

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

Percent

Variable	Central tendency ¹				Range ²			
	2009	2010	2011	Longer Run	2009	2010	2011	Longer Run
Change in real GDP.	-2.0 to -1.3	2.0 to 3.0	3.5 to 4.8	2.5 to 2.7	-2.5 to -0.5	1.5 to 4.0	2.3 to 5.0	2.4 to 3.0
January projection.	-1.3 to -0.5	2.5 to 3.3	3.8 to 5.0	2.5 to 2.7	-2.5 to 0.2	1.5 to 4.5	2.3 to 5.5	2.4 to 3.0
Unemployment rate.	9.2 to 9.6	9.0 to 9.5	7.7 to 8.5	4.8 to 5.0	9.1 to 10.0	8.0 to 9.6	6.5 to 9.0	4.5 to 5.3
January projection.	8.5 to 8.8	8.0 to 8.3	6.7 to 7.5	4.8 to 5.0	8.0 to 9.2	7.0 to 9.2	5.5 to 8.0	4.5 to 5.5
PCE inflation.	0.6 to 0.9	1.0 to 1.6	1.0 to 1.9	1.7 to 2.0	-0.5 to 1.2	0.7 to 2.0	0.5 to 2.5	1.5 to 2.0
January projection.	0.3 to 1.0	1.0 to 1.5	0.9 to 1.7	1.7 to 2.0	-0.5 to 1.5	0.7 to 1.8	0.2 to 2.1	1.5 to 2.0
Core PCE inflation ³	1.0 to 1.5	0.7 to 1.3	0.8 to 1.6		0.7 to 1.6	0.5 to 2.0	0.2 to 2.5	
January projection.	0.9 to 1.1	0.8 to 1.5	0.7 to 1.5		0.6 to 1.5	0.4 to 1.7	0.0 to 1.8	

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 January projections were made in conjunction with the FOMC meeting on January 27-28, 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

	Central Tendency	Range
Change in Real GDP	-4.0 to -3.5	-5.0 to -2.8
PCE Inflation	-0.1 to 0.3	-1.7 to 0.5
Core PCE Inflation	1.3 to 1.7	0.7 to 1.7

Participants' Projections

Projection	Change in Real GDP	PCE Inflation	Core PCE Inflation
1	-3.9	-0.1	1.7
2	-3.8	0.0	1.0
3	-4.0	0.0	1.5
4	-4.0	0.2	1.5
5	-2.8	0.5	1.7
6	-4.0	-0.2	0.7
7	-3.5	-0.2	1.5
8	-4.1	-0.1	1.7
9	-3.4	0.2	1.3
10	-3.5	0.1	1.7
11	-3.8	0.5	1.6
12	-3.5	0.5	1.6
13	-4.2	0.0	1.6
14	-4.0	0.0	1.2
15	-5.0	-1.7	1.5
16	-3.7	0.3	1.7
17	-3.9	0.0	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

	Central Tendency	Range
Change in Real GDP	0.3 to 1.1	-0.9 to 2.9
PCE Inflation	1.0 to 1.7	-0.8 to 2.0
Core PCE Inflation	0.5 to 1.3	0.2 to 1.6

Participants' Projections

Projection	Change in Real GDP	PCE Inflation	Core PCE Inflation
1	0.8	1.5	0.7
2	0.7	1.2	0.8
3	0.0	1.0	0.9
4	-0.2	1.4	0.5
5	1.9	1.9	1.3
6	2.9	-0.8	0.7
7	0.5	1.4	1.1
8	-0.9	1.3	0.5
9	0.8	1.0	0.7
10	0.7	1.7	0.9
11	1.7	1.7	1.4
12	0.3	1.1	1.6
13	0.3	2.0	0.2
14	1.1	1.2	1.2
15	0.9	0.9	0.5
16	0.5	1.3	1.3
17	1.0	1.4	0.8

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

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

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	2009	-1.6	9.3	0.7	1.2
2	2009	-1.6	9.6	0.6	0.9
3	2009	-2.0	9.5	0.5	1.2
4	2009	-2.1	9.5	0.8	1.0
5	2009	-0.5	9.1	1.2	1.5
6	2009	-0.6	9.5	-0.5	0.7
7	2009	-1.5	9.6	0.6	1.3
8	2009	-2.5	10.0	0.6	1.1
9	2009	-1.3	9.6	0.6	1.0
10	2009	-1.4	9.2	0.9	1.3
11	2009	-1.1	9.3	1.1	1.5
12	2009	-1.6	9.2	0.8	1.6
13	2009	-2.0	9.5	1.0	0.9
14	2009	-1.5	9.3	0.6	1.2
15	2009	-2.1	9.8	-0.4	1.0
16	2009	-1.6	9.6	0.8	1.5
17	2009	-1.5	9.2	0.7	1.2
1	2010	2.6	9.1	1.0	0.7
2	2010	2.6	9.5	1.6	1.3
3	2010	2.0	9.5	1.0	1.0
4	2010	1.8	8.9	1.1	1.2
5	2010	3.0	8.0	2.0	2.0
6	2010	4.0	9.0	1.5	1.5
7	2010	1.5	9.3	1.3	1.3
8	2010	2.1	9.6	0.9	0.8
9	2010	2.8	9.2	1.0	0.7
10	2010	2.5	9.0	1.0	0.9
11	2010	2.9	9.0	1.7	1.3
12	2010	2.0	9.5	1.5	1.5
13	2010	2.8	9.0	0.9	0.5
14	2010	3.5	8.9	0.7	0.7
15	2010	3.8	9.6	2.0	1.2
16	2010	2.7	9.2	1.1	1.0
17	2010	2.6	9.0	1.0	0.9

Table 2 (continued): April Economic Projections

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	2011	4.8	7.7	0.8	0.7
2	2011	5.0	7.5	1.9	1.7
3	2011	4.0	8.5	1.5	1.5
4	2011	3.5	8.0	1.6	1.6
5	2011	2.7	6.5	2.5	2.5
6	2011	3.8	8.5	2.0	2.0
7	2011	2.3	8.3	1.5	1.5
8	2011	4.8	8.5	1.0	0.8
9	2011	4.4	8.3	1.1	1.0
10	2011	4.4	8.1	1.1	1.1
11	2011	5.0	7.8	1.5	1.3
12	2011	3.5	9.0	1.5	1.5
13	2011	4.0	8.0	0.5	0.2
14	2011	4.5	8.3	1.0	1.0
15	2011	4.6	7.8	2.0	1.5
16	2011	4.8	8.1	1.0	1.0
17	2011	5.0	7.5	0.9	0.8
1	LR	2.8	5.0	2.0	
2	LR	2.4	5.0	2.0	
3	LR	3.0	5.0	1.5	
4	LR	2.4	5.2	2.0	
5	LR	2.7	5.0	1.7	
6	LR	2.8	5.3	1.5	
7	LR	2.5	5.3	2.0	
8	LR	2.5	4.8	2.0	
9	LR	2.5	5.0	1.8	
10	LR	2.6	4.8	2.0	
11	LR	2.5	5.0	2.0	
12	LR	2.7	5.0	1.5	
13	LR	2.5	4.8	2.0	
14	LR	2.4	5.0	2.0	
15	LR	2.7	4.5	2.0	
16	LR	2.5	4.8	2.0	
17	LR	2.5	5.0	2.0	

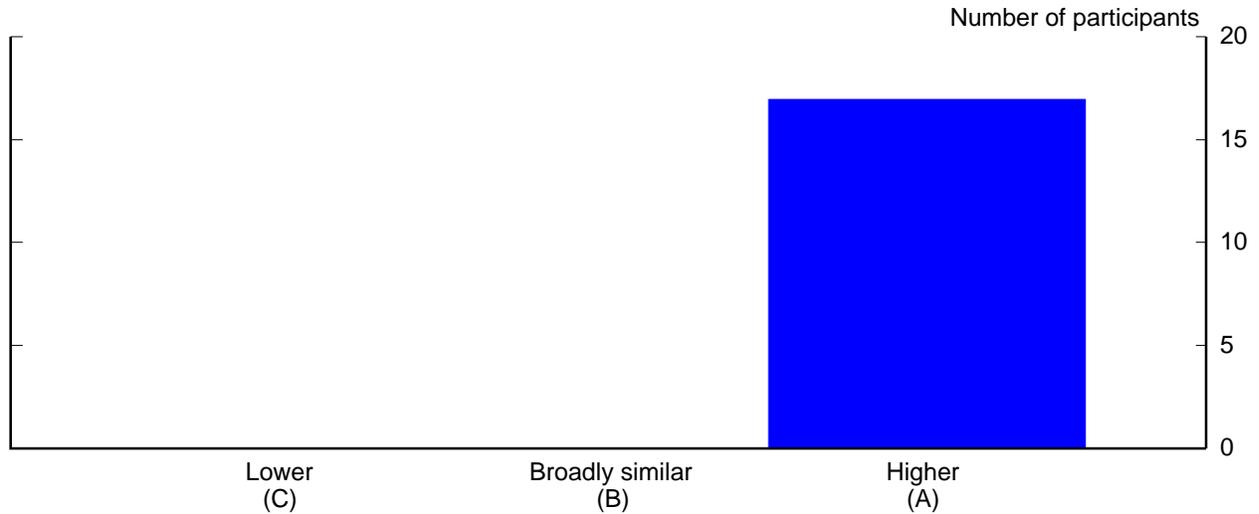
Figure 1. Central tendencies and ranges of economic projections, 2009–11 and over the longer run



