . .	1.4 to 1.5	1.0 to 1.5	1.0 to 1.6	1.0 to 1.7		1.3 to 1.6	0.9 to 2.0	0.5 to 2.4	0.2 to 2.3	
June projection. . . . .	1.3 to 1.6	1.0 to 1.5	0.9 to 1.7	n/a to n/a		1.2 to 2.0	0.5 to 2.0	0.2 to 2.5	n/a to n/a	

NOTE: Projections of change in real gross domestic product (GDP) and 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 June projections were made in conjunction with the FOMC meeting on June 23-24, 2009.

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 2009\***  
**(in percent)**

**Central Tendencies and Ranges**

	<b>Central Tendency</b>	<b>Range</b>
Change in Real GDP	-3.6 to -3.6	-3.6 to -3.5
PCE Inflation	-0.1 to 0.0	-0.1 to 0.1
Core PCE Inflation	1.6 to 1.6	1.5 to 1.6

**Participants' Projections**

<b>Projection</b>	<b>Change in Real GDP</b>	<b>PCE Inflation</b>	<b>Core PCE Inflation</b>
<b>1</b>	-3.6	-0.1	1.6
<b>2</b>	-3.6	-0.1	1.6
<b>3</b>	-3.6	0.1	1.6
<b>4</b>	-3.6	0.0	1.6
<b>5</b>	-3.6	-0.1	1.6
<b>6</b>	-3.6	-0.1	1.6
<b>7</b>	-3.5	0.0	1.5
<b>8</b>	-3.6	-0.1	1.6
<b>9</b>	-3.5	0.0	1.5
<b>10</b>	-3.6	-0.1	1.6
<b>11</b>	-3.6	0.0	1.6
<b>12</b>	-3.6	-0.1	1.6
<b>13</b>	-3.6	0.0	1.6
<b>14</b>	-3.6	-0.1	1.6
<b>15</b>	-3.6	-0.1	1.6
<b>16</b>	-3.6	-0.1	1.6
<b>17</b>	-3.6	-0.1	1.6

\* Growth and inflation are reported at annualized rates.

**Table 1b**  
**Economic Projections for the Second Half of 2009\***  
**(in percent)**

**Central Tendencies and Ranges**

	<b>Central Tendency</b>	<b>Range</b>
Change in Real GDP	2.9 to 3.5	2.7 to 3.7
PCE Inflation	2.1 to 2.5	2.0 to 3.4
Core PCE Inflation	1.2 to 1.4	1.0 to 1.6

**Participants' Projections**

<b>Projection</b>	<b>Change in Real GDP</b>	<b>PCE Inflation</b>	<b>Core PCE Inflation</b>
<b>1</b>	2.7	2.5	1.2
<b>2</b>	3.7	2.5	1.4
<b>3</b>	2.9	2.1	1.0
<b>4</b>	2.7	3.4	1.6
<b>5</b>	2.9	2.5	1.2
<b>6</b>	2.9	2.1	1.2
<b>7</b>	3.6	3.0	1.5
<b>8</b>	3.3	2.3	1.2
<b>9</b>	3.4	2.4	1.5
<b>10</b>	3.1	2.3	1.2
<b>11</b>	3.5	2.4	1.4
<b>12</b>	3.3	2.3	1.2
<b>13</b>	3.5	2.0	1.2
<b>14</b>	3.3	2.5	1.2
<b>15</b>	3.1	2.3	1.2
<b>16</b>	2.9	2.3	1.2
<b>17</b>	3.5	2.1	1.2

\* Projections for the second half of 2009 implied by participants' November projections for the first half of 2009 and for 2009 as a whole. Growth and inflation are reported at annualized rates.

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

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	2009	-0.5	10.3	1.2	1.4
2	2009	0.0	10.0	1.2	1.5
3	2009	-0.4	10.1	1.1	1.3
4	2009	-0.5	10.2	1.7	1.6
5	2009	-0.4	10.1	1.2	1.4
6	2009	-0.4	9.9	1.0	1.4
7	2009	0.0	9.9	1.5	1.5
8	2009	-0.2	10.0	1.1	1.4
9	2009	-0.1	9.8	1.2	1.5
10	2009	-0.3	9.9	1.1	1.4
11	2009	-0.1	10.0	1.2	1.5
12	2009	-0.2	10.0	1.1	1.4
13	2009	-0.1	10.0	1.0	1.4
14	2009	-0.2	10.1	1.2	1.4
15	2009	-0.3	10.1	1.1	1.4
16	2009	-0.4	10.0	1.1	1.4
17	2009	-0.1	10.0	1.0	1.4
1	2010	3.0	9.7	1.2	1.0
2	2010	3.0	8.6	2.0	2.0
3	2010	2.1	9.7	1.2	1.2
4	2010	2.4	9.7	1.8	1.5
5	2010	3.1	9.8	1.5	1.1
6	2010	3.0	9.5	1.1	1.2
7	2010	4.0	9.2	2.0	2.0
8	2010	3.5	9.4	1.3	1.0
9	2010	3.6	9.3	1.5	1.5
10	2010	2.5	9.5	1.4	1.4
11	2010	3.5	9.4	1.6	1.3
12	2010	2.5	9.7	1.5	1.0
13	2010	2.0	10.2	1.4	1.1
14	2010	3.4	9.5	1.4	0.9
15	2010	3.4	9.5	1.4	1.1
16	2010	2.9	9.6	1.3	1.1
17	2010	3.7	9.3	1.4	1.1

**Table 2 (continued): Economic Projections**

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	2011	4.4	8.6	1.0	1.0
2	2011	3.0	7.2	2.4	2.4
3	2011	2.5	8.5	1.3	1.3
4	2011	3.3	8.7	1.9	1.6
5	2011	4.6	8.6	1.6	1.0
6	2011	4.1	7.9	1.9	1.6
7	2011	3.8	8.2	2.0	2.0
8	2011	4.4	8.2	1.1	1.0
9	2011	4.1	8.3	1.5	1.5
10	2011	3.4	8.2	2.0	2.0
11	2011	4.5	8.2	1.5	1.5
12	2011	4.5	8.7	1.5	1.0
13	2011	4.0	8.6	1.7	1.5
14	2011	4.3	8.5	0.6	0.5
15	2011	4.4	8.2	1.0	1.0
16	2011	4.4	8.5	1.3	1.2
17	2011	4.5	8.0	1.0	1.0
1	2012	4.8	7.0	1.3	1.3
2	2012	3.0	6.5	2.0	2.0
3	2012	2.8	7.6	1.5	1.5
4	2012	3.6	7.0	1.9	1.7
5	2012	4.8	7.4	1.4	0.9
6	2012	4.0	6.8	1.9	1.7
7	2012	3.5	7.2	1.5	1.5
8	2012	4.4	6.8	1.0	1.0
9	2012	3.5	7.5	1.5	1.5
10	2012	3.5	7.5	2.3	2.3
11	2012	4.5	7.0	1.7	1.7
12	2012	4.8	7.5	1.5	1.2
13	2012	5.0	7.0	2.0	2.0
14	2012	4.5	7.3	0.2	0.2
15	2012	5.0	6.1	1.2	1.1
16	2012	4.0	7.3	1.5	1.5
17	2012	4.5	6.5	1.0	1.0

**Table 2 (continued): Economic Projections**

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	LR	2.5	4.8	2.0	
2	LR	2.8	5.3	1.7	
3	LR	2.5	5.2	2.0	
4	LR	2.5	6.3	2.0	
5	LR	2.6	5.1	2.0	
6	LR	2.6	5.0	2.0	
7	LR	2.8	5.3	1.5	
8	LR	2.5	5.0	2.0	
9	LR	2.7	5.0	1.5	
10	LR	3.0	5.0	2.0	
11	LR	2.5	5.2	2.0	
12	LR	2.8	5.0	1.5	
13	LR	2.4	5.0	2.0	
14	LR	2.5	5.0	2.0	
15	LR	2.8	5.0	2.0	
16	LR	2.5	5.0	1.8	
17	LR	2.8	5.0	2.0	

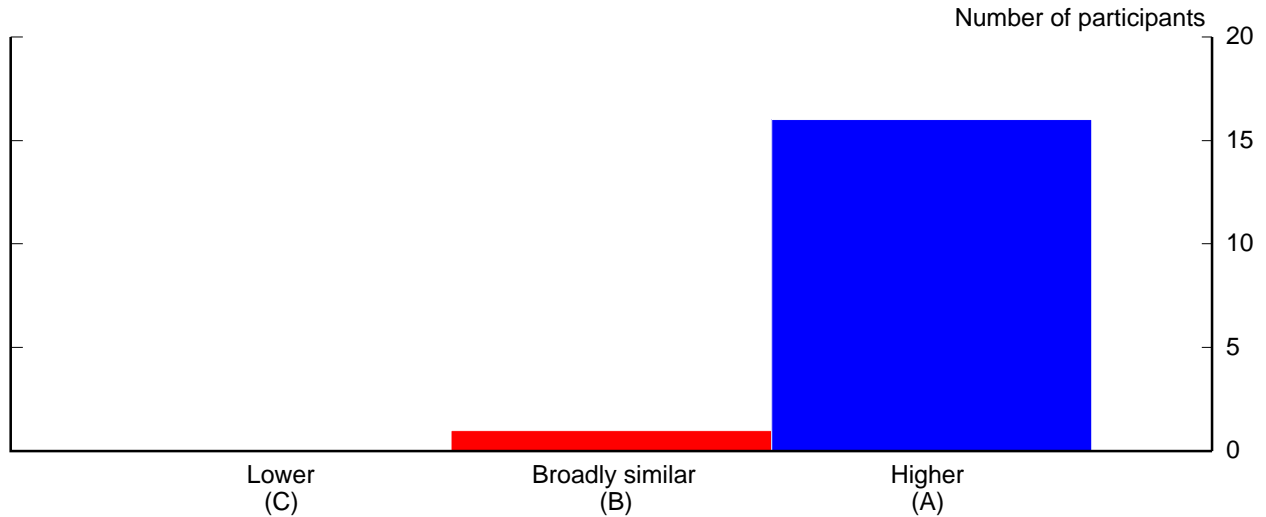
Figure 1. Central tendencies and ranges of economic projections, 2009–12 and over the longer run



