Table 1: Economic Projections of Federal Reserve Governors and Reserve Bank Presidents [1]

	2009	2010	2011
Central Tendencies			
Real GDP Growth	-1.3 to -0.5	2.5 to 3.3	3.8 to 5.0
October projections	*-0.2 to 1.1*	*2.3 to 3.2*	*2.8 to 3.6*
Unemployment Rate	8.5 to 8.8	8.0 to 8.3	6.7 to 7.5
October projections	*7.1 to 7.6*	*6.5 to 7.3*	*5.5 to 6.6*
PCE Inflation	0.3 to 1.0	1.0 to 1.5	0.9 to 1.7
October projections	*1.3 to 2.0*	*1.4 to 1.8*	*1.4 to 1.7*
Core PCE Inflation	0.9 to 1.1	0.8 to 1.5	0.7 to 1.5
October projections	*1.5 to 2.0*	*1.3 to 1.8*	*1.3 to 1.7*
Ranges			
Real GDP Growth	-2.5 to 0.2	1.5 to 4.5	2.3 to 5.5
October projections	*-1.0 to 1.8*	*1.5 to 4.5*	*2.0 to 5.0*
Unemployment Rate	8.0 to 9.2	7.0 to 9.2	5.5 to 8.0
October projections	*6.6 to 8.0*	*5.5 to 8.0*	*4.9 to 7.3*
PCE Inflation	-0.5 to 1.5	0.7 to 1.8	0.2 to 2.1
October projections	*1.0 to 2.2*	*1.1 to 1.9*	*0.8 to 1.8*
Core PCE Inflation	0.6 to 1.5	0.4 to 1.7	0.0 to 1.8
October projections	*1.3 to 2.1*	*1.1 to 1.9*	*0.8 to 1.8*

1. Projections of real GDP growth, PCE inflation and core PCE inflation are fourth-quarter-to-fourth-quarter growth rates, i.e. percentage changes from the fourth quarter of the prior year to the fourth quarter of the indicated year. PCE inflation and core PCE inflation are the percentage rates of change in the price index for personal consumption expenditures and the price index for personal consumption expenditures excluding food and energy, respectively. Each participant's projections are based on his or her assessment of appropriate monetary policy. The range for each variable in a given year includes all participants' projections, from lowest to highest, for that variable in the given year; the central tendencies exclude the three highest and three lowest projections for each variable in each year.

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 -2.9	-5.0 to -1.3
PCE Inflation	-0.7 to 0.2	-1.7 to 1.2
Core PCE Inflation	1.0 to 1.2	0.5 to 1.4

Participants' Projections

Projection	Change in Real GDP	PCE Inflation	Core PCE Inflation
1	-2.9	-1.7	1.0
2	-3.6	0.0	1.2
3	-3.0	0.2	1.0
4	-4.0	-0.2	1.2
5	-2.2	0.6	0.8
6	-3.0	-0.7	0.7
7	-3.3	0.2	1.4
8	-5.0	-1.0	1.0
9	-2.0	1.0	1.0
10	-3.0	-0.2	1.2
11	-4.5	-0.2	1.1
12	-3.5	-1.7	1.2
13	-4.0	0.0	1.2
14	-3.0	-0.7	1.0
15	-1.3	1.2	1.3
16	-3.6	0.2	0.5

* 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	0.8 to 2.1	0.1 to 2.4
PCE Inflation	1.0 to 1.8	0.7 to 3.0
Core PCE Inflation	0.8 to 1.2	0.2 to 1.7

Participants' Projections

Projection	Change in Real GDP	PCE Inflation	Core PCE Inflation
1	1.3	0.7	0.2
2	1.7	2.0	0.8
3	0.2	1.4	1.0
4	2.1	1.6	1.0
5	1.2	1.4	1.2
6	0.8	0.9	1.1
7	2.4	2.2	1.4
8	0.1	1.0	1.0
9	2.0	1.0	1.0
10	0.4	1.4	0.8
11	2.2	1.2	0.7
12	2.0	3.0	0.8
13	1.3	1.6	1.2
14	2.1	1.3	1.0
15	1.7	1.8	1.7
16	1.1	1.4	1.3