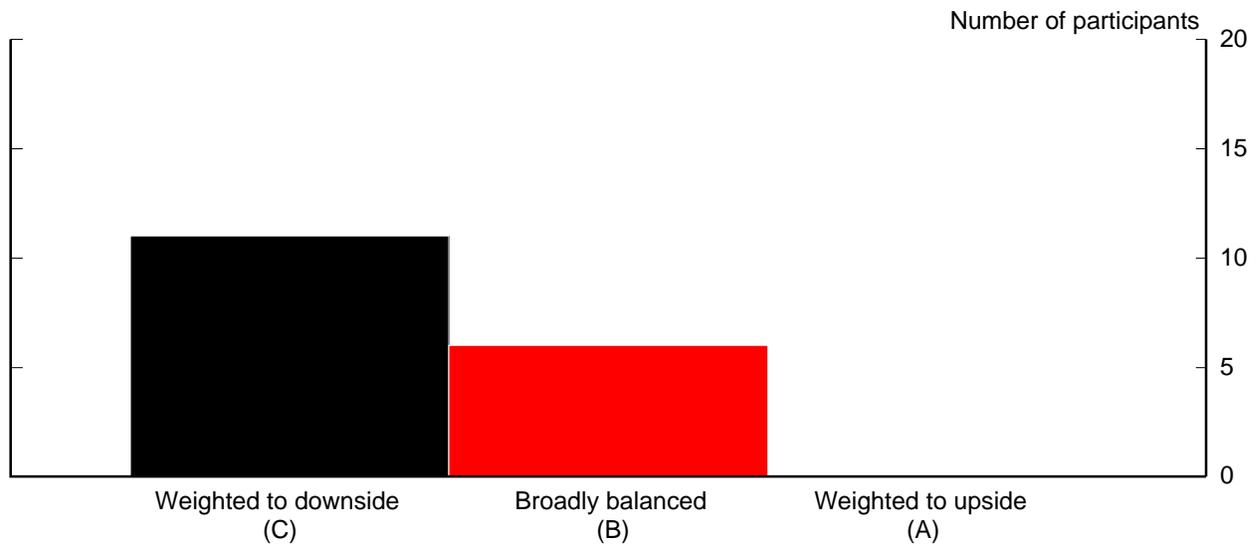
NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual.

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.

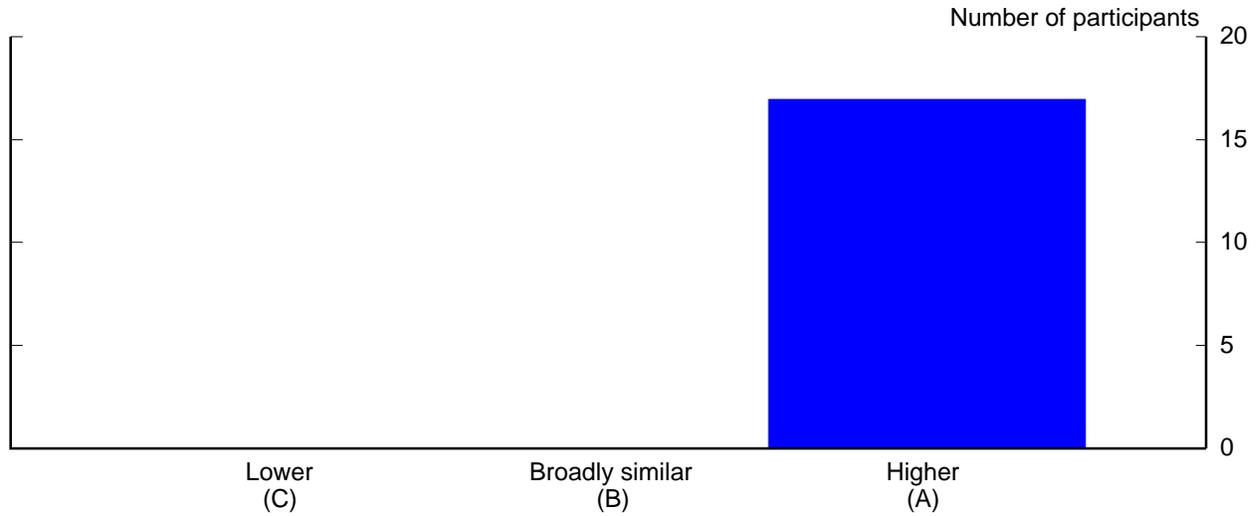


Individual Responses

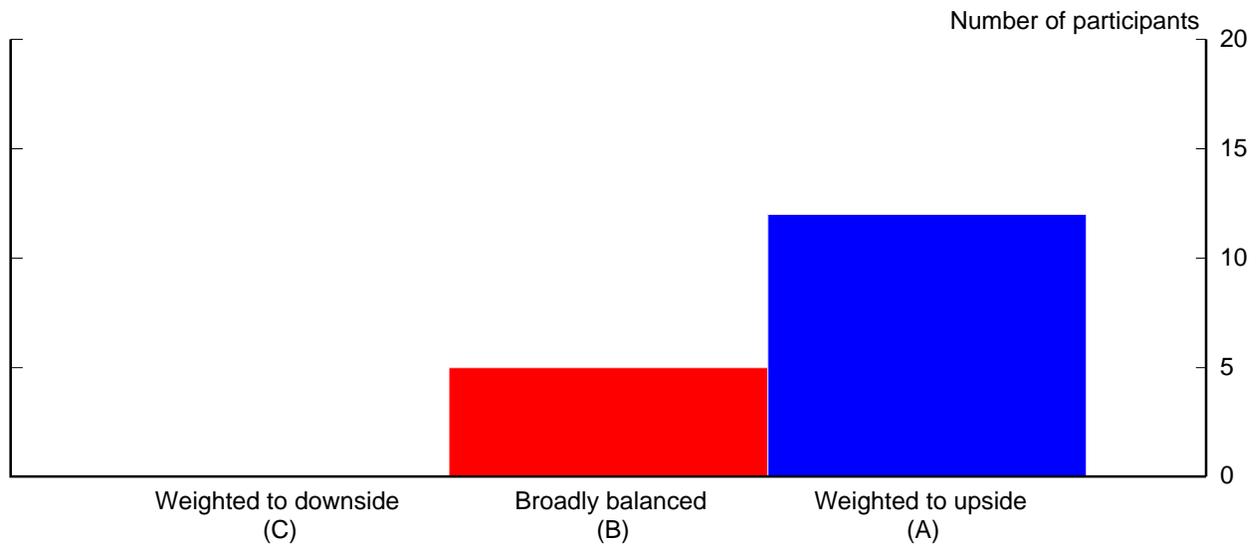
Respondent	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>17</u>
2(a)	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2(b)	C	C	C	B	B	B	C	B	C	C	B	C	C	B	C	C	C