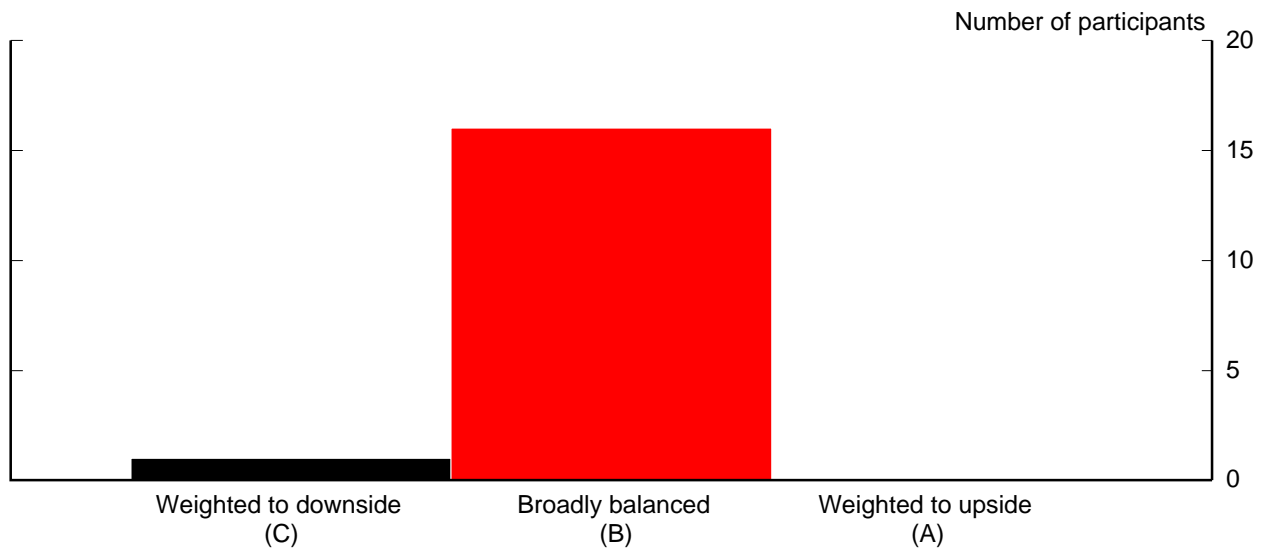
NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual.

### 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.**



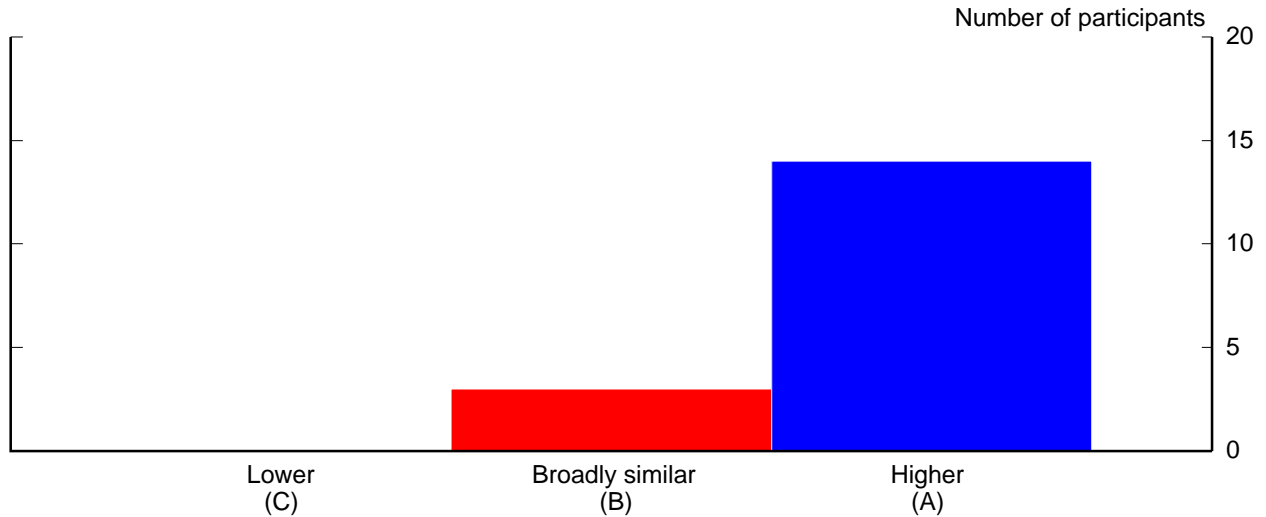
#### Individual Responses

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

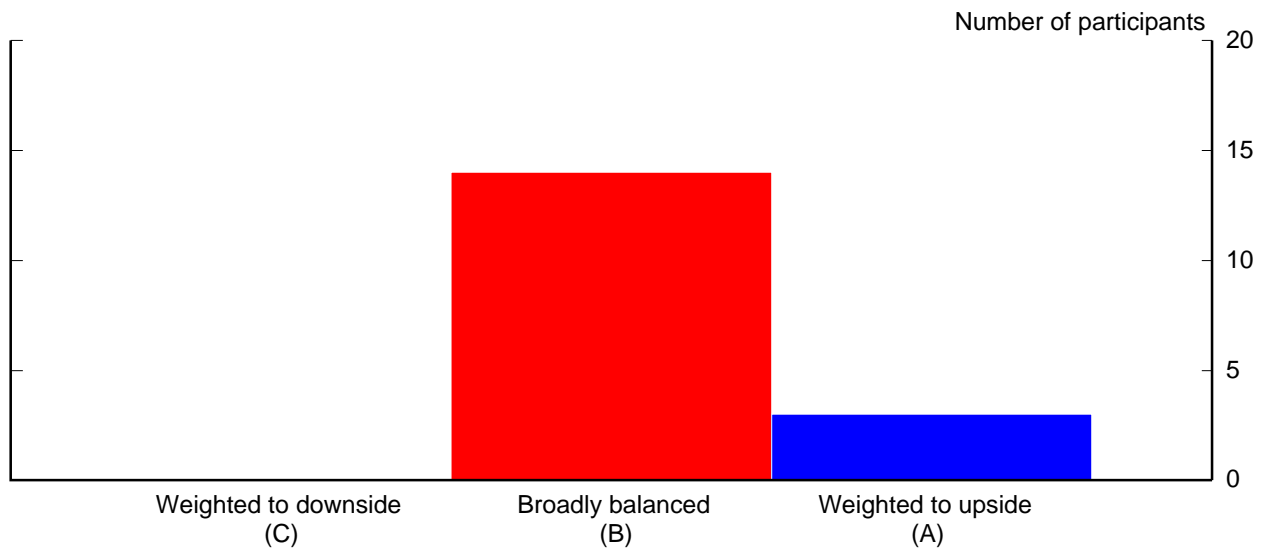


### Uncertainty and Risks - Unemployment Rate

**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.**

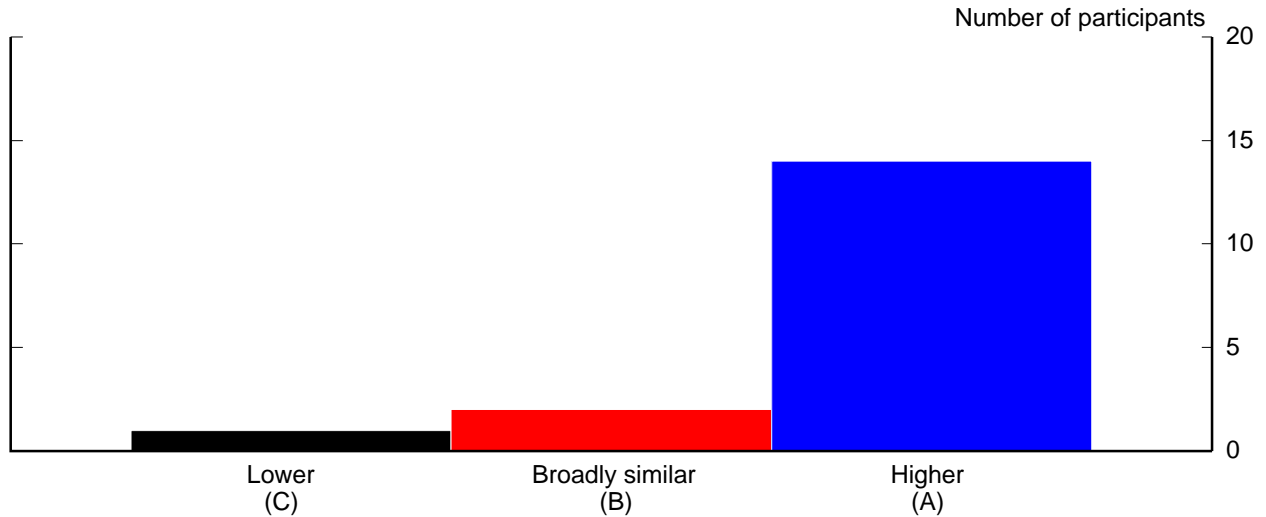


#### Individual Responses

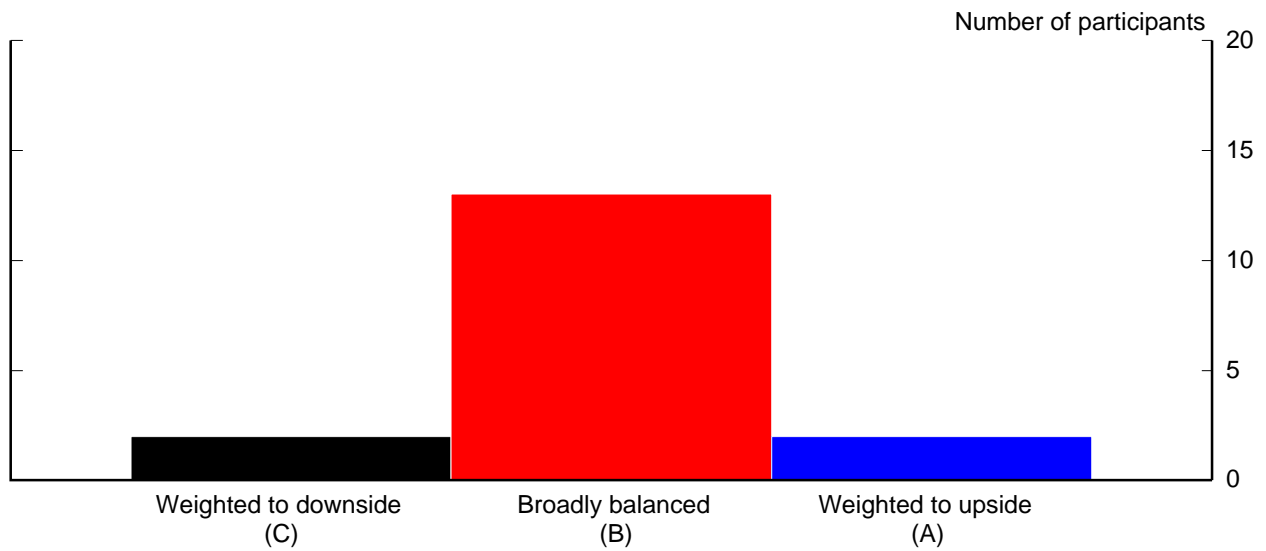
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	B	B	A	A	A	A	A	A	B	A	A	A	A	A	A	A	A
2(b)	B	B	B	B	B	B	B	B	B	B	B	A	A	B	A	B	B