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

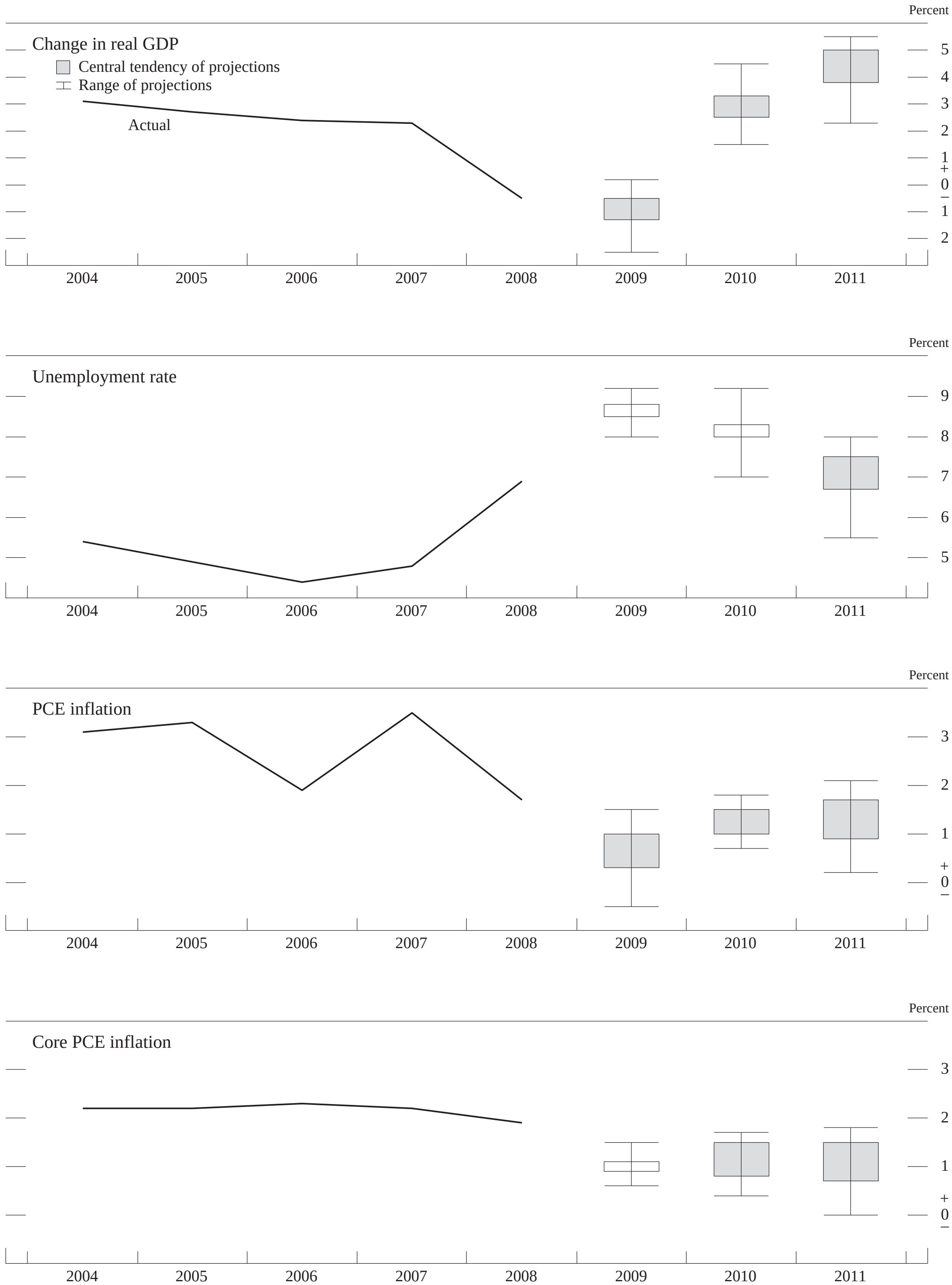
Table 2: January Economic Projections
(in percent)

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	2009	-0.8	8.8	-0.5	0.6
2	2009	-1.0	8.6	1.0	1.0
3	2009	-1.4	8.6	0.8	1.0
4	2009	-1.0	8.5	0.7	1.1
5	2009	-0.5	8.0	1.0	1.0
6	2009	-1.1	8.7	0.1	0.9
7	2009	-0.5	8.7	1.2	1.4
8	2009	-2.5	9.0	0.0	1.0
9	2009	0.0	8.5	1.0	1.0
10	2009	-1.3	8.6	0.6	1.0
11	2009	-1.2	9.0	0.5	0.9
12	2009	-0.8	8.4	0.6	1.0
13	2009	-1.4	8.5	0.8	1.2
14	2009	-0.5	8.5	0.3	1.0
15	2009	0.2	8.0	1.5	1.5
16	2009	-1.3	9.2	0.8	0.9
1	2010	3.3	8.4	1.8	1.0
2	2010	2.5	8.3	0.9	0.8
3	2010	1.5	8.0	1.2	1.1
4	2010	2.8	8.0	1.2	1.0
5	2010	3.0	8.2	1.5	1.5
6	2010	3.3	8.2	1.2	1.1
7	2010	3.0	8.3	1.5	1.3
8	2010	2.0	9.0	1.0	1.0
9	2010	4.0	7.5	1.5	1.5
10	2010	1.5	8.3	1.3	1.3
11	2010	4.5	8.2	1.0	0.4
12	2010	2.6	8.1	1.1	0.8
13	2010	3.5	8.1	0.7	0.7
14	2010	3.1	8.2	0.9	0.8
15	2010	3.0	7.0	1.7	1.7
16	2010	3.0	9.2	1.7	1.6

Table 2 (continued): January Economic Projections

Projection	Year	Change in Real GDP	Unemployment Rate	PCE Inflation	Core PCE Inflation
1	2011	4.2	7.7	2.1	1.4
2	2011	4.2	7.4	0.9	0.7
3	2011	3.8	6.8	1.8	1.3
4	2011	5.0	6.5	1.2	1.0
5	2011	3.5	7.5	1.5	1.5
6	2011	4.5	7.2	1.3	1.2
7	2011	5.0	7.0	1.5	1.3
8	2011	4.0	8.0	1.5	1.5
9	2011	3.8	6.5	1.5	1.5
10	2011	2.3	7.3	1.5	1.5
11	2011	5.5	7.0	0.2	0.0
12	2011	4.9	6.7	0.8	0.6
13	2011	4.5	7.5	1.0	1.0
14	2011	5.0	6.9	0.8	0.7
15	2011	2.7	5.5	1.7	1.7
16	2011	5.0	7.2	1.8	1.8