Uncertainty and Risks - Unemployment Rate

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



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

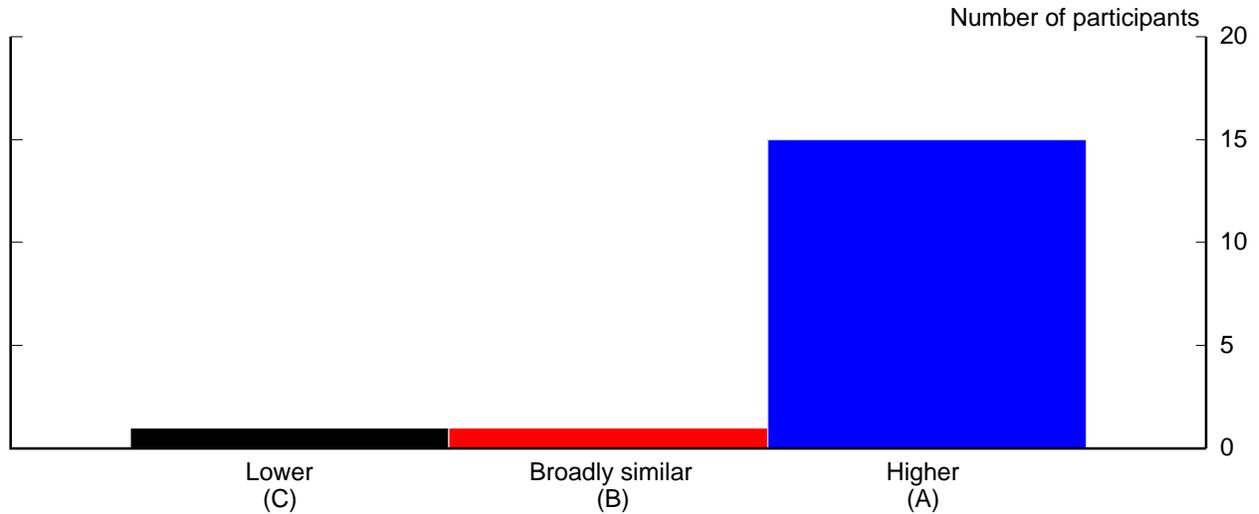


Individual Responses

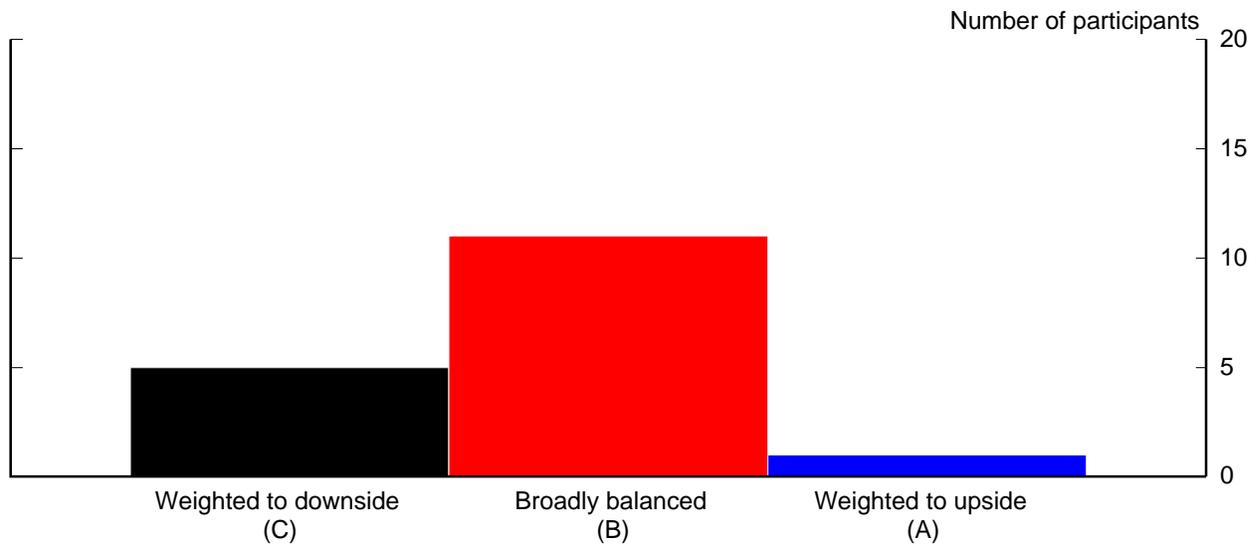
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2(b)	A	A	A	B	B	B	A	A	A	A	B	A	A	B	A	A	A

Uncertainty and Risks - PCE Inflation

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



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

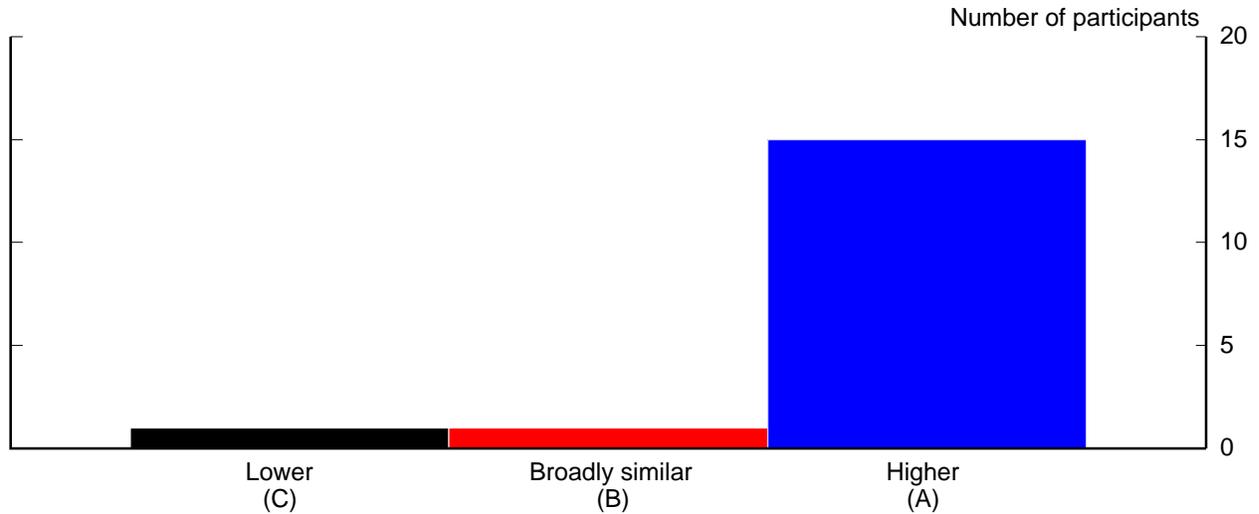


Individual Responses

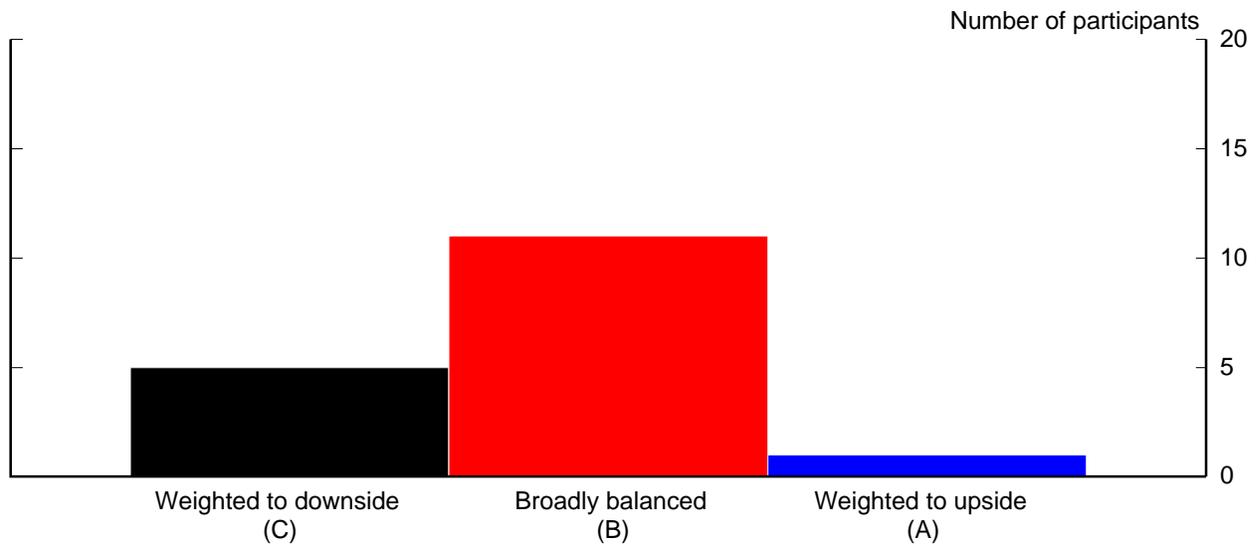
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
2(a)	A	A	A	A	A	A	A	A	A	B	A	C	A	A	A	A	A
2(b)	B	C	B	B	A	B	B	B	B	B	B	B	C	B	C	C	C

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

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:

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 3:

N/A

Respondent 4:

N/A

Respondent 5:

The stresses in the financial sector remain significant. Traditional monetary policy is constrained by the zero bound and the precise impact on the economy of quantitative easing is unknown. For these reasons, I view forecast uncertainty as higher than usual.

Respondent 6:

N/A

Respondent 7:

N/A

Respondent 8:

N/A

Respondent 9:

N/A

Respondent 10:

N/A

Respondent 11:

Despite recent improvements in credit markets, the speed and degree to which nonstandard policies by the Federal Reserve, Treasury, and the FDIC will ameliorate credit conditions remains highly uncertain. Additional uncertainty concerns the speed at which private-market price discovery will take place and the effect that it will have on institutions' lending capacity. The political landscape, the implications of the upcoming stress test results, and the still unknown parameters of the PPIP and CAP have added uncertainty and risk aversion to private-sector markets, and so have added corresponding uncertainty to our forecast.

Respondent 12:

I believe that the projections for GDP and unemployment have above-average uncertainty this year, due to the difficulty in forecasting the timing of the recession's trough. Beyond this year, uncertainty is normal. Inflation expectations would be anchored under an appropriate monetary policy, and therefore uncertainty would be lower than the trailing twenty-year average.

Respondent 13:

N/A

Respondent 14:

Uncertainty is unusually high because the depth and duration of the recession are far from clear, as is the timing and magnitude of the recovery.

Respondent 15:

N/A

Respondent 16:

The unusual global financial and economic crisis and uncertainty about the effects of fiscal policy and unconventional monetary policies increase the degree of uncertainty regarding the outlook for economic activity. Elevated variability of commodity prices and heightened risks to the outlook for economic activity raise the degree of uncertainty regarding the outlook for inflation.

Respondent 17:

high uncertainty naturally accompanies a period of financial and economic stress with little if any precedent in the post WWII era—especially taking account of its global dimensions.

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:

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

Respondent 3:

N/A

Respondent 4:

N/A

Respondent 5:

Incoming data have led me to revise down my view on the likely path for growth and unemployment compared to my January forecast. With the downward revision, I now view the risks to growth and the unemployment rate as roughly balanced. I view longer-term inflation risk as tilted to the upside, reflecting uncertainty about the Fed's ability to reduce the size of its balance sheet at the appropriate time. However, in the near term, the risk to inflation is likely tilted to the downside given the weak economic outlook.