### 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.**

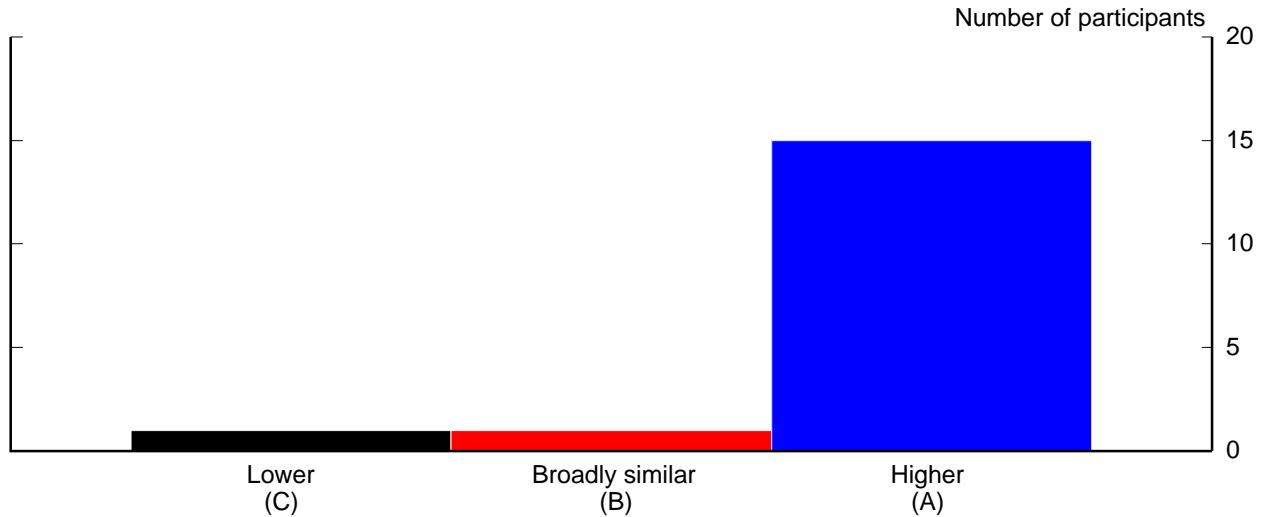


#### Individual Responses

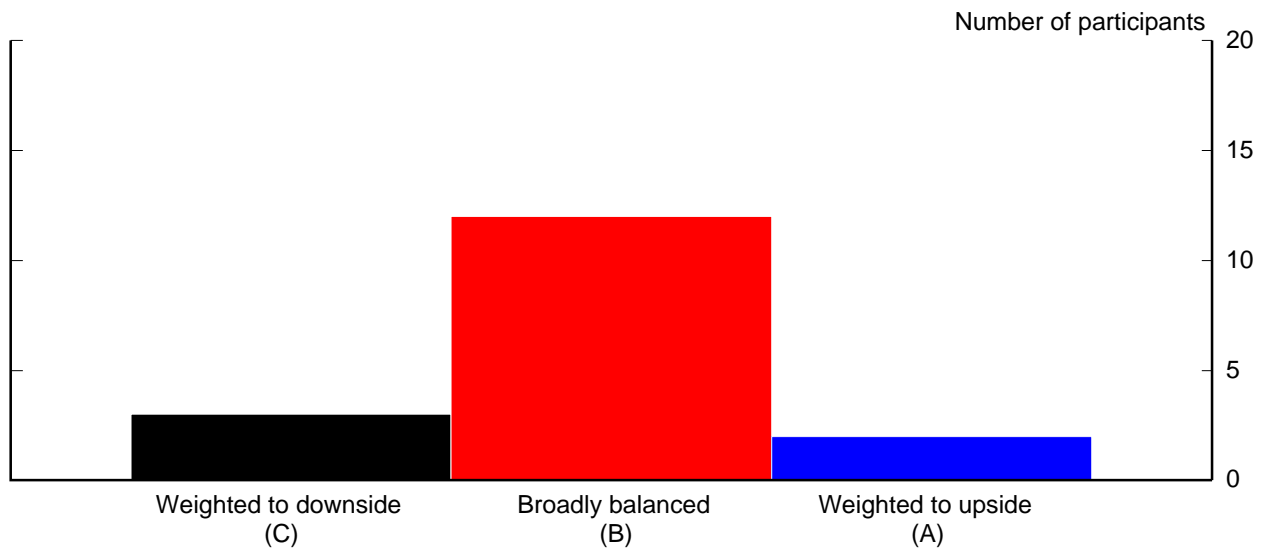
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	B	A	A	A	B	A	A	A	C	A	A	A	A	A	A	A	A
2(b)	B	A	B	B	B	B	B	B	B	A	B	B	C	C	B	B	B

### 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	A	A	B	A	A	A	C	A	A	A	A	A	A	A	A
2(b)	B	A	B	B	B	B	B	B	B	A	B	B	C	C	B	B	C

## Longer-run Projections

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

**Respondent 1:**

In light of the severity and breadth of shocks to the economy and the continuing, though reduced, risk of more to come, the convergence process may well extend beyond five or six years to something closer to eight years.

**Respondent 2:**

N/A

**Respondent 3:**

N/A

**Respondent 4:**

Convergence process likely to take somewhat longer.

**Respondent 5:**

N/A

**Respondent 6:**

At a 5-6 year horizon, the economy has yet to fully converge for output and unemployment. Given the substantial weakness in my near-term projection, the convergence process will likely take 7-8 years.

**Respondent 7:**

I anticipate that the convergence process for real GDP growth and inflation will be substantially shorter than 5-6 years, perhaps on the order of three years for real growth (with a period of overshoot of real growth in the interim during recovery), and an overshoot in the interim in inflation as a consequence of significant near term growth in the monetary base supported by longer term asset purchases that cannot be sold off over a very short time period. I anticipate that the decline in the unemployment rate will lag behind the recovery of real growth.

**Respondent 8:**

I expect that the economy will take about six or seven years to converge fully because of the magnitude of the forecasted degree of slack and the limits on monetary stimulus resulting from the zero lower bound on interest rates.

**Respondent 9:**

N/A

**Respondent 10:**

Unemployment will take longer than five or six years.

**Respondent 11:**

N/A

**Respondent 12:**

Convergence is likely to be unusually slow given the damage to the financial sector, the depth of the recession, and the difficult domestic and global adjustments required.

**Respondent 13:**

By 2015-16 potential growth is 2.4%, down from our current estimate of 2.5-2.7%, as the babyboomers retire. A reasonable estimate for the long-run unemployment rate is 4.5% to 5.5%. We would expect, with appropriate policy and no further adverse shocks, unemployment to be in this range and the output gap to be around zero by 2015-16.

We assume long-term inflation expectations to be anchored around 2.5% on a CPI basis and the FOMC's inflation objective to be around 2% for the PCE deflator and around 2.5% for the CPI. Under these conditions, with the output gap around zero, we would expect PCE inflation of around 2%.

**Respondent 14:**

Convergence to the real economy's equilibrium and to the inflation objective within five years requires lower long-term interest rates in the near-term than what is assumed in the baseline outlook. Absent such a reduction in long-term rates, it is unlikely that the dual mandate's objectives will be achieved within a five-year horizon.

**Respondent 15:**

N/A

**Respondent 16:**

If appropriate policy is followed, I would expect convergence to occur within five to six years. However, I am concerned that delaying the removal of policy accommodation and the shrinkage of our balance sheet could result in higher inflation and mean more time is required to reach a desired inflation rate of 1.8 percent.

**Respondent 17:**

Growth and the unemployment rate should converge over the next 5 years, but inflation may still be below my preferred long-run rate.

## 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:**

Financial market conditions continue to improve and the economy is in recovery. However, the impact of fiscal stimulus going forward has raised uncertainty around my projected path for real output growth. In addition, the effect of the extraordinary monetary policy accommodation in place and the uncertainty about the timing of when we will exit from that accommodation have increased the uncertainty around my inflation forecast.

**Respondent 3:**

N/A

**Respondent 4:**

N/A

**Respondent 5:**

N/A

**Respondent 6:**

N/A

**Respondent 7:**

N/A

**Respondent 8:**

The global economic downturn and uncertainty about the effects of fiscal policy and unconventional monetary policies increase uncertainty regarding the outlook for economic activity.

Problems in commercial real estate, and more generally, the continued vulnerability of financial institutions, pose downside risks to financial stability and the outlook for economic activity. On the other hand, more rapid healing of financial markets and a rebound in confidence may provide greater impetus to growth than expected. Heightened risks to the outlook for economic activity and employment, as well as the elevated variability of commodity prices, raise uncertainty regarding the outlook for inflation.

**Respondent 9:**

I believe that uncertainty regarding projections for GDP and unemployment are now about average. Inflation projections would be more firmly anchored under an appropriate monetary policy, and therefore uncertainty would be lower than the trailing 20-year average.

**Respondent 10:**

Volatility was unusually low during the past twenty years. I expect that the future will be more volatile.

**Respondent 11:**

The severity of the recession means the uncertainty over cyclical dynamics is greater than it has been over the past twenty years. The unevenness of the improvement in credit conditions—with capital markets functioning much better but bank lending still appearing to be capacity constrained—also adds unusual uncertainty. So

do the implications of the unprecedented expansion of the Federal Reserves balance sheet.

**Respondent 12:**

N/A

**Respondent 13:**

Quantitative judgment based on standard deviation of FRBNY forecast distribution for GDP growth and core PCE inflation relative to forecast errors over the last 20 years.