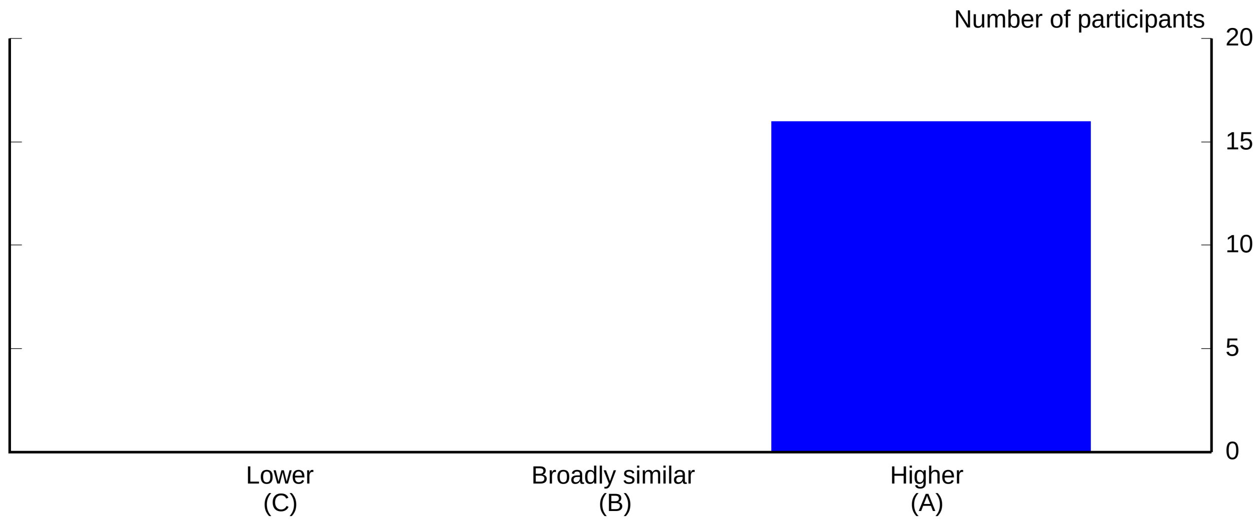
Figure 1. Central tendencies and ranges of economic projections, 2009–11



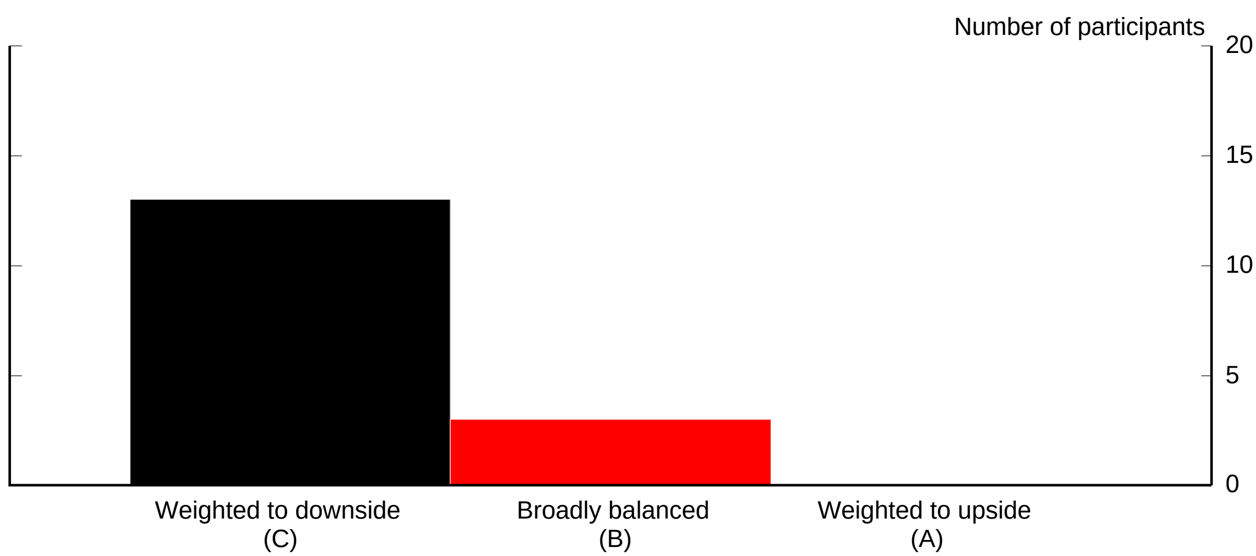
NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual.

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.