Respondent 6:

Going forward into 2010 as the economy recovers from the current recession and experiences the fiscal stimulus program as well as substantial persistent increases 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, but over the longer run the risks will likely move to the upside as it proves difficult to unwind the rapid near term projected growth in the monetary base in an expeditious fashion.

Respondent 7:

I have revised my assessment of the risks to inflation away from "weighted to the downside" and toward being "broadly balanced". There remains a risk the economy's potential is greater than I have assumed and that as a result, the disinflationary consequences of projected economic weakness are stronger than shown in my forecast. However, recent policy actions have increased the potential for growth in the Fed's balance sheet to contribute to rising inflation expectations.

Respondent 8:

N/A

Respondent 9:

In the near-term, I believe the risks to overall and core inflation are to the downside. However, in the longer-term, I believe the risks are to the upside if we delay removing accommodation and shrinking our balance sheet.

Respondent 10:

N/A

Respondent 11:

We still face risks on both the up and downsides with regard to growth. There are both up and downside risks surrounding the potential influence of Fed asset purchases on credit conditions and economic activity. There is a downside risk that uneasiness over the costs of participating in government programs will reduce their acceptance by potential market participants and thus diminish their positive influence on financial markets and economic activity. There is an upside risk that aggressive inventory control and pent-up demands will generate a more pronounced cyclical recovery than in our baseline forecast.

As we thought last time, in the near term price risks are tilted towards lower-than-expected inflation due to the substantial slack in the economy and falling commodity prices. Over the longer run, there is a risk that actual or perceived difficulties in unwinding the large expansion to the Federal Reserve's balance sheet will boost inflationary expectations.

Respondent 12:

N/A

Respondent 13:

N/A

Respondent 14:

N/A

Respondent 15:

N/A

Respondent 16:

A further intensification of the ongoing adverse feedback loop represents a significant downside risk to the outlook for growth. The looming problem in the commercial real estate market poses additional downside risks to the outlook for economic activity. The sizable downside risks to the outlook for economic activity imply greater downside risks to the outlook for inflation.

Respondent 17:

Growth risks are still weighted to the downside, which implies a similar asymmetry to inflation risks. Those risks reflect still-fragile financial markets and incomplete adjustments of financial and household balance sheets to more sustainable configurations. In the baseline those adjustments are gradual and orderly; the risk is that they are accelerated, tightening financial conditions and restraining demand. However, the risks are less strongly skewed than they were in January; signs of stabilization in key demand sectors and improvement in financial markets suggest that the odds on gradual and orderly adjustments are higher.

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

9

NO

8

Respondent 1: No

N/A

Respondent 2: Yes

Through 2009-10 identical. We assume the normalization of interest rates starts in 2011. Because of differences in our inflation forecast, real policy rates remain similar in 2011. Our views on the size of the balance sheet are close to the Greenbook assumption.

Respondent 3: No

N/A

Respondent 4: Yes

Expect policy to begin to normalize sooner than under Greenbook base case, but not quite as rapidly as market expectations

Respondent 5: Yes

My forecast continues to assume a less accommodative federal funds rate path than in the Greenbook baseline. I view the appropriate policy as raising the funds rate toward the end of 2009 to 0.5 percent. The funds rate rises gradually through the forecast horizon reaching 2.5 percent at the end of 2010 and 3.5 percent at the end of 2011.

Respondent 6: Yes

While the exact timing and pattern of recovery from the current recession is highly uncertain and becoming stuck in a deflationary trap is a possibility, I do not see the latter as the modal outcome. Hence I believe that, under appropriate monetary policy, we likely 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 7: No

N/A

Respondent 8: No

N/A

Respondent 9: Yes

Like Greenbook, I assume the funds rate target will be maintained in the range of 0 to 1/4 percent through the end of 2010. However, I expect it will be necessary to start raising the funds rate in 2011. I am also concerned that the size of our balance sheet will constrain our ability to raise the funds rate in 2011.

Respondent 10: No

N/A

Respondent 11: Yes

We assume that the funds rate will begin to increase sometime in 2010. We also assume that the Fed will take some active measures to reduce the size of our balance sheet instead of simply letting it run down

passively as assets mature.

Respondent 12: Yes

I believe that under an appropriate policy, the committee will announce a numerical inflation objective. I believe that further expansion of the monetary base this year will be necessary to move toward an inflation target of $1\frac{1}{2}$ percent. This is consistent with the Greenbook assumption for asset purchases. I believe that the funds rate is likely to remain low for at least a year.

Respondent 13: No

The forecast is conditioned on roughly the same short- and long-term interest rates assumptions as in the Greenbook. But as the Greenbook is also suggesting, such a path for the interest rates does not necessarily represent appropriate monetary policy.

Respondent 14: Yes

I expect the Federal funds rate to begin to move up modestly sometime in the second half of 2010 or early in 2011.

Respondent 15: Yes

In my projection, the federal funds rate would likely begin to rise sooner than in the Greenbook.

Respondent 16: No

N/A

Respondent 17: 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:

I chose the Greenbook scenario on the strength of a belief that housing markets are stabilizing due to the low absolute levels of activity and government programs. The specific programs I think are having a strong influence are (a) low mortgage rates (b) first time homebuyer tax credits and (c) refinance ability at higher LTVs through the GSEs. I am still concerned about the potential for further stress in financial markets caused by destabilization around specific large financial institutions. However, I wasn't able to translate my concern into support for the false dawn scenario.

Respondent 2:

In our central projection, the US economy remains in recession through mid 2009, making this the longest recession of the post WWII period. At the trough, the level of real GDP is about 2 3/4% below the NBER peak, modestly less than the most severe recessions of that period. By the second half of 2009 a relatively tepid recovery is expected to take hold, aided by the preemptive path of monetary policy, various initiatives to foster financial market stability, and aggressive fiscal stimulus measures. Growth returns to just above its potential rate by the second half of 2010 and then accelerates to about 2 1/2 % above its potential rate in 2011. Barring a significant decline in the economy's potential growth rate, this point forecast implies that a significant output gap will persist over this entire period. At the trough, the unemployment rate is expected to be around 8 3/4%, a full four percentage points above the level at the peak. This is somewhat less than might be expected from an Okun's Law relationship as the labor force participation rate and average weekly hours have declined and productivity growth has slowed, all of which tend to damp the increase in unemployment. The unemployment rate is expected to continue rising over the first year of recovery, likely to between 9 1/2% and 9 3/4%, as growth remains relatively sluggish and as the participation rate and average weekly hours begin moving upward again. Thereafter, the unemployment rate moves down only gradually. The risks to this modal forecast are substantially skewed to the downside with an uncomfortably high probability that the current downturn will end up of similar depth and duration to pre-World War II contractions.

The broad outlines of this central projection are as follows. Consumer spending remains relatively sluggish as household boost saving out of current cash flow in response to continued somewhat restrictive credit conditions and an apparent sustained decline in their net worth. The correction in housing production is expected to be largely completed by mid-2009. At that point the large drag that residential investment has exerted on growth for nearly the past four years will be over. Thereafter, housing is likely to be a modest plus for growth, but we do not anticipate the usual surge of residential investment experienced in the early stages of past recoveries due to the continued high volume of homes coming onto the market through the foreclosure process and, again, continued relatively tight mortgage underwriting standards. Indeed, the correction in house prices is expected to continue through the end of 2010 with a cumulative 22% peak-to-trough decline in the FHFA purchase-only home price index. (For other indices, such as the Case-Shiller 20 city composite, the peak-to-trough decline is likely to be around 40 percent.) Business investment in new structures and new equipment and software is expected to decline sharply in 2009 as capacity utilization rates decline and vacancy rates rise. In typical business cycle fashion, these components of final demand do not begin to recover until the second half of 2010. In addition, during the first half of 2009 businesses aggressively pare inventories to get them better aligned with sales. With the sharp downgrading of foreign growth prospects, exports are expected to decline through mid 2009 with significant growth not returning until 2010. Nonetheless, in the near-term net exports remain a plus for growth from an accounting sense as imports also decline sharply due to the weakness of domestic demand. During the second half of 2009 the net export contribution gradually declines and then turns negative in 2010 as the recovery of domestic demand induces an increase in the rate of growth of imports. Finally, the growth contribution of the government sector begins to rebound in the second half of 2009 as the effects of the stimulus legislation begin to take hold.

Underlying this projected path of private final demand is the expectation that financial market functioning returns to more normal conditions and that consumer and business confidence is gradually restored.

In this central scenario, total consumer price inflation is negative over the first half of 2009 as the effects of the sharp declines in energy and other commodity prices during 2008Q4 work their way through the system. Core inflation remains relatively low in 2009 reflecting the significant increase in slack in the US economy. But by 2010 both total and core inflation gradually increase back as final demand firms within the context of anchored inflation expectations. However, it will likely take until 2011 before inflation returns to the mandate consistent range.