**Respondent 14:**

N/A

**Respondent 15:**

N/A

**Respondent 16:**

N/A

**Respondent 17:**

The situation—of recovery from severe recession and financial crisis along with the effects of extraordinary monetary and fiscal stimulus—has no precedent in post-war history and so uncertainty about how agents and markets will respond is unavoidably high.

## 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:**

Incoming data have led me to revise up slightly my near-term path for growth and raise my path for the unemployment rate compared to my June forecast. I view the risks to growth and the unemployment rate as roughly balanced. Over the longer term, inflation risk is tilted to the upside reflecting uncertainty about the timing of the Fed's withdrawal of accommodation.

**Respondent 3:**

N/A

**Respondent 4:**

N/A

**Respondent 5:**

N/A

**Respondent 6:**

N/A

**Respondent 7:**

Going forward into 2010 as the economy recovers from the recent recession and experiences the fiscal stimulus program as well as a substantial persistent increase in the monetary base, I believe that the risks to real growth will become weighted to the upside. In the near term I see the risks to inflation as broadly balanced.

**Respondent 8:**

Although the risks to the outlook for growth, unemployment, and inflation are greater than usual, they are each roughly in balance.

**Respondent 9:**

N/A

**Respondent 10:**

N/A

**Respondent 11:**

N/A

**Respondent 12:**

N/A

**Respondent 13:**

Quantitative judgment based on the difference between projection and expected value from FRBNY forecast distribution. For inflation, risks are to the downside in the near to medium term and slightly to the upside in the longer term. Given the downward revision in our modal inflation projection since June we now assess the overall balance to the downside



**Respondent 14:**

N/A

**Respondent 15:**

N/A

**Respondent 16:**

In the near term, the weakness of the economy and recent price trends pose some downside risks to core and overall inflation. However, in the medium to long term, the expansion of our balance sheet and increased public nervousness about increases in our balance sheet and federal borrowing present upside risks to inflation.

**Respondent 17:**

risks to core inflation are weighted to the downside by the possibility that inflation expectations begin to move lower as inflation continues to come in below current expectations in the context of persistent large output gaps. The effects of this risk on headline inflation are balanced by the possibility that growth in EMEs puts added pressure on the prices of petroleum and other natural resources.

## Appropriate Monetary Policy

### 3. Does your view of the appropriate path of interest rates differ materially from the interest rate assumed by the staff in the Greenbook?

**YES**

12

**NO**

5

**Respondent 1:** No

N/A

**Respondent 2:** Yes

My forecast continues to assume a less accommodative federal funds rate than in the Greenbook baseline. I view the appropriate monetary policy as one that raises the funds rate to about 2.5 percent by the end of 2010 and 3.5 percent by the end of 2011. By the end of 2012, I see the funds rate at about 4.5 percent.

**Respondent 3:** No

N/A

**Respondent 4:** Yes

Expect policy to normalize materially sooner than Greenbook base case.

**Respondent 5:** Yes

For reasons relating to “side effects” of ultra-low rates (e.g., on the dollar, inflation expectations, and risk-taking), may need a modest move toward normalization (e.g., 100bp) in 2010:H2.

**Respondent 6:** Yes

Due to a stronger inflation profile in my outlook, the federal funds rate begins to increase gradually in the second half of 2010.

**Respondent 7:** Yes

While the pattern of recovery from the recent recession is uncertain, I believe that under appropriate monetary policy to maintain price stability we will have to move away from the current target range for the funds rate as part of the process of withdrawing from quantitative easing much sooner than assumed in the Greenbook forecast.

**Respondent 8:** No

N/A

**Respondent 9:** Yes

I believe that under an appropriate monetary policy the committee would announce a numerical inflation objective. In order to achieve that objective, the funds rate will begin to increase next year.

**Respondent 10:** Yes

I expect that the Fed Funds rate will be raised above its current low level sometime in 2010.

**Respondent 11:** Yes

We expect that the federal funds rate will follow a path near to slightly above that expected by futures markets.

**Respondent 12:** No

N/A

**Respondent 13:** Yes

Through 2009-10 identical. We assume the normalization of interest rates starts in 2011 and continues at a faster rate in 2012. Because of differences in our inflation forecast, the difference in real rates is less substantial. Our views on the size of the balance sheet are close to the Greenbook assumption.

**Respondent 14:** Yes

The forecast is conditioned on roughly the same short- and long-term interest rates assumptions as in the Greenbook. But this path for the interest rates is not consistent with achieving the dual mandate's goals over a five-year horizon.

**Respondent 15:** No

N/A

**Respondent 16:** Yes

I expect that it will be necessary to begin raising the target for the federal funds rate in 2010, in contrast to the Greenbook assumption that the current target range is maintained through 2011. Holding rates down so low so long would invite asset imbalances and risk repeating past mistakes. In my judgment, appropriate policy will also involve taking steps to reduce the size of our balance sheet and normalize its composition in a timely manner.

**Respondent 17:** Yes

I assume that the policy rate begins to rise around the middle of 2011, responding to my slightly stronger output forecast than in the Greenbook.

## Forecast Narratives

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

**Respondent 1:**

Key factors include widespread expectations of slow employment growth and consequent drag on consumption and uneven nature of housing market recovery. Key uncertainty is impact of diminution in effects of stimulus and of our LSAP program in first half of 2010.

**Respondent 2:**

The recent data on labor markets have been somewhat weaker than what I anticipated in my June forecast and have led me to revise upward slightly my path for the unemployment rate. As well, I revised up my near-term path for growth based on the stronger-than-expected data. In my view, the economy is now in recovery and I expect an above-trend pace of 3 percent growth in 2010 as recovery dynamics take hold. I expect growth above trend in 2011 and 2012. The labor market recovery is gradual — I expect the unemployment rate edges down to about 6.5 percent by the end of the forecast horizon, at which time it remains above the natural rate of unemployment by a bit over 1 percentage point. I anticipate that inflation will rise into 2011 then pull back in 2012 in response to tighter monetary policy. In my view, the substantial liquidity that is now in the financial system raises the risk that inflation will rapidly accelerate to unacceptable levels and that inflation expectations will become unanchored. To ward off these developments, the FOMC will need to commence a steady tightening of monetary policy that begins some time in 2010.

**Respondent 3:**

I have assumed a very modest boost to spending from fiscal stimulus that largely dissipates in the first half of 2010. Although financial market function is notably improved, financial firm balance sheets are still quite fragile and some financial markets remain dysfunctional, obstructing somewhat the flow of credit to households and businesses. I also project a further rise in the personal savings rate as household attempt to further improve their balance sheets. Moreover, the extraordinarily high level of uncertainty about the outlook is likely to also inhibit the recovery process relative to historical experience. I have assumed that these types of factors will combine to restrain potential growth in the economy for some time.

**Respondent 4:**

Expect less medium term benefit from fiscal stimulus. Expect higher NAIRU, lower productivity, and somewhat lower growth rates throughout forecast period. Finding new equilibrium will take somewhat longer than a typical recovery.

**Respondent 5:**

Moderate growth in 2010:H2 is unfolding as expected, reflecting the inventory cycle; some improvement in housing and equipment investment; support from fiscal policy, including one-off factors such as cash for clunkers and the first-time homebuyers' credit; continued improvement in equity and credit markets, though less so in banks; some stabilization in household spending; and stronger global growth, especially in Asia. Slow to moderate growth (a subpar recovery) is likely in 2010, though uncertainty about 2010 is high. An important potential drag on growth in 2010 is the likelihood of a jobless recovery, the product of employer caution and uncertainty; the ability of employers to wrest productivity gains; and tight credit, particularly relevant for smaller firms. Although household spending should be supported by increased wealth, somewhat better credit availability, and rising income and sentiment, the weakness in the labor market and continuing concerns about household leverage should restrain the increase in consumption spending in 2010. Global growth will help manufacturing and increase the profits of US firms, but the effects on the prices of oil and other commodities will be a negative. Also, net exports will not contribute significantly to overall growth, and the current account may worsen a bit. Housing may slow as the Fed stops buying MBS, foreclosures rise, and tax credits expire. In all, growth in 2010 will be insufficient to reduce unemployment significantly.

Beyond 2010 the normal recovery pattern should assert itself more strongly. Medium-term potential growth rates may be slightly better, due to good productivity performance, but there may be a downward level shift in potential output going on now, reflecting lower investment, labor market disruptions (loss of skills, for example), and the need for reallocation among industries. Imbalances, including those related to bank and household balance sheets, fiscal policy, industry mix, and the current account will complicate the return to sustainable growth.

Resource slack, including high vacancy rates in apartments, will keep core inflation moderate (probably declining slowly). Rapid (perhaps too rapid) growth in emerging markets, plus a weaker dollar, could put upward pressure on commodity prices, leading to headline inflation rates above core rates.

**Respondent 6:**

The consumer will continue to be under considerable strain well into 2010 and possibly beyond, facing an extremely weak labor market, low net worth, and tight credit conditions. Commercial real estate is also distressed—with rising vacancy rates and tight credit—and is likely to remain so for some time. Slower inventory reductions and eventual inventory gains lead to positive contributions to GDP growth over the next several quarters. The robust resumption of foreign growth, notably from Asia, supports strong export growth in the near-term.

My forecast assumes that inflation expectations will be “anchored” near current levels of roughly 2% throughout the forecast period. Considerable uncertainty surrounds this assumption. Incoming data indicating that either a substantive deceleration or acceleration in core prices could push expectations in the same direction. Additionally, worries of an impending inflationary episode due to the Federal Reserve’s balance sheet actions could move expectations higher.

**Respondent 7:**

The unfolding path of economic activity in the first three quarters of 2009 is consistent with my earlier expectation of a slowing contraction in the first half of the year, with output bottoming out in the middle of the year and recovery in the second half. Hence I have not revised my previous forecast for real growth. In 2010 and 2011 I anticipate that real growth will occur at greater than steady-state rates, reflecting normal cyclical patterns reinforced by a modest impact of the fiscal stimulus package and the impact of the substantial monetary stimulus that has been in train since last fall. I expect that subsequently growth will slow and approach steady-state rates. Core PCE inflation from the fourth quarter of last year through the third quarter of 2009 is in the range of 1.5 percent at an annual rate – lower than I previously expected. I do not see this rate of inflation abating in the near future. While headline PCE inflation from the fourth quarter of last year through the third quarter of 2009 is slightly less than one percent at annual rates, recent increases in energy prices lead me to expect that the headline rate will approach the core rate as 2009 progresses. Subsequently, under appropriate monetary policy, inflation should approach my preferred long-run rate of 1.5 percent, though I believe that it will rise above that rate in an interim period. I do not believe that future energy shocks can be forecasted, so with available information I expect that core and headline inflation will be roughly equal in the out years of the projection period.