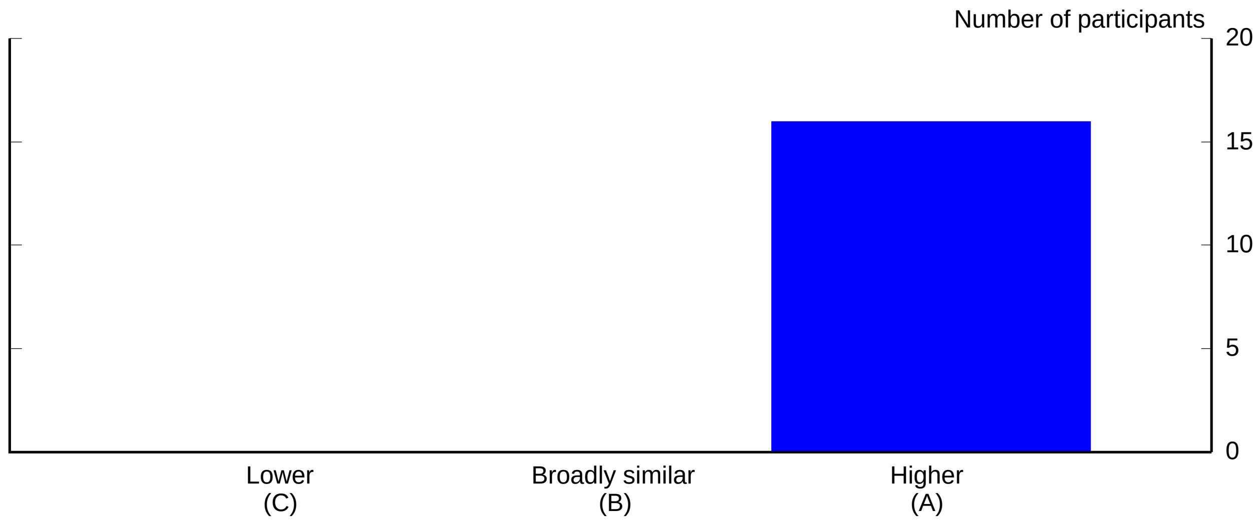


Individual Responses

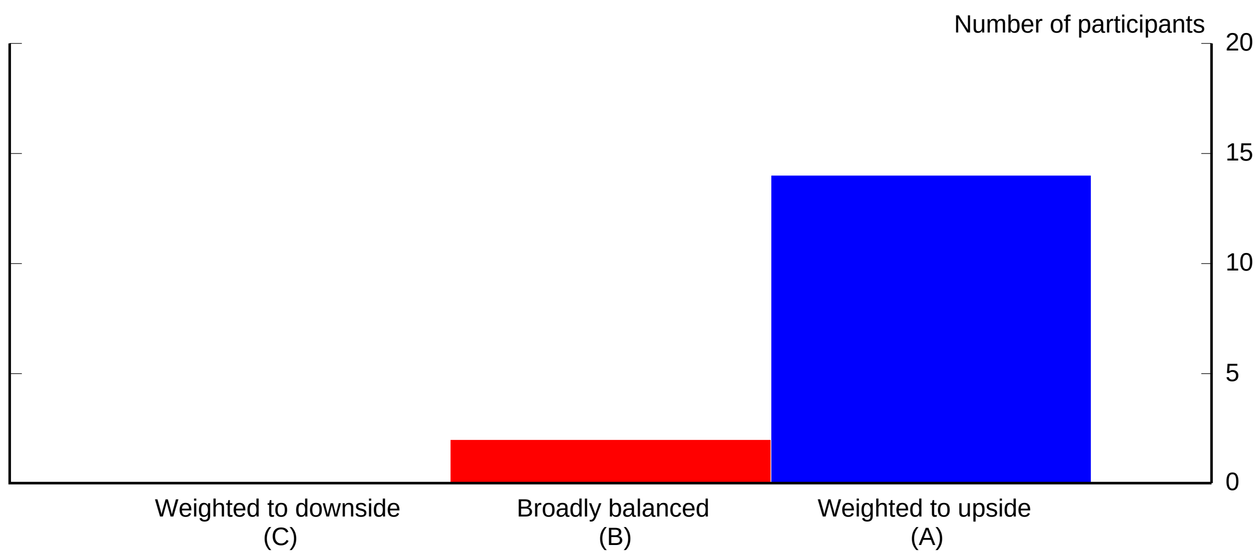
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2(b)	C	C	B	C	C	C	B	C	C	C	C	C	B	C	C	C

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.