The risks to our central projection for real activity are substantial and are skewed to the downside. In the near-term, the key risk is 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 decline of household net worth embedded in this central projection induces a steeper-than-expected increase of the personal saving rate, keeping consumer spending weaker for longer. The sharp increase in the prime age male unemployment rate during the current cycle, combined with the large share of workers 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 increasing evidence that potential growth has slowed somewhat, but it is too soon to tell whether this is a cyclical or a structural phenomenon.

The balance of risks around the central scenario for inflation is also skewed to the downside, but somewhat less so than for growth. Clearly, the significant downside risk to the growth projection implies downside risk to the inflation projection. Further, if some of the more adverse risks to the global economy are realized, then we assess a substantial chance of deflation. In contrast, in the current environment of aggressive global monetary and fiscal policy response to the ongoing financial crisis, there is some risk of higher inflation if the economy proves more resilient than in our central scenario. The net effect of these competing risks is somewhat to the downside.

The heightened uncertainty associated with banking and financial crisis periods, and the uncertainty associated with the timing, magnitude, and effectiveness of policy responses have resulted in highly elevated uncertainty around our central projection compared to typical levels.

Respondent 3:

The economy's sharp decline over the fall and winter months threatens a further deterioration in loan performance that will put new stress on the financial sector. Thankfully, consumer demand appears to be stabilizing, residential construction has little room left to fall, and fiscal stimulus should soon begin kicking in.

The economy's longer-term prospects depend very much on whether policy makers and private decision makers take advantage of the anticipated lull to make meaningful progress on the reorganization and recapitalization of the financial system. Poor execution of reorganization and recapitalization by government authorities will retard private-sector confidence and inhibit employment gains and capital expenditure commitments.

On the price front, a perception that the Federal Reserve will monetize fiscal deficits will undermine confidence in our commitment to price stability, discourage capital markets and distort business decision making so as to impede recovery.

Respondent 4:

Expect less benefit from fiscal stimulus, particularly beyond 2009. Expect somewhat higher NAIRU, lower productivity and lower growth rates throughout the forecast period and beyond. Recession expected to last longer and be somewhat deeper. And finding new equilibrium will take somewhat longer than during typical recoveries

Respondent 5:

The recent data on the economy have been weaker than what I anticipated in my January forecast. I expect continued weakness in the housing sector, tight credit market conditions, lower household wealth, and poor growth prospects in the rest of the world to hold down economic growth to a significantly below-trend pace through the first half of 2009. As these factors begin to unwind, the economy rebounds to an above-trend pace of 3 percent in 2010 before edging back down to trend at 2.7 percent in 2011. 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 toward the end of 2009.

Respondent 6:

I expect continued, though slowing, contraction in the first half of 2009 with output bottoming out in the middle of the year and recovering in the second half. 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 recently adopted fiscal package and the impact of the substantial monetary stimulus that is in train. I expect relatively low, but positive inflation in 2009, but rising intermediate run inflation as a consequence of current monetary stimulus. Subsequently I believe that inflation, under appropriate monetary policy, should approach my preferred long-run rate of 1.5%. 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 over the projection period.

Respondent 7:

Slow restoration of financial market functioning, sluggish consumer spending, and lingering economic uncertainty are likely to retard the recovery process. I have assumed a bottoming out of the real estate sector in the second half of this year, no new adverse shocks to financial markets here or abroad, and some boost from combined fiscal and monetary stimulus, particularly in the second half of 2009. However, the potential for another adverse shock to the financial system, an accelerated decline in foreign growth, or a further deterioration in consumer confidence tilt the balance of growth risks to the downside.

I continue to assume that forces adversely affecting economic growth are also weighing somewhat on economic potential.

Respondent 8:

In the near term, some stabilization seems likely if only because the pace of deterioration in the preceding several quarters had been so rapid. The drawing down of inventories, delay of durables purchase, and similar developments should – absent another major shock – reverse to some degree. Over the longer term, I anticipate that important parts of capital markets will remain unusually encumbered for some time to come, and that structural changes in important economic sectors will retard employment growth well beyond the end of the recession

Respondent 9:

While the economy is likely to contract in the second quarter, we are beginning to see signs of a deceleration in the pace of decline. As a result of this deceleration, I have greater confidence that we are likely near the bottom and will see a recovery by year-end.

My outlook balances the negative effects of job losses, falling income, and continued problems in housing with the positive effects of an eventual rebound in residential and inventory investment, and stimulative monetary and fiscal policy. As a result, I expect real GDP to decline 3.4 percent in the first half of this year before rebounding to 0.8 percent in the second half and 2.8 percent in 2010. Continued weakness in the economy and labor markets along with continued financial stress means the near-term risks to GDP growth are weighted to the downside.

Recent data on consumer price inflation has been higher than expected, leading to an upward revision in near-term inflation. I expect that continued economic weakness will keep downward pressure on inflation in the medium-term. And as long as long-term inflation expectations continue to remain stable, I see little risk of significant disinflation or deflation. In the longer term, I fear the risks are to the upside if we delay removing accommodation and shrinking our balance sheet.

Respondent 10:

Modest improvement in the outlook arising from 1) Q1 stabilization in consumption, with further support expected from fiscal policy 2) some improvement in financial markets (in part reflecting Fed policies), stock price rise, 3) progress in inventory adjustment and 4) some stabilization (at a low level) in housing. However, financial improvement remains tentative and conditioned on policy and incoming data, and banks remain somewhat fragile. Other downside risks include commercial real estate (both activity and impact on balance sheets), consumption (reflecting primarily deterioration in labor market and loss of housing wealth), and global economic and financial conditions. A relatively slow recovery, the result of financial headwinds and the "jobless recovery" phenomenon seems the most likely outcome, although conditions should begin to pick up later in 2010 and in 2011.

Respondent 11:

We feel that monetary accommodation (including that provided by special credit facilities and large-scale asset purchases), fiscal policy stimulus, private sector financial adjustments, and the economy's natural cyclical adjustment dynamics will result in a resumption of positive growth in the second half of 2009. Growth will remain below potential for some time, however, reflecting the still net-negative influence of restrictive credit conditions, weak demand from abroad, and a hesitancy for households and businesses to spend in the uncertain economic environment. As these factors diminish, growth is projected to pick up well above potential in late 2010 and in 2011. The increases in output will not be enough, however, to close resource gaps by the end of the projection period.

The inflation forecast balances two opposing forces. On the downside, substantial domestic resource gaps and the influence of weak world demand on commodity prices will reduce cost pressures and hold down markups. In contrast, unless managed appropriately, the expansion of the Fed's balance sheet and the prospects for persistently large fiscal deficits could have upside consequences for inflation expectations. Our forecast assumes that the effects of these forces on inflation expectations will roughly cancel out, and thus inflation will settle out in a range consistent with the achievement of our dual mandate.

Respondent 12:

I believe that the recession will end in the second half of this year, and that the economy will then begin to grow slowly. I believe that business investment is likely to be quite weak this year. I believe that fiscal policy effects will be smaller than generally projected, as appears to have been the case last year, and consequently my outlook is not heavily dependent on the probable course of fiscal policy

Respondent 13:

After the sharp drop in GDP in both 2008:Q4 and 2009:Q1, there are tentative signs that the ongoing contraction in economic activity is leveling off. These signs of stabilization, however, are mitigated by still dire labor market conditions which will worsen further before starting to improve gradually. Activity should

continue to decline in the near term, though at a slower pace than in the past two quarters. A return to mild positive growth in activity should occur only later this year. The fiscal stimulus will provide some wherewithal to consumers, but the factors that hamper a faster recovery both later this year and in 2010 are numerous. Credit constraints remain a crucial factor behind a subpar recovery under present circumstances. Households' and firms' spending should suffer from a lack of credit availability well into next year. Support to consumer spending will also be hampered by the large declines in households' net worth, and the uncertainty surrounding the fate of the auto sector could lead to postponements in consumers' decision to buy a car. In addition, residential investment is unlikely to provide the same boost to activity as in past recoveries, while labor market reallocation could also be disrupted this time around by less geographical labor mobility as a result of the poor housing market. In all, these factors point to a relatively shallow turnaround in economic activity late this year and in 2010. The unemployment rate is still high by the end of the forecast horizon despite an acceleration in growth in 2011 as credit constraints wane. Given the sizable slack in the labor market over the forecast horizon, the rate of core inflation hovers around zero percent in 2011.

The risks to real activity are tilted to the downside. Further deterioration, albeit at a reduced pace, in economic activity in the near term implies that conditions at many financial institutions will continue to worsen. This raises the likelihood of further restrictions on credit supply and of increased financial instability. As concerns inflation, the risks are to the downside, too. The downside risks are not just due to real-side uncertainty, but are also the result of our limited experience with near-zero inflation. Given the unemployment rate forecast, our models would predict outright deflation starting in 2010. We tempered this deflationary outlook by taking into account the fact that downward nominal rigidities could attenuate the inflation-unemployment trade-off. Still, the risks of deflation are significant.

Respondent 14:

I expect the recession to persist through the middle of 2009, followed by a modest recovery for three or four quarters. The expansion will be constrained by ongoing problems in financial markets and institutions and in housing. As these problems diminish, economic growth should gain momentum. Underpinning the expansion is accommodative monetary policy and fiscal policy stimulus.