**Respondent 8:**

Recent economic indicators—including consumer spending, housing starts, and industrial production—have turned positive, suggesting a moderate recovery is in train. Business inventory investment is poised to rebound strongly. Foreign economies also show signs of stabilizing. However, labor markets continue to deteriorate and business spending remains weak.

Financial conditions have improved. I expect that the process of healing the banking and financial sec-

tors will proceed slowly and impaired financial intermediation will interfere with the pace of recovery for some time. In addition, households are in the midst of a lengthy process of repairing their balance sheets that have been weakened by massive stock and housing market losses and debt accumulation. Fiscal and monetary stimulus provide key drivers for recovery over the next few years.

Significant slack in labor and goods markets should keep inflation low, but well-anchored inflation expectations should help avoid sustained deflation.

**Respondent 9:**

I believe the recession ended this summer. The recovery is likely to be less robust than average, due to the continuing drag from commercial construction and a weak recovery in housing and autos. I believe that fiscal policy effects will be smaller than generally projected, and consequently my outlook is not heavily dependent on the amount and timing of additional fiscal policy actions.

**Respondent 10:**

Financial and labor markets have both stabilized. However, bank lending is low and unemployment is high. At the same time, bank holdings of excess reserves are large.

**Respondent 11:**

There is substantial uncertainty over the degree to which losses associated with the deep recession will affect banks' lending capacity and thus their ability to meet the financing needs of small and medium-sized businesses. The potential needs for structural reallocation also impart uncertainty both for actual output and the measurement of resource gaps—although the gaps will be very large for some time under plausible scenarios. Consumer and business sentiment could prove fragile—either on the up or down side—and related potential swings in confidence impart further uncertainty onto the forecast. Accordingly, there are bimodal aspects to the outlook. In the downside scenario, growth is held back by continued disruptions to credit flows and the negative effect on sentiment of an economy that does not bounceback robustly from the deep recession. In the upside case, accommodative policy and further improvement in credit flows support spending. Furthermore, continued gains in output bolster confidence enough to cause a spurt in spending from plans that had been put on hold during the recession. Our forecast averages these scenarios—but because we see both as very plausible, we think the uncertainty over the expected outcome is higher than usual.

**Respondent 12:**

Despite encouraging developments, we are very far from being out of the woods. Wage and salary incomes have fallen sharply, putting intense strain on household finances. The deteriorating performance of consumer and commercial real estate loans could put new pressure on the financial system if the economy does not gain meaningful traction soon. Fiscal stimulus and a slowing rate of inventory liquidation will carry us only so far. The banking outlook, especially for global banks that are too big to fail, is the wild card impacting the transmission of monetary policy. And the plethora of new economic and regulatory initiatives is creating uncertainty among business decision makers—uncertainty that might retard commitments to expansion of employment and CAPEX in the U.S.

**Respondent 13:**

In our central projection, the recovery of the US economy began in 2009Q3 after a post WWII record four-quarter decline of real GDP of nearly 4%. Indeed, based on the advance estimate, real GDP rose at 3.5% rate in 2009Q3, and growth in the fourth quarter is expected to be comparable to that of the third, which is stronger than we expected in June. Real personal consumption expenditures increased 3.4% in 2009Q3, due largely, but not entirely, to the boost to light-weight vehicle sales provided by “cash for clunkers.” Similarly, single-family housing starts have moved up more than anticipated due to the strong response to the first time home buyer tax credit as well as the success of the Fed's purchases of agency MBS in lowering mortgage interest rates. Finally, led by the auto sector, the inventory cycle is turning out to be stronger than expected, likely contributing 2 to 2  $\frac{1}{2}$  percentage points to the second half growth rate.

Despite the stronger-than-expected second half growth of real GDP, labor market conditions are turning out to be only modestly better than expected in June. On the plus side, it now looks as though the unemployment rate will average closer to 10% in 2009Q4 rather than the 10-1/2% previously expected. However, in 2009Q3 hours worked continued to decline more rapidly than employment while the rate of increase of wages and salaries continued to slow. For 2009Q3, aggregate wage and salary disbursements were 5.2% below year-ago levels, the steepest year-over year decline of the post WWII period. Initial claims for unemployment insurance have declined from their peak but remain stubbornly high at around 530,000 per week.

In contrast, inflation has behaved closer to our June projection. Total PCE deflator inflation will likely increase at a 2% annual rate in the second half of 2009 after being essentially zero over the first half of the year, reflecting the large swings in energy prices. Core inflation has been stable, but numerous indicators are consistent with the view that the large amount of slack in the economy is putting downward pressure on underlying inflation.

For 2010 we continue to project growth of real GDP around 2%, with the first half of the year notably weaker than the second half. If the swing in the inventory cycle is very strong in 2009Q4, it is quite possible that GDP growth could be considerably higher than our projection for Q4 but then much weaker in the first half of 2010. As growth in 2010 is below our estimate of potential, there is some further upward movement of the unemployment rate to around 10  $\frac{1}{4}$ % by midyear. This is very sluggish growth for the first full year of recovery and is below the consensus forecast. A key feature of this projection is that the significant headwinds confronting the household sector prevent a typical cyclical rebound of consumer spending. Payroll employment is roughly five percent below its peak level and expected to recover very slowly. The household sector has made only minimal progress in reducing its substantial debt overhang. The effects of the stimulus bill on taxes and transfers are largely behind us, and energy prices have increased from recent lows. While the stock market and home prices have risen, we estimate that as of 2009Q3 the ratio of household net worth over disposable income remains roughly 20% below its peak. Finally, while credit conditions appear to be gradually easing, we expect them to remain tight relative to the standards of the recent past.

A second key feature of our forecast is that while it appears that the correction in housing production is over, it is unlikely that there will be the surge of residential investment because tightened mortgage underwriting standards constrain demand and high volumes of foreclosed homes will continue to come onto the market. Finally, new construction of multifamily units has taken a distinct movement downward reflecting excess supply of condos and high rental vacancy rates. With consumption and residential investment recovering on a gradual path, it follows that any recovery of business investment in new equipment and software and new structures is likely to be delayed. This is even more the case given the steepness of the decline of output during the recession, which has led to historically low capacity utilization rates, rapidly rising retail and office vacancy rates, and sharply declining prices for existing commercial real estate. Also contributing to the relatively tepid growth expected for 2010 is the ongoing structural adjustment taking place in the state and local government sector which is expected to result in significant declines in employment in this sector for much of the first half of the year. Finally, while growth prospects for our trading partners have generally improved, suggesting a rebound of exports, improving final domestic demand will be associated with rapidly increasing imports. As a result, net exports are unlikely to be a major contributor to growth over the forecast horizon.

By the second half of 2010 and into 2011 we expect headwinds to dissipate and the recovery to gather steam, with growth of 4% in 2011 and a further improvement to 5% in 2012. With this above potential growth, the unemployment rate should be approaching 7% by the end of 2012. Underlying this projection is the expectation that financial market functioning returns to more normal conditions and that consumer and business confidence and the general appetite for risk taking have been restored. With household income and

balance sheets improving and credit flowing more normally, the substantial pent-up demand for consumer durables, housing, and business equipment and software will start to be satisfied. Moreover, the structural adjustments of state and local governments and of the commercial real estate sector will likely have run their course by that time.

Barring a significant decline in either or both the level of the economy's potential output or its potential growth rate, this point forecast implies that a large output gap will persist over most of the forecast horizon. Accordingly, we expect core inflation to slow to around 1% in 2010, with a sizeable risk that it could be even lower. But by late 2010 and into 2011, as final demand firms within the context of anchored inflation expectations, we expect core inflation to start a move back towards our view of the FOMC inflation goal.

The risks to our central projection for real activity are still significant and remain skewed to the downside. In the near-term, the key risk remains that financial market conditions and consumer and business confidence do not improve as assumed. This in turn leads to lower than expected asset prices, less recovery in the supply of credit and, therefore, an even weaker path for final demand. A related risk is that, even if financial markets and asset prices behave as assumed, the low path of household net worth embedded in our central projection induces a steeper-than-expected increase of the personal saving rate, keeping consumer spending weaker for longer. The sharp decrease in the prime age employment rate during the current cycle, combined with the large share of Americans nearing retirement age, make this risk particularly acute. Finally, an important risk over the medium term is the uncertainty surrounding our assumption of the economy's potential growth rate. There is considerable concern that with the weakness of business investment and a necessary reallocation of labor and capital, the economy's potential growth rate has slowed significantly. On the other hand, recent productivity numbers have been surprisingly strong. Another source of risk to the forecast is on the fiscal policy front. Under current law many of the tax provisions enacted in 2001 and 2003 are scheduled to expire at the end of 2010. The outcome of the debate over these provisions could potentially have a significant impact on both growth prospects and inflation expectations. Finally, relatively modest changes in variables such as productivity growth, the participation rate, and the average work week could end up having a significant impact on the ultimate path of the unemployment rate.

The risks around the central scenario for inflation are to the downside. Clearly, the still significant downside risk to the growth projection combined with the possibility of no meaningful decline in potential implies downside risk to the inflation projection. In contrast, with the aggressive global monetary and fiscal policy response to the ongoing financial crisis could eventually raise inflationary pressures more than expected, leading to some risk of higher inflation towards the end of the forecast horizon.

The heightened uncertainty associated with recoveries from banking and financial crisis as well as the uncertainty associated with the timing, magnitude, and effectiveness of policy responses produces relatively high uncertainty around our central projection compared to typical levels.

**Respondent 14:**

Recent data on the pace of economic activity have been, overall, positive. The good news on the pace of growth in the second half of this year, however, has to be placed in a context in which the level of economic activity remains very low. The unemployment rate is now at a level very similar to the rate hypothesized in the stress test scenario for banks conducted earlier this year. There is still little improvement at this point in privately-generated sources of income, with households' disposable income being significantly supported by the ongoing fiscal stimulus. Over the course of the forecast horizon, the economy faces the challenge of shifting away from the support offered by the fiscal stimulus and to income generated by the private sector. In this regard, incoming data are not very comforting. Wage growth has slowed significantly and the high level of unemployment suggests continued weakness in wages over most of the forecast horizon. In addition, credit availability is likely to place constraints on both households' and firms' spending in the early stages of the recovery.