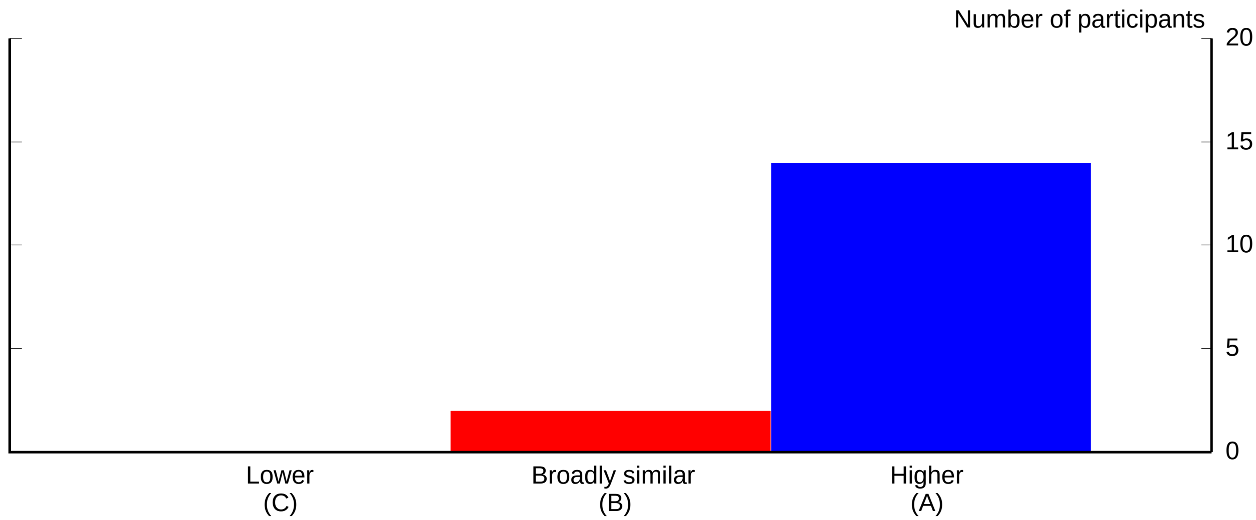


Individual Responses

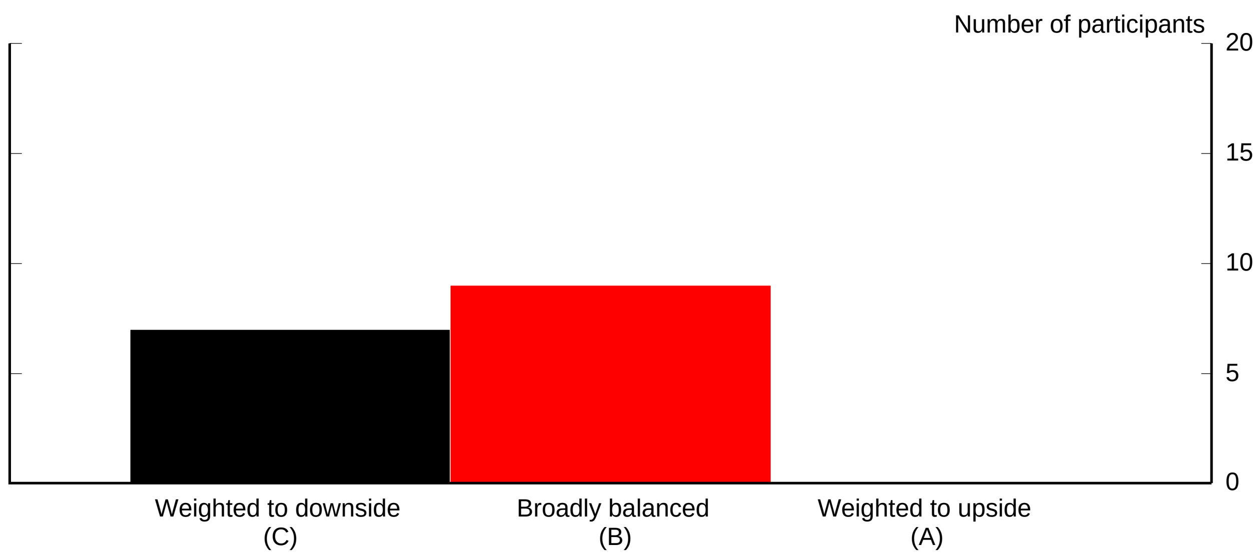
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2(b)	A	A	A	A	A	A	B	A	A	A	A	A	B	A	A	A

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.

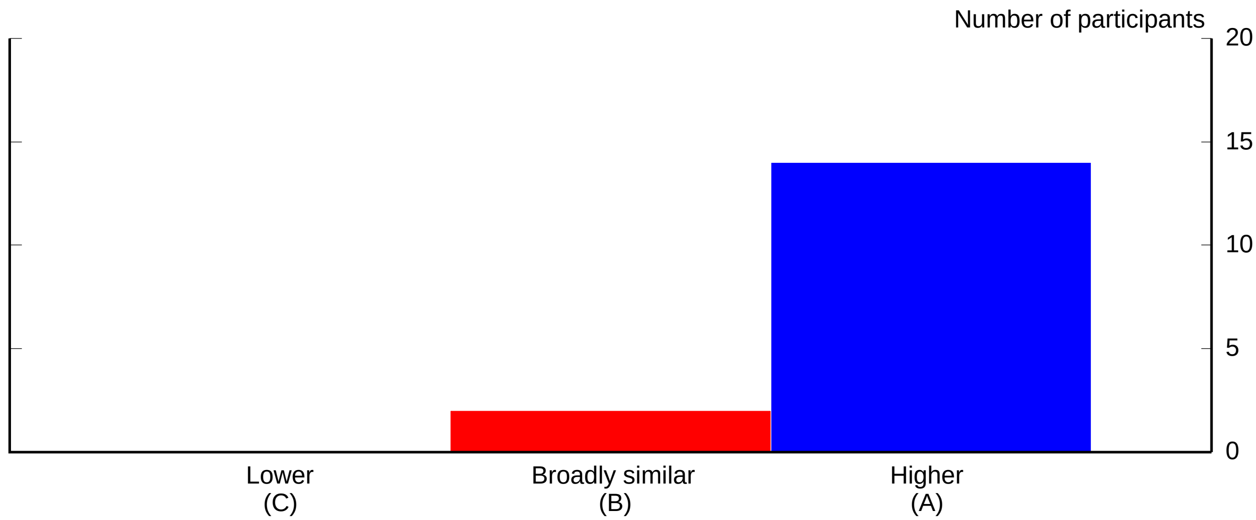


Individual Responses

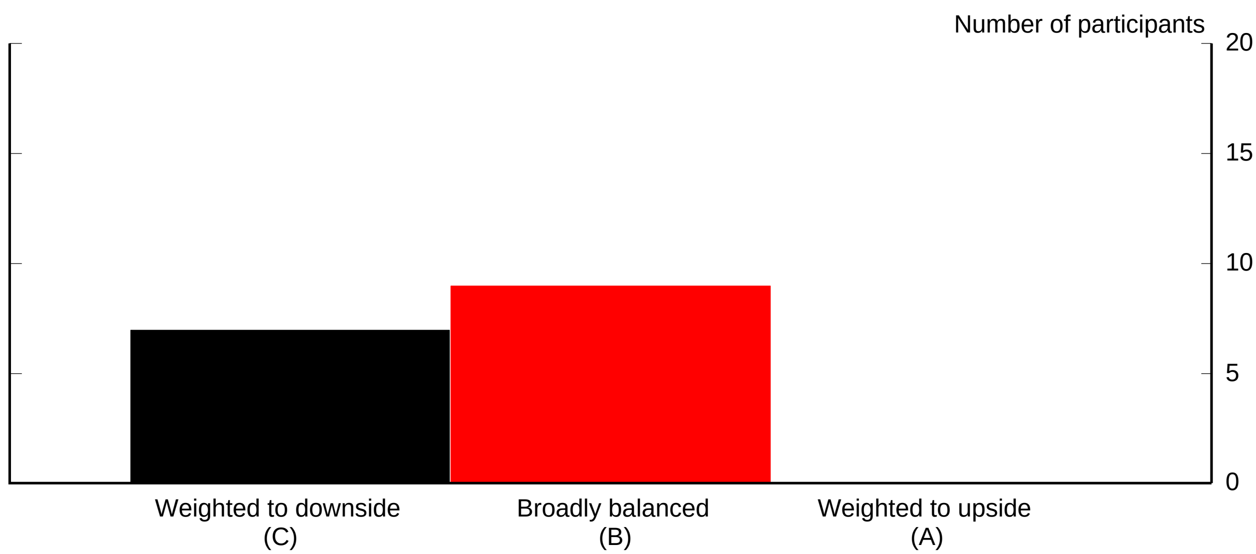
Respondent	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2(a)	A	A	B	A	B	A	A	A	A	A	A	A	A	A	A	A
2(b)	C	B	B	C	B	C	B	B	B	C	C	B	B	C	B	C

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
2(a)	A	A	B	A	B	A	A	A	A	A	A	A	A	A	A	A
2(b)	C	B	B	C	B	C	B	B	B	C	C	B	B	C	B	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:
Uncertainty about growth and unemployment is driven primarily by uncertainty about the course of the financial crisis and the effects of the crisis on real activity. In addition, there is much uncertainty about the shape and effectiveness of the government policy response (fiscal and financial policies). Inflation uncertainty reflects uncertainty about the evolution of resource slack and commodity prices (in light of greater uncertainty about world growth).