Respondent 15:

Fallout from the financial crisis continues to impact real economic activity, depress business investment and further dampen consumer spending. These adverse effects only begin to dissipate in the second half of 2009. Recent signs of stabilization in consumption and housing buttress our view that positive growth will return in the second half of 2009. Fiscal stimulus and Federal Reserve asset purchases help to foster that growth. The rapid and uneven deterioration in employment along with continued sharp declines in job openings means that unemployment will continue to rise into 2010 and require an extended period of time to recover. Along with the reallocation reducing the size of the output gap, policy-informed inflation expectations support the core inflation rate and diminish the chances for a deflationary episode.

There is a substantial amount of uncertainty surrounding this projection. Forecasting in periods such as these is notoriously difficult. The primary risks are to the downside on medium-term growth and inflation.

Respondent 16:

Although tentative signs of stabilization of the economy have emerged and financial conditions have improved somewhat, the economic situation remains very weak and public confidence in the economic outlook is in tatters. The housing sector is moribund, labor markets continue to deteriorate, business spending is falling sharply, and other major economies are contracting as fast as the United States. The process of healing the banking and financial sectors is proving to be difficult and slow, and impaired financial intermediation will interfere with the pace of recovery. 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. 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 17:

inventory overhangs in houses and goods are gradually worked off, leading to increases in production to meet demand. demand itself is bolstered by gradual healing in financial markets, fiscal stimulus, and lower interest rates reflecting monetary accommodation as spreads decline. But the pickup is gradual because of continuing financial strains as intermediary capital is restored in the face of elevated losses in the recession, and rebuilding of household wealth through a substantially higher saving rate than over recent decade. confidence returns slowly, holding back spending. And the restoration of strong growth abroad also takes time for much the same reasons.

Forecast Narratives (continued)

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

Respondent 1:

N/A

Respondent 2:

We project slightly higher trend growth of hours worked mainly because we assume that the secular decline in the labor force participation rate will occur later and more slowly than in the GB. In terms of differences for the outlook in 2009-10 this implies a slightly higher peak to the unemployment rate than the GB as the labor force participation rate does not decline as sharply as in the GB. 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 2011 under the assumption of well-anchored inflation expectations

Respondent 3:

The Greenbook baseline forecast underestimates the continuing drag on real activity from a weakened financial sector. On the inflation front, unconventional policy initiatives, necessitated by unusual and extreme financial conditions, have created confusion and uncertainty about the future course of monetary policy. Also, frictional unemployment is likely to increase, both because of the large, permanent shift in resources away from the construction and financial-services industries and because home-price declines inhibit labor mobility. Consequently, inflation pressures are likely to be somewhat greater than is assumed in the Greenbook baseline.

Respondent 4:

N/A

Respondent 5:

My inflation forecast is less influenced by the degree of resource utilization in the economy. In my view, inflation will likely run at a higher pace in 2010 and 2011 than in the Greenbook. Given the strength of the economy in my forecast and the higher inflation path, the monetary policy path is less accommodative beginning in 2009Q4.

Respondent 6:

I am somewhat more optimistic on real growth for the second half of 2009. I see substantially stronger recovery in real growth during 2010-11. I see higher inflation than the Greenbook throughout the forecast period.

Respondent 7:

I anticipate that real growth will be lower in 2010 and 2011, as the forces restraining economic activity are likely to be in place for a considerable period of time.

Respondent 8:

I am influenced by several, though not all, the factors mentioned in the Greenbook in connection with the alternative "false dawn" and "labor market damage" scenarios

Respondent 9:

Over the forecast horizon (2009 – 2011), I expect real GDP growth to average about 2 percent, similar to Greenbook (1.9 percent). In addition, the general contour of my forecast for real GDP is similar to Greenbook's forecast: a modest rebound in growth in the second half of this year, with growth then rising above trend in 2010 and 2011.

Like Greenbook, I expect overall and core PCE inflation to remain near 1 percent through the forecast horizon. With the relatively stable long-term inflation expectations we have seen and potential upward pressure on inflation in the medium to longer run, I do not expect to see the 1/2 percentage point decline in long-term inflation expectations that is assumed in Greenbook. As a result, I expect core and overall inflation to be higher than Greenbook in 2011.

Respondent 10:

N/A

Respondent 11:

We think inflation expectations will run higher than in the Greenbook baseline. The effect of economic slack on actual inflation could reduce inflation expectations modestly over the near term. But, moving out further in the projection period, we feel some active adjustment of our balance sheet will be necessary to keep longer-run inflation expectations from rising above rates consistent with the dual mandate.

Respondent 12:

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. I expect growth to be a bit weaker next year than the Greenbook projects, in part due to weaker investment in residential and nonresidential structures.

Respondent 13:

We see the unemployment rate peaking higher than in the Greenbook, but the differences to the real outlook are relatively 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 14:

Relative to the Greenbook, I have a more rapid snap-back in economic activity in 2010. I also have a lower unemployment rate at the end of the forecast period.

Respondent 15:

My projected real GDP growth path is broadly similar to the one in the Greenbook, although I have somewhat larger losses in the first half of 2009 and a steeper recovery in 2010. Despite the overall similarity in the two growth profiles, the labor market in my outlook is notably weaker, with the unemployment rate going above 10% in the middle of 2010.

My outlook is for more core PCE inflation in both 2010 and 2011. Because the current recession is generating a substantial amount of worker dislocation the effective gap would be smaller. This implies more inflation. Furthermore, my inflation outlook also assumes that inflation expectations remain near current levels which keeps core PCE inflation higher than in Greenbook.

As a consequence of the stronger inflation profile, the federal funds rate begins to rise sooner than the Greenbook forecast.

Respondent 16:

My forecast for economic activity is very similar to that of the Greenbook. My forecast for inflation is somewhat higher than in the Greenbook, reflecting an expectation that inflation expectations will remain well anchored.

Respondent 17:

N/A

Forecast Narratives (continued)

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

Respondent 1:

N/A

Respondent 2:

In January we judged it likely that the US economy would experience a recession of intensity similar to 1981-2 and 1973-5. Incoming labor market data, the continued synchronized decline in the pace of global economic activity and increasing evidence of restricted credit flows produced initially another large downward revision in our projections for 2009H1 but tentative signs of stabilization over the last few weeks have reversed much of that downward revision. Although the fiscal stimulus passed was similar to our January conditioning assumption, we view the signs of stabilization as initial evidence that monetary, fiscal and financial stability policy actions are starting to gain traction. On the other hand, we have slightly lowered our estimate of potential growth as the capital stock will be lower going forward for a considerable time.

Core inflation data surprised to the upside relative to our January forecast for three months in a row. We view these upward surprises as transitory and have not carried them forward into future quarters.

The downside risks to our central scenario projection have decreased slightly since January. The source of this risk mitigation is again some evidence that previous policy actions are starting to gain traction.

In January the policy assumption underlying our central projection was a renormalization of the policy rate in 2011 along with an expansion of the TALF and more communication on medium term inflation objectives. While it now seems unlikely that TALF will expand as quickly as expected, the effectiveness of direct purchases of Treasuries has been more effective than our initial assumptions.

Respondent 3:

The labor market performed somewhat worse than expected in 2009:Q1, but reassuring signs that the pace of decline in real activity is moderating have recently emerged.

Respondent 4:

Unemployment is now expected to be more pronounced.

Respondent 5:

The key factors that have caused me to revise down my near-term forecast are the weaker-than-expected data over the past few months. In addition, financial markets conditions are only slightly improved from last time and growth abroad deteriorated more than I expected.

Respondent 6:

Substantially weaker real growth in the first quarter of 2009 than I anticipated; More negative food and energy price changes in the first quarter of 2009 than I anticipated and a faster than anticipated increase in the unemployment rate are responsible for revisions to my forecast for the first half of 2009. My forecasts for fourth quarter over fourth quarter 2009 GDP growth have been revised by only a small amount as a result of this information. I now see somewhat higher intermediate term (2011) core and headline inflation given the higher than previously projected expansion of the monetary base.

Respondent 7:

On balance, data for Q1 were a little weaker than I expected, producing a downward revision to Q1 GDP estimate and pushing back the recovery until later in the year. The deterioration in labor markets has also been more severe than was anticipated in January and I have revised upward the forecast rate of unemploy-

ment accordingly.

Respondent 8:

N/A

Respondent 9:

Since last quarter, I have made slight downward revisions to real GDP growth, significant upward revisions to the unemployment rate, and an upward revision to inflation in 2009. A deterioration in labor markets, industrial production, and housing were the key factors leading to these small revisions.

Respondent 10:

As above, consumption stabilization, better housing results, tentative improvement in financial markets, some progress in inventory adjustment.

Respondent 11:

The incoming data on real economic activity in late 2008 and early 2009 came in weaker than we had expected. In addition, we have scaled back the assumed impact of fiscal stimulus on growth in 2009. In contrast, our nonstandard policies and private-sector adjustments have led to a somewhat larger improvement in financial conditions than we had been assuming in January. We also now have incorporated the current targets for large-scale asset purchases into the policy assumptions conditioning our forecast.

Respondent 12:

The data on employment, incomes, and production have been weaker than expected at the time of the previous projections. However, data on spending have been stronger.