In all, we expect the ongoing recovery to make only a relatively small dent to the unemployment rate gap by the end of 2011. Given the sizable slack in the labor market over the forecast horizon, the rate of core inflation hovers around zero in 2011 and 2012.

The risks to activity have become somewhat more balanced, but the downside risks at this point are much more costly than the potential upside, given that a faster-than-expected recovery is unlikely to generate meaningful inflationary pressures. The risks to inflation continue to be on the downside. Given the unemployment rate forecast, several accelerationist Phillips curve models would predict outright deflation starting in the second half of 2010.

**Respondent 15:**

N/A

**Respondent 16:**

The economy has now begun a recovery that, over the next year or so, is likely to be sluggish by historical standards, due to some important economic and financial headwinds. The recovery is driven in part by highly stimulative monetary and fiscal policy. But because temporary tax incentives pulled forward some auto and home sales and the stimulus from ARRA will turn to a drag in the second half of 2010, the pace of expansion is likely to be slower over the next year or so than in the third quarter of this year. The headwinds include some lingering impairment of financial market functioning, the problems in commercial real estate and their broader implications for bank lending and credit availability, the likely need for further de-leveraging by consumers, and businesses' uncertainty about the economic environment. Over the medium term, as uncertainty diminishes and consumer spending maintains a sustained rate, business spending should pick up and contribute significantly to economic growth.

In light of the weakness of the economy and recent price trends, I expect core inflation to remain low through at least the next year. However, over time, as the recovery continues, inflation is likely to move up, to a level more in line with long-term inflation expectations. Dollar depreciation and increases in energy prices will help to move core inflation higher.

With the economy and financial markets still in highly unusual circumstances, the uncertainty surrounding the outlook for growth and inflation remains high by historical standards. However, I think the risks are now broadly balanced. All of the headwinds facing the economy, such as the problems in commercial real estate, pose downside risks to GDP growth. But on the positive side, the surprising strength of the economy in the third quarter could maintain momentum. Reflecting the overall resiliency of the economy and historical patterns, the sharp recession could be followed by a healthy recovery. In the case of core inflation, the weakness of the economy poses a near-term downside risk, while the expansion of our balance sheet and public nervousness about our balance sheet and federal borrowing pose longer-term upside risks.

**Respondent 17:**

the economy recovers as housing declines, inventory destocking, and other factors previously weighing on demand abate. But the growth in final demand continues to be constrained by impairment of some securitization markets, only gradual easing in credit availability from banks, past declines in wealth, and business and household caution following the severe downturn and weak recovery in labor markets.

### Forecast Narratives (continued)

4(b). Please indicate the extent to which the BEA's redefinition of core PCE inflation has led you to adjust your current projections for that variable, relative to the projections that you submitted last June. (For 2009 and beyond, the BEA's redefinition has led the staff to raise its projections for core PCE inflation by about 0.1 percentage point per year.)

**Respondent 1:**

Same as staff

**Respondent 2:**

The redefinition has had an insignificant effect on my forecast.

**Respondent 3:**

This redefinition had no influence on my core PCE projections.

**Respondent 4:**

N/A

**Respondent 5:**

Minimal. If number is needed, say 0.0 to 0.1 per year.

**Respondent 6:**

My adjustment is quite similar to that of the Greenbook.

**Respondent 7:**

No significant change from the redefinition.

**Respondent 8:**

I added 0.1 percentage point per year to my core PCE price inflation forecast relative to my June 2009 projection.

**Respondent 9:**

This is a small item, and it is not unusual for a benchmark revision to change historical values by larger magnitudes. Indeed, despite this factor the overall benchmark revision for PCE inflation in Q1 was down. Going forward, this change does not alter my view of an appropriate monetary policy, nor does it change my view of our ability to achieve our goals. Accordingly I have not changed my forecast for 2010 and beyond because of this definitional change. The change in my forecast for the second half of this year reflects the downward revision for Q1 and generally low inflation readings over the summer.

**Respondent 10:**

Not applicable.

**Respondent 11:**

N/A

**Respondent 12:**

Because our inflation forecasts are based on movements in trimmed-mean PCE inflation and because "food away from home" has typically been included in trimmed-mean inflation, the impact of the BEA's revisions on our view of the inflation outlook has been negligible.

**Respondent 13:**

We were aware of the redefinition of core PCE in June and would agree with the Board staff that all else equal, it “raises” core inflation by around 0.1 pp. We should note that in terms of our short-term forecast the redefinition is dominated by our uncertainty over the effect of the extraordinary amount of slack on inflation. Further, since we assume in our longer-run projections that core inflation is equal to total inflation and this long-run rate is pinned down by the FOMC’s inflation objective, it would have no effect on our forecasts more than two years out.

**Respondent 14:**

BEA’s redefinition of core PCE inflation does not materially affect the contours of our inflation forecast.

**Respondent 15:**

N/A

**Respondent 16:**

In light of the historical differential, I have adjusted my core PCE projections upward (relative to what the projections would be under the old definition of core inflation) by 0.1 percentage point per year.

**Respondent 17:**

same as staff

## Forecast Narratives (continued)

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

**Respondent 1:**

I continue to be moderately more pessimistic on job creation, with concomitant effects on some other variables.

**Respondent 2:**

My inflation forecast is less influenced by the degree of resource utilization in the economy and so I project a higher pace of inflation over 2010-2012 than does the Greenbook. Given the strength of economic growth in my forecast and the higher inflation path, the policy path is less accommodative over the forecast horizon.

**Respondent 3:**

My baseline trajectory for unemployment and inflation conforms reasonably well to the Greenbook baseline. However, I do project a more restrained pace of real GDP growth and less potential output growth over the forecast horizon than the Greenbook.

**Respondent 4:**

N/A

**Respondent 5:**

Moderately more pessimistic about 2010, due to concerns about the labor market and bank credit. A jobless recovery will undercut household spending growth. More generally, final demand has not clearly stabilized yet. See some upside risk in global commodity prices, which could slow US growth and increase US inflation.

**Respondent 6:**

Following the relatively strong third quarter, my forecast includes two consecutive quarters of declining real GDP growth before returning to above trend growth throughout the balance of the forecast period. Overall, output growth is considerably weaker in 2010 and moderately so in 2011.

Despite a moderately weaker growth profile, my outlook entails more core PCE inflation in the second half of 2010 and beyond, primarily due to an assumption that inflation expectations remain anchored near current levels in the neighborhood of 2%. Additionally, the recession has generated a substantial amount of worker dislocation, pushing up the quantity of unemployment that is considered “natural” thereby shrinking the unemployment gap. Moreover, my forecast is likely to imply a smaller reaction of inflation to changes in the gap.

**Respondent 7:**

Compared to the 70% confidence intervals indicated for the Greenbook forecasts, the differences between the point estimates in the Greenbook baseline forecasts and my forecasts are not different in any meaningful statistical sense. However the time path of my projections does differ from the Greenbook baseline, in that I see stronger near-term growth than that in the Greenbook baseline with real growth subsequently tapering off in 2011 and 2012. This contrasts with the increasing real growth rates that the Greenbook shows in those years. While my near-term inflation outlook is essentially the same as that in the Greenbook forecast, I see inflation increasing in an intermediate period before returning to the rate that I believe is consistent with appropriate monetary policy. In contrast, the Greenbook forecast sees inflation declining and persisting at very low rates for “an extended period”.

**Respondent 8:**

My forecast is very similar to the Greenbook forecast.

**Respondent 9:**

I believe that under an appropriate monetary policy the public's inflation expectations would be well anchored, and the inflation path would be higher than in the Greenbook. In order to keep inflation on target, I believe the federal funds rate will be on an upward trajectory by the end of 2010.

**Respondent 10:**

The forecasts are roughly congruent.

**Respondent 11:**

We do not see inflation falling as low as the Greenbook does. One reason is that our current output gap is smaller than the Greenbook's because we did not change our view of historical structural productivity. In addition, we see longer-run inflation expectations as being consistent with a higher level of actual inflation in the out-years of the projection period.

**Respondent 12:**

The Greenbook baseline forecast underestimates the continuing drag on the economy from damage to the financial sector, uncertainty created by new economic and regulatory initiatives, and the deterioration in household cash flow. It does not take into account inducements deriving from regulatory and taxation initiatives for corporations and financial investors to invest in more promising markets abroad, at the expense of job creation and CAPEX at home. (Although these effects are not quantifiable, they are palpable.) It also assumes a too-rapid response of the unemployment rate to reductions in the output gap when these reductions finally do take hold, and underestimates the upward pressure on commodity prices due to a stronger world economy.

**Respondent 13:**

We assume lower inflation persistence than does the GB. Thus, for our medium-term inflation outlook we project inflation within the "mandate-consistent" range in late 2011 under the assumption of well-anchored inflation expectations.

**Respondent 14:**

The differences to the real outlook are very minor. As concerns inflation, we expect core inflation to be lower than in the Greenbook, as a result of a more meaningful trade-off between inflation and unemployment.

**Respondent 15:**

N/A

**Respondent 16:**

The key differences in our forecasts are in the growth outlook for 2010 and the path of monetary policy. I expect growth in 2010 to be modestly weaker than Greenbook does, reflecting my concerns about the headwinds facing the economy. I also believe that policy will need to be tightened more aggressively than in Greenbook. Holding rates so low through 2011 will invite asset imbalances and lead to a problematic rise in inflation expectations and, eventually, inflation.

**Respondent 17:**

slightly higher growth in Q4 2009 and 2010, taking more of a signal from recent positive surprises.

## Forecast Narratives (continued)

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

**Respondent 1:**

Short-term forecast affected by stronger than expected activity in Q3.

**Respondent 2:**

The key factors causing me to revise my near-term projection have been the weaker-than-expected labor market data and stronger-than-expected growth data. However the basic shape of my forecast and the story underlying it have not materially changed.

**Respondent 3:**

N/A

**Respondent 4:**

N/A

**Respondent 5:**

Financial markets continued to improve, as did housing and global activity, suggesting a better near-term outlook. Consumer spending has held up so far. Medium-term outlook is weakened on net by poor labor market performance and the increasing likelihood of a jobless recovery. Bank credit has not revived even as other credit markets have improved.