Respondent 3:
N/A

Respondent 4:
The speed and extent of the collapse of confidence in financial institutions and economic prospects and the resulting pull back in risk taking this fall, along with the governmental response, have few, if any precedents, so uncertainty about how economic activity and inflation will play out is unusually high

Respondent 5:
Uncertainty regarding my projections for GDP growth and unemployment are above average over the next year or so, due to the difficulty in forecasting the timing and depth of the recession. Beyond the end of the recession, uncertainty is about average. Under appropriate monetary policy, inflation expectations and inflation would be more firmly anchored than has been typical over the past twenty years, so uncertainty would be lower. While I believe that lower inflation uncertainty can be achieved over the forecast horizon, uncertainty about inflation is higher than typical now and it may take some time to make the transition to a more appropriate anchoring of expectations. Thus on balance, uncertainty about inflation would be broadly balanced.

Respondent 6:
N/A

Respondent 7:
The degree to which nonstandard policies by the Federal Reserve, Treasury, and the FDIC will ameliorate credit conditions is highly uncertain. So is the degree to which private markets will make progress in working through the price discovery process and the effects of resulting asset revaluations on the lending capacity of financial intermediaries. The scope and influence of yet-to-be-enacted stimulative fiscal policy action adds another degree of uncertainty to the forecast.

Respondent 8:
N/A

Respondent 9:
N/A

Respondent 10:
N/A

Respondent 11:
N/A

Respondent 12:
N/A

Respondent 13:
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. Moreover, there appears to be the possibility, albeit relatively remote, of sustained deflation.

Respondent 14:
The global financial turmoil, the deepening banking crisis, and questions about the effectiveness of the nascent fiscal stimulus and ongoing unconventional monetary policy actions raise the level of uncertainty around our projections for economic activity. The increased volatility in commodity prices and the heightened risks to the outlook for growth raise the level of uncertainty about our inflation projections.

Respondent 15:
The economy continues to experience unusual financial stresses. Further, monetary policy is constrained by the zero bound on interest rates and the magnitude of the effects of quantitative easing are uncertain. Consequently, I view forecast uncertainty to be higher than usual.

Respondent 16:
Quantitative judgment based on standard deviation of FRBNY forecast distribution for GDP growth and core PCE inflation relative to those reported in Reifschneider and Tulip.

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:
N/A

Respondent 3:
N/A

Respondent 4:
The government policies (including Federal Reserve policies) to address financial sector weakness and stimulate the economy here and abroad are more likely to turn out to be less effective than more effective than I have assumed. The skew in the distribution around the output gap results in a skew in the distribution around inflation. In addition, I have assumed that inflation expectations are better anchored than in the staff forecast, and the risks around that are to the downside.

Respondent 5:
The possibility that the recession lasts beyond the third quarter leads us to believe that the risks to GDP growth and unemployment rate are tilted to the downside and upside respectively. Inflation risks are balanced.

Respondent 6:
In the near-term (2009 and 2010), I believe the risks to overall and core inflation are to the downside. However, in the longer-term (2011 and beyond), I believe the risks are to the upside if we delay removing accommodation and shrinking our balance sheet.

Respondent 7:
The risks with regard to the effects of nonstandard government policies on the functioning of credit markets appear to be balanced. There is a downside risk that the realization of further losses by financial institutions could result in additional balance sheet pressures on lending capacity. The up and down-side risks to growth emanating from the uncertainty over fiscal policy stimulus are balanced. In the near term, price risks are tilted to 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 8:
N/A

Respondent 9:
In the near term, I see the risks to growth weighted to the downside, but going forward as the economy recovers from the current recession and experiences the fiscal stimulus package I believe that the risks will become weighted to the upside. In the near I believe that the risks to inflation are broadly balanced, while over the longer term the risks may move to the upside depending on the success of an exit strategy from the current quantitative easing.

Respondent 10:
There is a significant risk that the near-term disinflationary consequences of economic weakness are stronger

than shown in my forecast.

Respondent 11:
N/A

Respondent 12:
N/A

Respondent 13:
N/A

Respondent 14:
The risks to the outlook for growth are weighted to the downside and those for the outlook for unemployment are correspondingly weighted to the upside. The interaction of higher unemployment and rising delinquencies raises the potential for even greater losses by banks and other institutions and an intensification of the ongoing adverse feedback loop. The continuing deterioration of the financial sector despite massive interventions also raises concerns about how quickly the economy might recover. Given the sizable downside risks to the forecast for growth, the risks to the inflation forecast are likewise weighted to the downside.

Respondent 15:
Near-term risks to growth are to the downside given weak financial market conditions and the monetary policy zero-bound constraint. Near-term inflation risks are to the downside. But longer-term inflation risks are to the upside because of the uncertainty about our ability to reduce the size of our balance sheet at the appropriate time.

Respondent 16:
Quantitative judgment based on the difference between projection and expected value from FRBNY forecast distribution.

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	NO
8	8

Respondent 1: Yes
My projection has the federal funds rate gradually rising beginning in 2011.