Respondent 13:

The current forecast for real activity reflects the fact that economic conditions have deteriorated somewhat more than expected.

Respondent 14:

My forecast has changed little over the past quarter.

Respondent 15:

Fourth-quarter 2008 real GDP was revised much lower than was expected in my January projection, shifting the level of the near-term growth forecast down dramatically. Some recent data suggests stabilization in both consumption and housing supporting the view that a trough in economic activity will occur in mid-2009. An unusually dramatic deterioration in the labor market has pushed up the peak unemployment rate by roughly one percentage point from the January projection. Other data indicate a strong role for labor market reallocation during the recovery process, thereby pushing up trend unemployment and tempering the effects of economic slack on inflation. Recent unexpected strength in core CPI inflation has also pushed my near-term inflation outlook higher.

Respondent 16:

Since January, economic data have come in somewhat worse than anticipated, causing me to lower my forecast for real GDP growth in the first half of this year. The worsening outlook for foreign growth and signs that the repair of the banking and financial sectors will take longer than previously expected have caused me to lower my forecast for growth by a modest amount over the next few years. Recent inflation data have been higher than expected and measures of inflation expectations remain well contained, causing me to raise my forecast of inflation over the next few years, despite the higher forecasted path for the unemployment rate.

Respondent 17:

N/A

Longer-run Projections

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

Respondent 1:

N/A

Respondent 2:

By 2015 potential growth is 2.4% down from our current estimate of 2.7% as the babyboomers retire and there are some lingering effects of the present contraction on the capital stock. 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, that unemployment to be in this range in 2015 and the output gap around zero.

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 3:

Convergence will make little headway until the housing market has bottomed out, household finances are in better shape, the Fed has convincingly exited or clearly articulated strategies for exiting its "quantitative easing" programs without having created an inflationary dynamic, and consumption has begun to support solid economic growth in a more sustainable fashion. The world economy must recover sufficiently to provide a boost to export growth. It is doubtful whether all of these conditions will be met quickly enough that full convergence can be achieved before 2015.

Respondent 4:

Convergence process likely to take longer than five to six years.

Respondent 5:

N/A

Respondent 6:

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 3 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 7:

N/A

Respondent 8:

Given the severity and breadth of shocks to the economy, and the non-trivial chance that there are more to come, the convergence process may well extend beyond five or six years to something closer to eight years.

Respondent 9:

If appropriate policy is followed, I would expect convergence to occur within 5 or 6 years. However, I am concerned that delaying the removal of policy accommodation and shrinkage of our balance sheet will mean

convergence will take longer.

Respondent 10:

N/A

Respondent 11:

N/A

Respondent 12:

N/A

Respondent 13:

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

Respondent 14:

N/A

Respondent 15:

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.

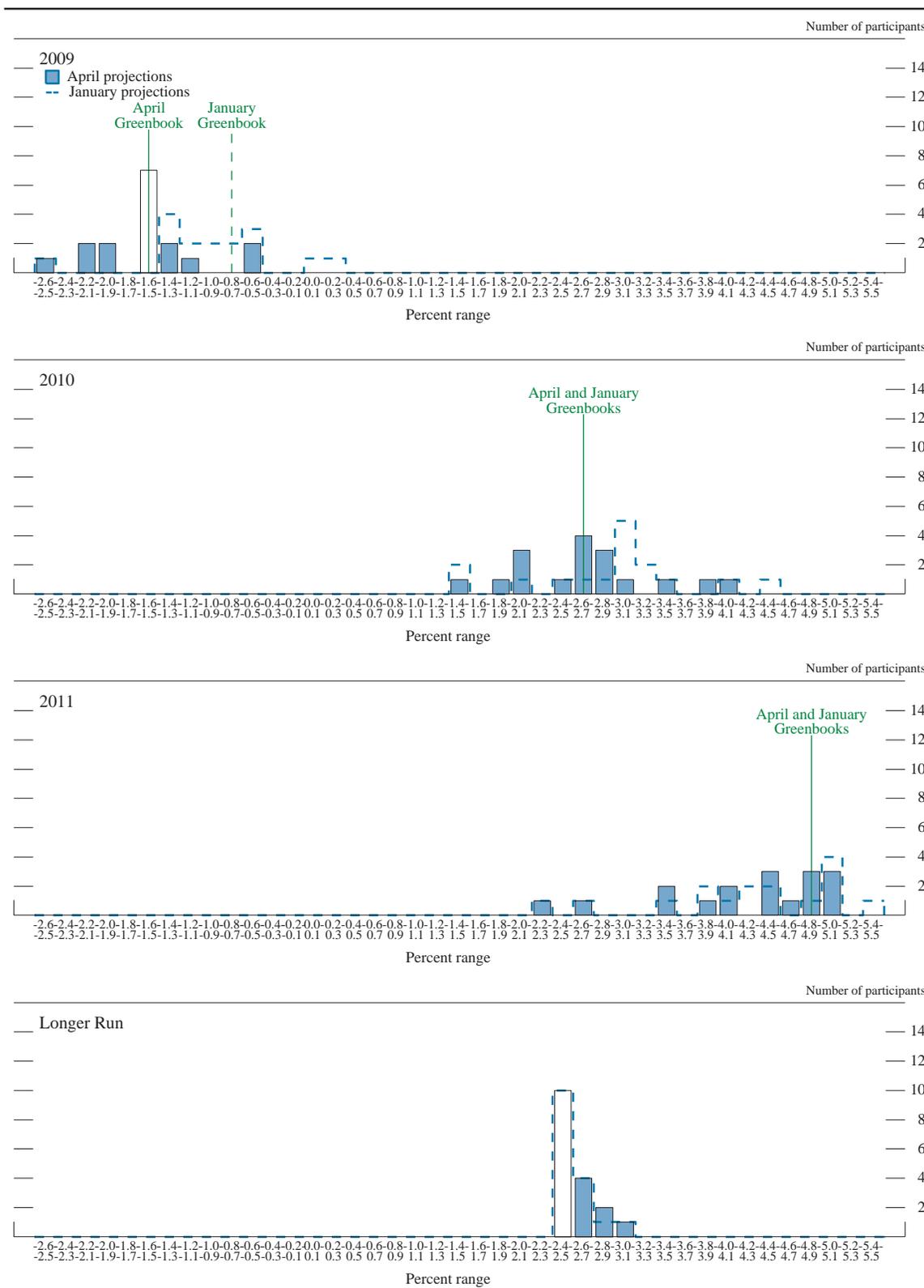
Respondent 16:

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

Respondent 17:

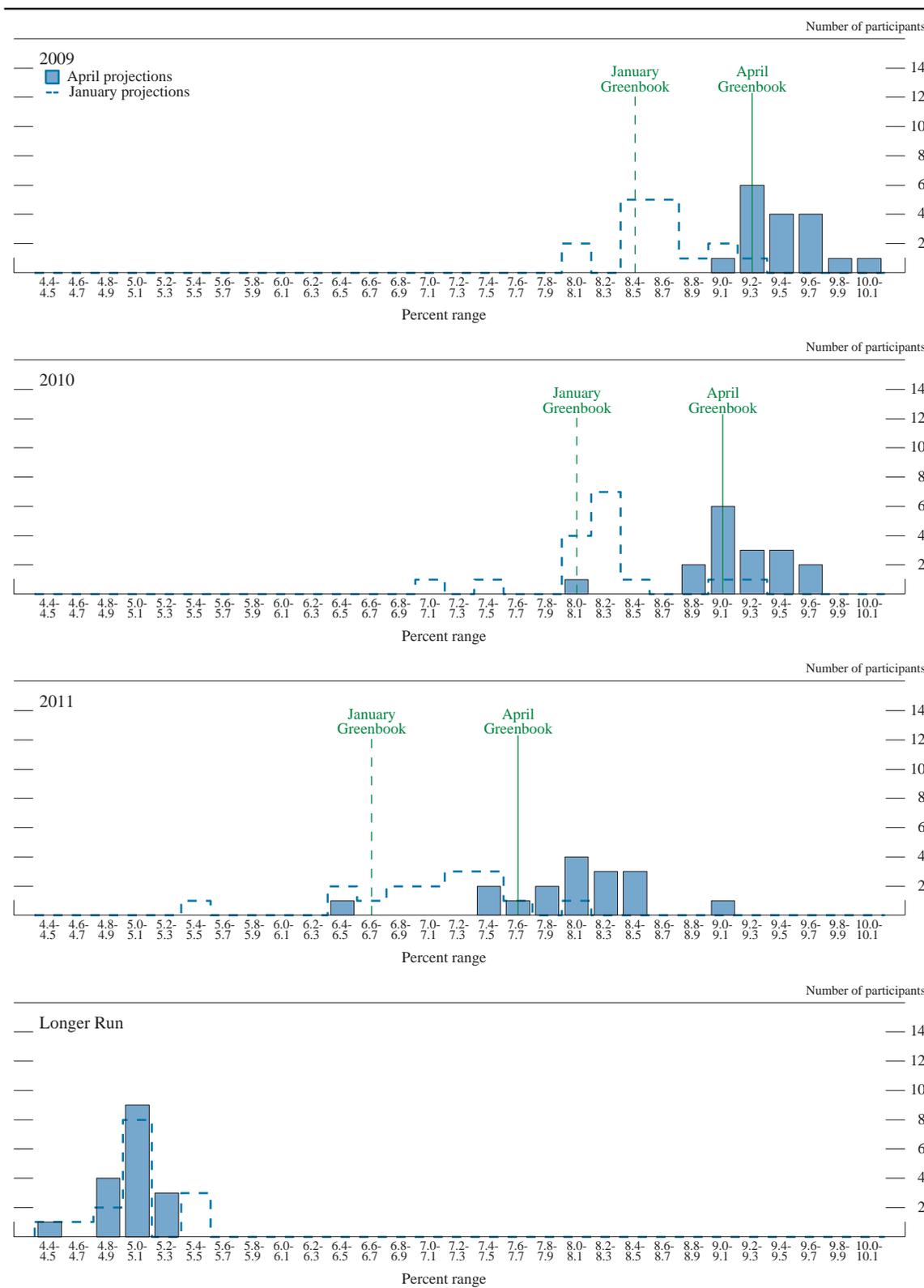
N/A

Figure 2.A. Distribution of participants' projections for the change in real GDP, 2009–11 and over the longer run