**Respondent 6:**

The incoming data led to a much stronger third quarter than we had anticipated, indicating an end to the recession. Nevertheless, many of the underlying weaknesses that I had previously identified remain, which should produce a weaker recovery relative to historical norms. In particular, I expect a deceleration in real output going into 2010 before we see near- or above-trend growth. I have also dampened my near-term inflation outlook since the June submission due to lower-than-expected observed price increases.

**Respondent 7:**

Recent measures of economic activity appear to be evolving as I had expected in my projections from last quarter, hence I have not revised my projected path of real output. My forecasts for the unemployment rate are unchanged in the near term, but I have revised my out-year (2011) forecast down. I have revised my forecast for headline PCE inflation in 2009 upward and for Core PCE inflation in 2009 downward, given the available data through the first three quarters, but my inflation forecasts (headline and Core PCE) for 2010 and beyond are unchanged.

**Respondent 8:**

Since June, economic data have come in consistently better than I anticipated, and financial conditions have improved considerably. These developments have caused me to raise my forecast for real GDP growth in 2009 and 2010 and to lower my forecast for the unemployment rate correspondingly. Recent core inflation data have been a touch lower than expected, but this is balanced by a lower forecasted rate of unemployment in 2010 and thereafter. On net, these influences offset and my forecast for core PCE inflation is little changed from my June projection. The lower projected path for commodity prices has caused me to lower somewhat my forecast for overall PCE price inflation.

**Respondent 9:**

We have raised our forecast for real growth in response to positive news on consumer spending, housing starts and home sales, manufacturing activity, initial unemployment claims, equity prices, foreign economic activity, and corporate bond yields. The change in the inflation forecast for the second half of this year

reflects the downward revision for Q1 and generally low inflation readings over the summer.

**Respondent 10:**

Not applicable.

**Respondent 11:**

Our revisions have mainly been to 2009:H2 and 2010:H1, and reflect the somewhat better- than-anticipated incoming data.

**Respondent 12:**

The near-term outlook has significantly improved due to the stabilization of inventory investment and consumer demand, the effects of fiscal stimulus and tax incentives, and a strengthening of demand for U.S. exports. These influences have so far more than offset the deleterious effects of increased policy uncertainty.

**Respondent 13:**

In June we judged it likely that the US economy would start a sluggish recovery in the second half of 2009 with unemployment peaking at 10.5%. Incoming expenditure data and improved financial markets conditions has been led us to upgrade our near term GDP forecast. While there are some tentative signs of stabilization in the labor market and overall unemployment has increased less quickly than our June projection, the employment levels of prime age workers continue to drop. The fall of close to 5 percentage points in the employment to population ratio of prime age workers (0.9 of which occurred since May) is unprecedented in the post-war period. Given this weakness in a crucial area of the labor market, we assess that much of the improvement in our near term forecast since June is due to support from the extraordinary set of government policies used to prevent a deeper downturn rather than underlying strength. Thus, once the downward revision to GDP in annual NIPA revisions is taken into account, we have not materially increased our forecast for the level of GDP at the end of 2011. House prices have also surprised us to the upside but again we attribute much of this to government policy rather than a significant improvement in the underlying fundamentals.

Core inflation data (including revisions) has surprised to the downside since June. Much of this surprise was in non-market priced services and thus we ignored it. On the other hand, core goods inflation continues to surprise on the upside and core service inflation (excluding the non-housing non market prices) continues to surprise on the downside. The differing persistence of the core service and core goods inflation has led us to reduce our inflation projection along with the large increase in slack amongst prime age workers.

The downside risks to our central scenario projection have decreased considerably since June. The source of this risk mitigation is continued evidence that the wide range of government policy actions have gained traction in reversing the adverse feedback loop of the September 2008 to March 2009 period. Further, we have increased the upside risk from productivity growth remaining above our assumption.

Since long-term inflation expectations have remained stable since June we have decreased some of the upside risks to inflation in the near term from an unmooring of inflation expectations. The “slope of the Phillips curve” is difficult to measure precisely. Our modal projection is mainly based on a model that uses the prime age male unemployment rate to measure slack and currently assumes the curve is very flat. Hence there is an increased risk that if the curve is steeper, inflation will be well below our forecast.

In June the policy assumption underlying our central projection was a renormalization of the policy rate starting in 2011 along with no substantive changes in the balance sheet or LSAP. We have made no changes to these assumptions.

**Respondent 14:**

The pace of economic activity in the second half of this year appears to be somewhat faster than previously thought. However, labor market conditions have deteriorated more than we were anticipating. Overall, changes to both the real and the inflation outlook are minor.

**Respondent 15:**

N/A

**Respondent 16:**

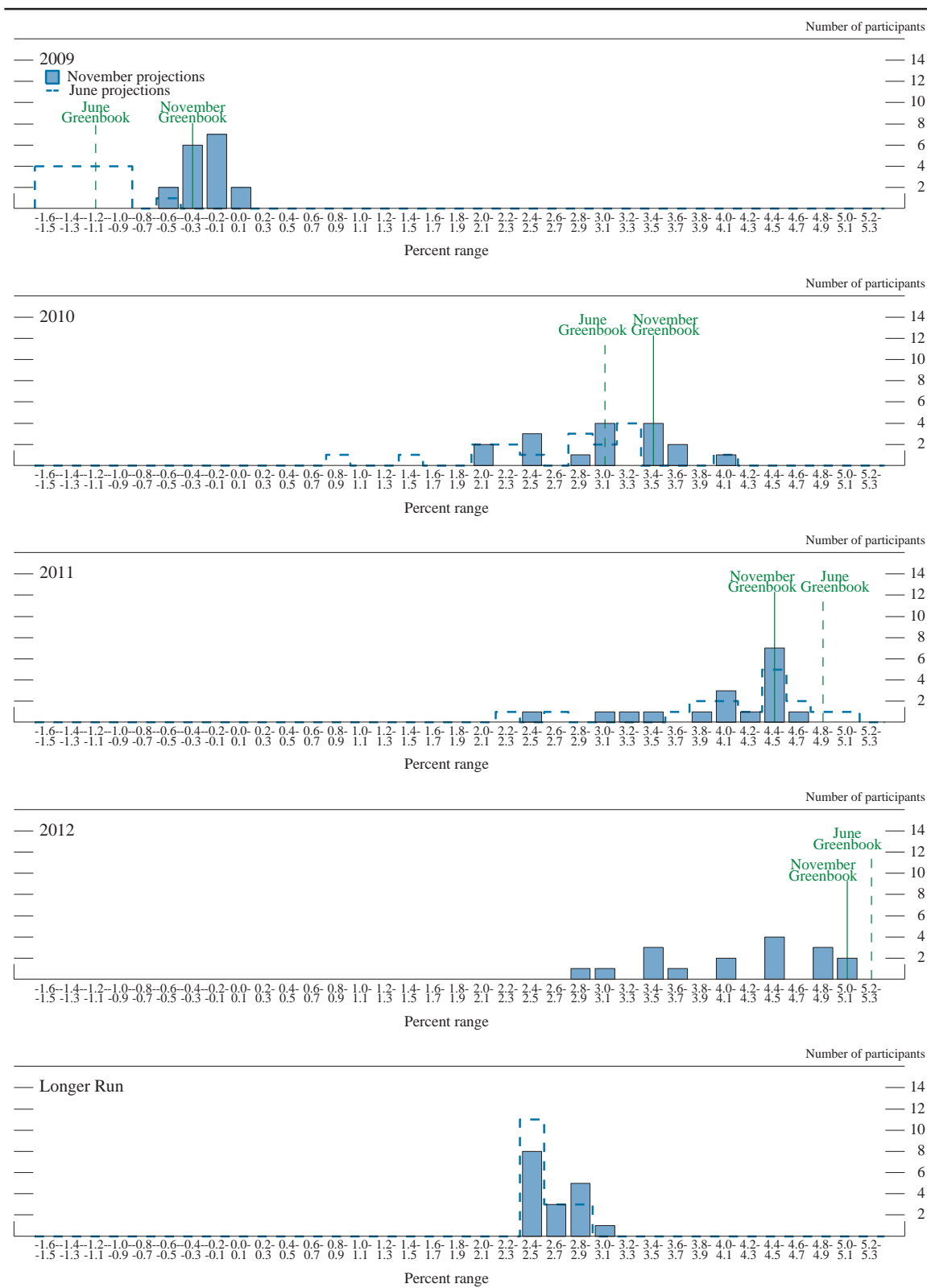
The only sizable change to my forecast is in the projection of GDP growth for 2009. This change is entirely due to data for the second half of 2009, especially the third quarter, coming in stronger than anticipated back in June.

**Respondent 17:**

incoming data have been stronger than expected and financial conditions have improved faster than I expected in June, so my projection of output going forward is somewhat higher, but the basic contours haven't changed. Despite the stronger output, my projection for the unemployment rate is very similar, inflation expectations have been stable, and unit labor costs have been very soft; together with a fairly flat Phillips curve, these factors give me essentially the same projection for subdued inflation that I had in June.