Respondent 2: No
N/A

Respondent 3: No
N/A

Respondent 4: No
Although my expected path for the federal funds rate is about the same as that of the staff, I did assume additional credit market actions by the Federal Reserve that help to reduce tightness in financial market conditions.

Respondent 5: Yes
I believe sometime between the end of this year and the end of next year we will want to reduce excess reserves substantially and lift the federal funds rate off the floor.

Respondent 6: Yes
I assume the funds rate remains in its current range of zero to 1/4 percent through the end of 2009. However, unlike Greenbook, I assume the FOMC can begin to raise the funds rate at a modest pace beginning in 2010 (rather than waiting until 2013).

Respondent 7: Yes
We assume that increases in the funds rate begin sometime in 2010.

Respondent 8: No
N/A

Respondent 9: 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 this as the modal outcome. Hence I believe that, under appropriate monetary policy, we likely will have to move away from the current target range as part of the process of withdrawing from quantitative easing much sooner than assumed in the Greenbook forecast.

Respondent 10: No
N/A

Respondent 11: No
N/A

Respondent 12: No
N/A

Respondent 13: 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 14: No
N/A

Respondent 15: Yes
My forecast assumes a less accommodative federal funds rate path than that in the Greenbook baseline. I view appropriate policy as keeping the funds rate close to zero though the first half of 2009. The funds rate then begins to rise gradually as real GDP growth accelerates and inflation begins to rise. The funds rate reaches 3.5 percent in 2011Q4.

Respondent 16: 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 remains similar in 2011. We also assume an expansion of the TALF, the Fed's balance sheet to fluctuates around a high level determined by the facilities/OMOs, and official communication on a contingent path for the policy rate and the Committee's mandate for price stability.

Forecast Narratives

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

Respondent 1:
Fallout from the credit crisis severely impacts real economic activity, depressing business investment and further dampening consumer spending. These adverse effects only begin to dissipate in the second half of 2009. Furthermore, weakness has spread into world markets, causing a global recession. The severity of the U.S. recession is dampened somewhat by the forthcoming fiscal stimulus, which also helps to accentuate the recovery period.

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

Respondent 2:
As in the last set of projections, the intensification of the financial crisis and the remarkably sharp slowdown in global growth point to substantial weakness in the near term. My modal forecast has some improvement in financial conditions in 09:H1, reflecting fiscal policy, bank stabilization policies, and Fed support of credit markets, as well as some improvement in confidence and workdown of inventories. However, both fiscal and banking policies may take time to work, monetary policy is constrained by the ZLB, and we have seen in past episodes that "financial headwinds" can persist. Thus a quite slow recovery (particularly in the labor market) or stagnation for a period are both significant possibilities.

Respondent 3:
Degree of financial stress; efficacy of fiscal stimulus.

Respondent 4:
The adverse feedback between financial markets and economic activity continues through the first half of 2009, though diminishing in force over the second quarter. By the second half of the year the effects of governmental actions to repair financial markets and bolster spending boost demand. In addition, inventories of goods and of houses are drawn down to more sustainable levels, removing that source of cut backs in production. The slowing of house price declines helps to relieve anxieties about financial institutions, contributing to a gradual improvement in financial market functioning and easing of financial conditions. As this process continues, and as the multiplier/accelerator effects of fiscal stimulus play out, the growth of economic activity strengthens over 2010 and 2011.

Respondent 5:
I believe the recession is likely to end around mid-year, and that the economy will then begin to grow slowly. Business investment is likely to quite weak this year, but consumer spending is likely to flatten out and then pick up. I am a bit more pessimistic about the stimulative effects of fiscal policy than the Greenbook.

Respondent 6:
Recent data on consumer and business spending, housing, labor markets, foreign economic activity, and financial markets point to a deeper broad-based recession, leading me to revise down my forecast for growth in 2009. In the near-term, I expect the negative effects of job losses, declining incomes and wealth, lower consumer and business confidence, and tighter credit to dominate the positive effects of lower energy prices. However, I expect monetary policy and fiscal policy to eventually provide a boost to growth and sentiment. As a result, I now expect real GDP to decline during the first three quarters of the year before picking up to a 2 percent rate in the fourth quarter. I also expect consumer spending will decline at about a 1 percent rate in the first half of the year. With a stimulative fiscal policy in 2009 and 2010, and a continued accommodative monetary policy, I expect the economy will grow above trend in 2010 and 2011, thereby

shrinking the currently large negative output gap.

The significant decline in energy and commodity prices, along with weakness in output and spending, has put significant downward pressure on overall and core inflation in the last couple months. Both overall and core inflation are likely to remain below 1 percent in 2009 and only about 1 $\frac{1}{4}$ percent in 2010.

In light of continued weakness in the economy, severe problems in housing and financial markets, and heightened caution of the part of consumers and businesses, the risks to GDP growth are weighted to the downside. In the near-term (2009 and 2010), the risks to overall and core inflation are to the downside. However, in the longer-term (2011 and beyond), I fear the risks are to the upside if we delay removing accommodation and shrinking our balance sheet.

Respondent 7:
We assume that monetary accommodation (including that provided by special credit facilities), private financial sector adjustments, and fiscal policy stimulus will result in a resumption of positive growth in the second half of 2009. Although we expect them to improve, we still believe credit conditions will be a net drag on activity this year. Further improvement in financial markets, continued policy accommodation, and cyclical dynamics are expected to boost growth above potential in 2010 and 2011.

The recovery is not expected to be robust enough to close resource gaps until beyond the end of projection period. One reason is that firms have shed labor quickly, and, going forward, we think they will be reluctant to increase employment quickly.

This slack represents continued downward pressure on inflation. However, we do not anticipate that inflation expectations will decline to a degree that would support a deflationary outcome. This judgment assumes that agents' deflationary concerns due to output gaps are roughly balanced by concerns over the possible inflationary consequences of our expanded balance sheet. In this environment, we assume that policy unwinds the extra liquidity injected in the economy with appropriate consideration to the evolution of inflation expectations.