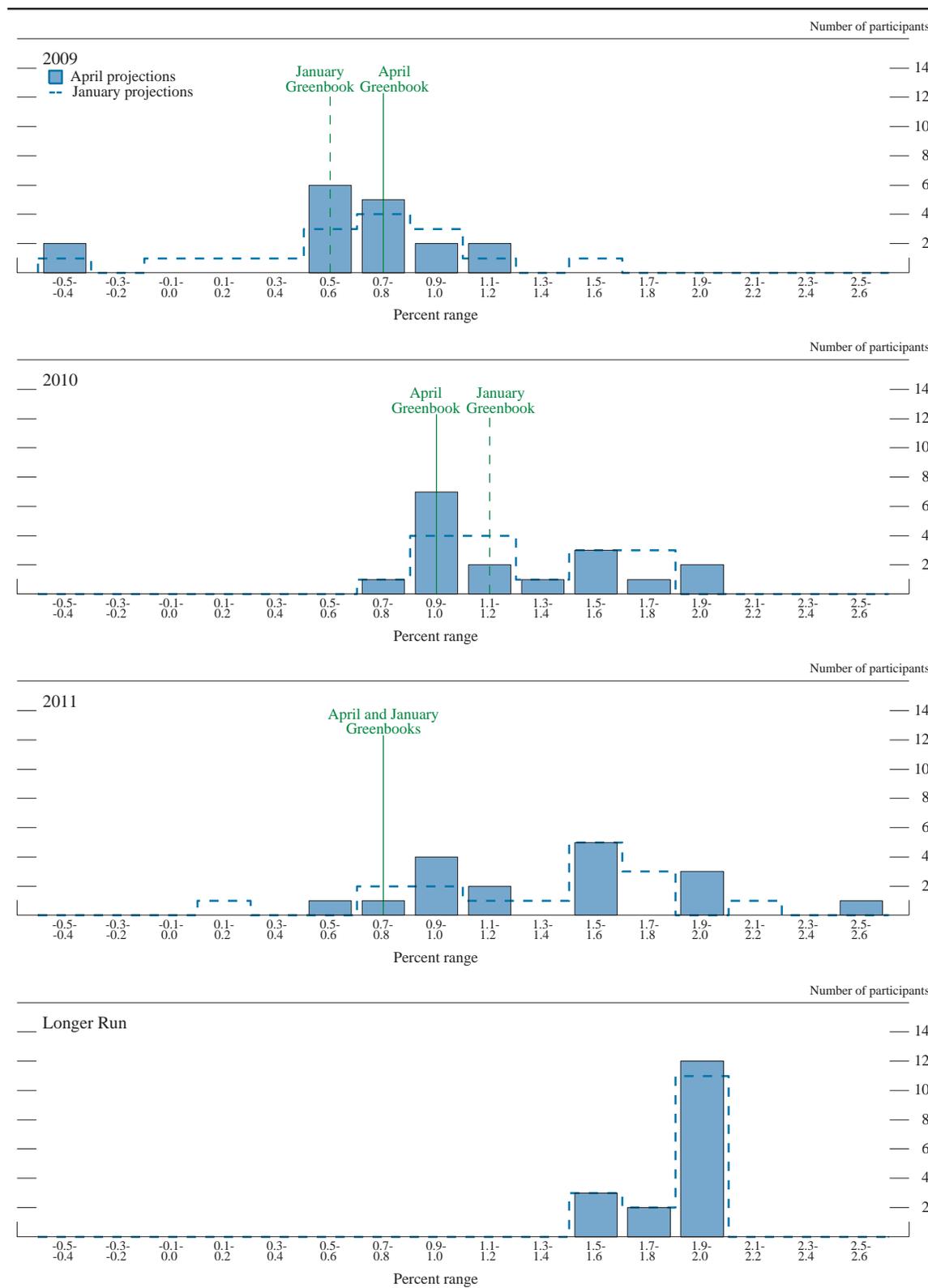
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.B. Distribution of participants' projections for the unemployment rate, 2009–11 and over the longer run



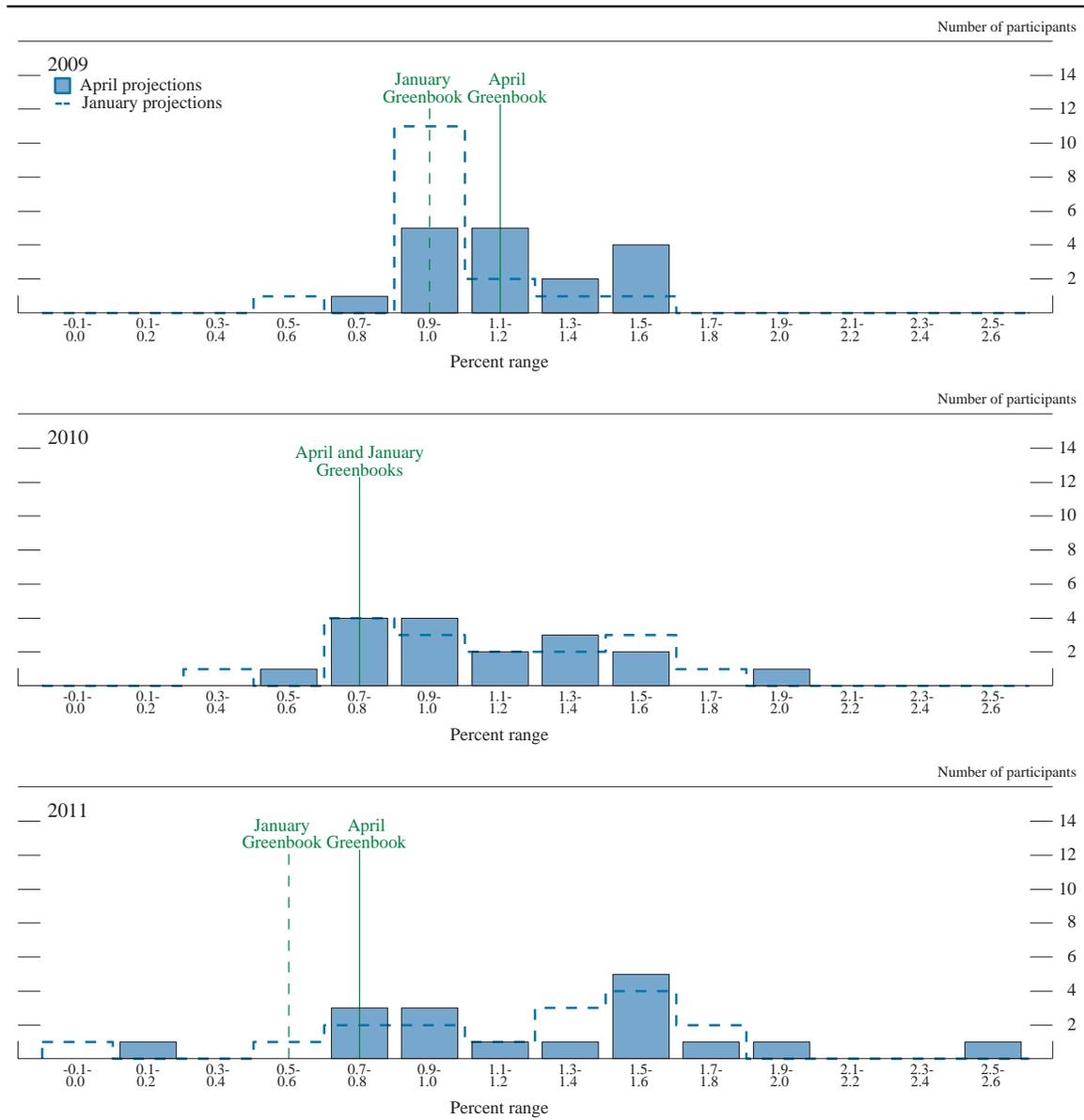
NOTE: Definitions of variables are in the general note to table 1.

Figure 2.C. Distribution of participants' projections for PCE inflation, 2009–11 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, 2009–11



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