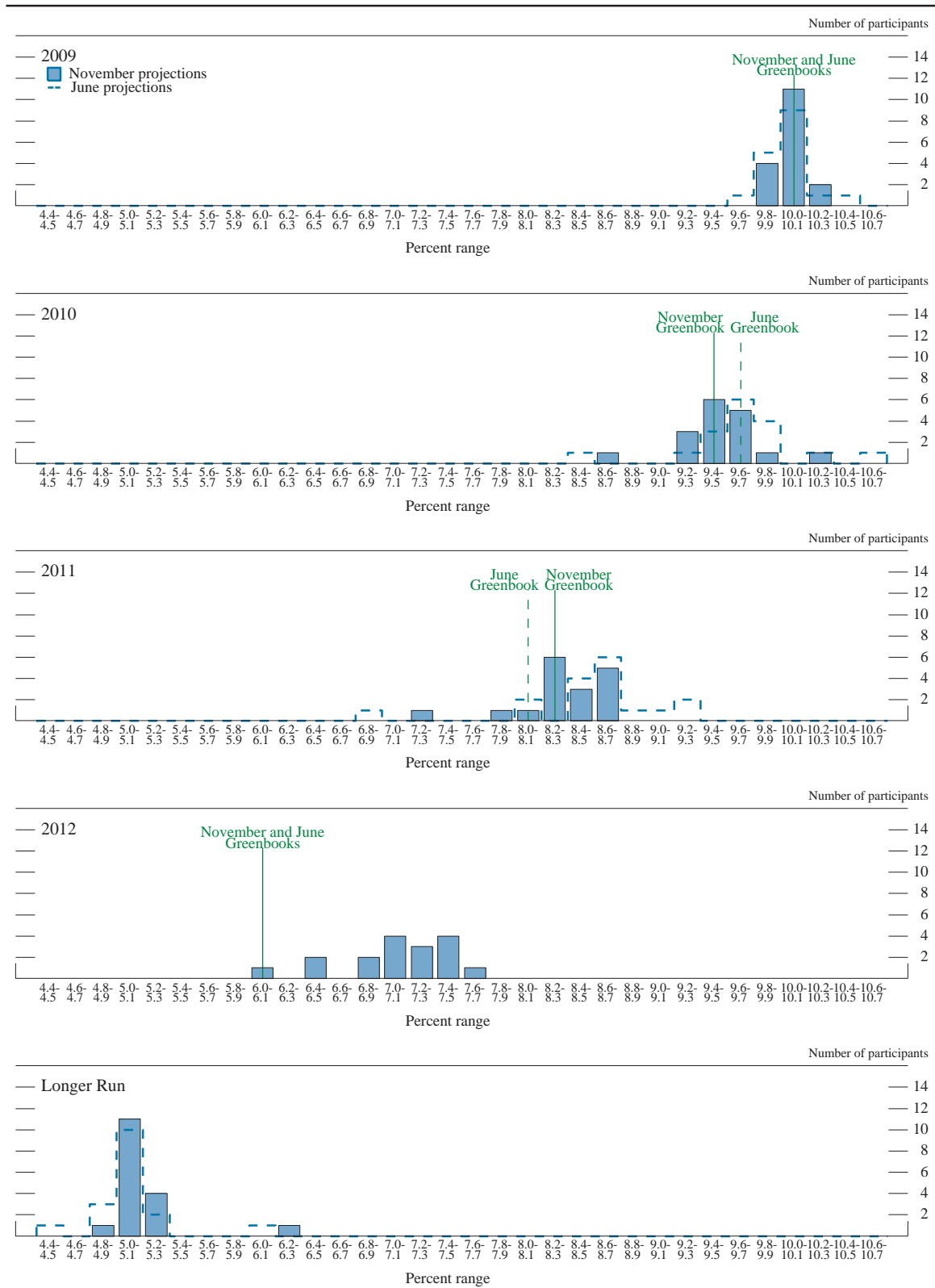


Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–12 and over the longer run



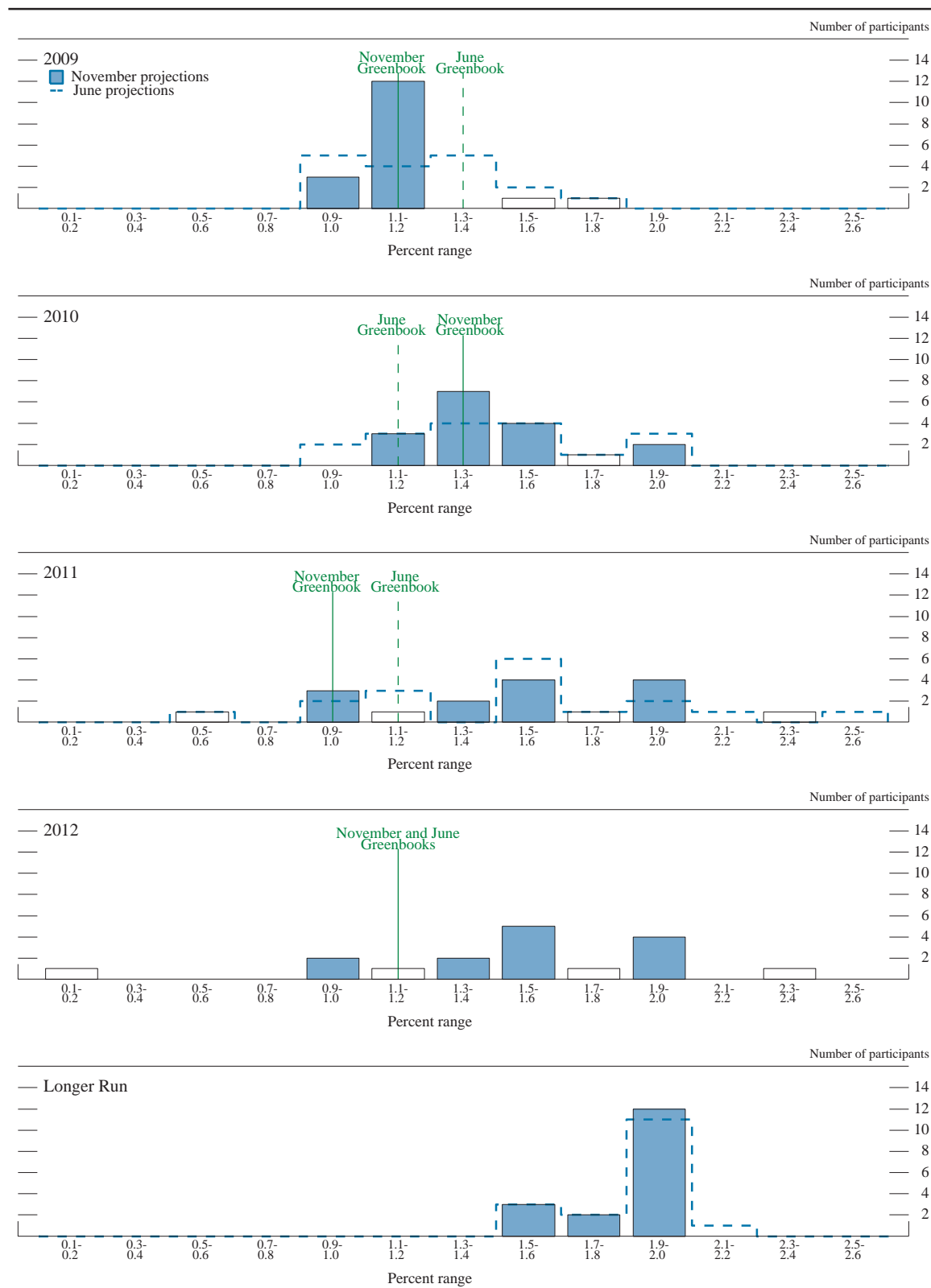
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–12 and over the longer run



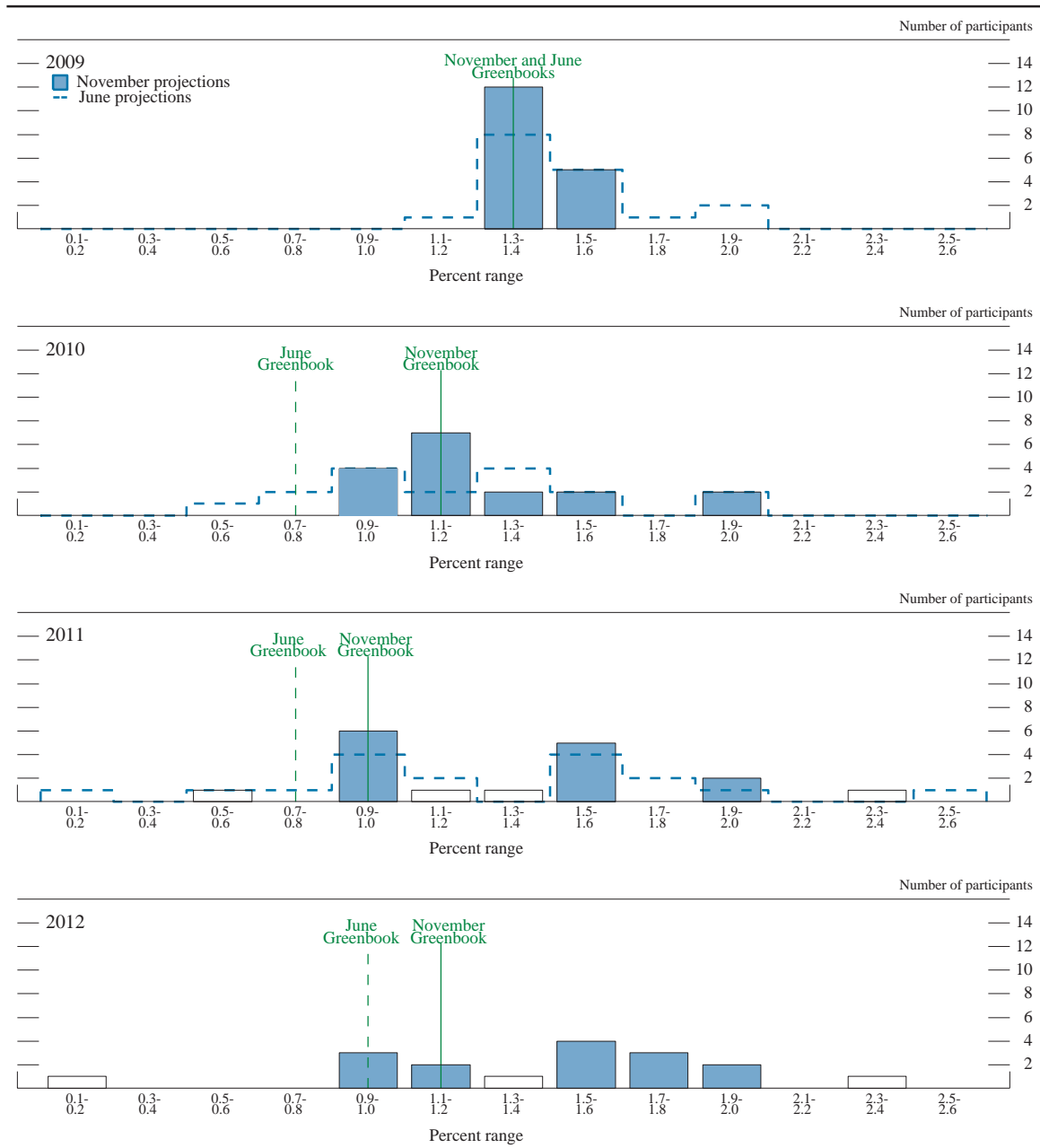
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–12 and over the longer run



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

Figure 2.D. Distribution of participants' projections for core PCE inflation, 2009–12



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