Respondent 8:
The deterioration in the economy will continue over the near term, driven by adverse feedback from rising unemployment, the world-wide seizing up of credit markets, declines in foreign direct investment, and growing global protectionist sentiment. Federal Reserve initiatives will have only limited success in countering these headwinds. Consequently, the recession will be unusually deep, and the recovery unusually sluggish.

With the economy and economic policy entering uncharted territory, risk aversion will remain extreme. Trust–in regulators, financial institutions, investment advisors, and fiscal and monetary policymakers–has been badly damaged.

Late this year and early next year, though, residential investment bottoms out–eliminating a major drag on the economy–and fiscal stimulus takes effect. As uncertainties about financial rescue and reorganization policies are resolved, borrower, investor, and financial-manager decision making gradually thaw.

Respondent 9:
I expect continued contraction in early 2009 with output bottoming out in the middle of the year and then recovering in the second half. In 2010 and 2011 I anticipate growth will occur at greater than steady-state rates, reflecting normal cyclical patterns reinforced by a modest impact of a yet-to-be adopted fiscal stimulus package. I expect relatively low, but positive inflation in 2009 under appropriate monetary policy. 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 10:
All indicators continue to reveal an economy in deep and broad-based recession. Further declines in home prices are expected to weigh heavily on financial and household balance sheets. Consumer and business spending are like to fall further in the near-term, mitigated somewhat by fiscal stimulus starting in the latter half of 2009. However, credit loses and solvency concerns remain substantial well into 2010, and private savings rates are projected to rise and remain elevated over the forecast horizon, slowing the pace of recovery.

Slower growth is expected to exert downward pressure on prices, though these influences are likely to be partly mitigated by a temporary reduction in potential GDP growth and accommodative policy actions.

Respondent 11:
Fundamental drivers of the economy have deteriorated substantially. Labor market conditions are bleak, and the labor market is likely to worsen further before starting to improve gradually. Support to consumer spending is hampered not only by the labor market, but also by the very steep declines in stock market and housing wealth. The fiscal stimulus will provide some wherewithal to consumers, but we expect the effect of the stimulus to become apparent mostly in 2010, as the drag from poor consumption fundamentals begins to subside. Overall, we expect activity to contract in the first half of this year, with the unemployment rate rising to 9 percent by mid-year. The fiscal stimulus starts to impact the economy in the second half of 2009, and as a result activity grows near potential. We expect GDP to grow noticeably above potential in 2010 and 2011, as credit conditions start to improve and the effects of the ongoing fiscal and monetary stimuli are fully realized. This spurt in economic activity notwithstanding, the unemployment rate is still at 7 percent by the end of 2011. As a result of the significant labor market slack over the forecast horizon, the rate of core inflation hovers around zero percent in 2011.

The timing of the fiscal stimulus remains uncertain. Delays in the enactment of the stimulus package could make conditions even worse in the near term. Given the pronounced deterioration we are expecting in the near-term, conditions at many financial institutions will continue to worsen. This raises the likelihood of further restrictions on credit supply and of increased financial instability. For these reasons, we view the risks to real activity as tilted to the downside. 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 12:
I chose the Greenbook forecast assuming strong fiscal stimulus and gradual waning of financial stress. The other scenarios I considered as highly likely were for more financial stress or more cautious spending. I finally discarded the two weaker scenarios on the assumption that should either occur it would be offset by stronger government reaction such as larger scale asset purchases or additional fiscal stimulus aimed especially at job creation. I am concerned that if stock market values do not begin to recover, savings rates will remain elevated.

Respondent 13:
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 14:
Financial conditions remain extremely tight, housing activity and labor markets continue to deteriorate, consumer and business spending are still falling, and the outlook for global growth has worsened. These

factors contribute to the projected contraction in economic activity through much of 2009. Recapitalizing the banking system and supporting financial markets are crucial continuing actions. Also, the fiscal stimulus will be a key driver of the gradual recovery in 2010 and 2011. Plummeting commodity prices and slack in labor and goods markets should continue to keep inflation low.

Respondent 15:
The recent data on the economy have been weaker than what I anticipated in my October forecast. I expect continued weakness in the housing sector, tight credit markets, 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. However, 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. Uncertainty around this forecast is higher than usual given the zero bound constraint on monetary policy. Near-term, the principal risk is that the economy turns out weaker than expected. Longer term, the principal risk is that the economy rebounds more quickly and at a stronger-than-expected pace. The FOMC would then need to reduce the size of its balance sheet in a timely manner to avoid an unwelcome rise in inflation.

Respondent 16:
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 1/4 % below the peak, somewhat less than the most severe recessions of that period. By the second half of 2009 recovery begins 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 2010 and accelerates in 2011 to about 2 $\frac{1}{2}$ % above its potential rate, implying only a narrowing rather than a complete closing of the output gap over this period. At the trough, the unemployment rate is expected to be around 8 $\frac{3}{4}$%, a full four percentage points above the level at the peak. This is large relative to the decline in real GDP due to continued moderate growth of productivity and a rather muted decline of the labor participation rate. Moreover, the unemployment rate is expected to continue rising over the first year of recovery, likely to around 9 1/4%, as the participation rate and average weekly hours move upward again. Thereafter, the unemployment rate moves down only gradually. We maintain substantial downside risk to our central scenario with an uncomfortably high probability on the steepest contraction in activity since the 1930s.

Within this central projection, consumer spending remains relatively sluggish through 2009 as households respond to the decline in their net worth by boosting saving out of current cash flow. 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 the past three years will be over. Thereafter, housing is likely to be a modest plus for growth, but the surge of residential investment experienced in the early stages of past recoveries is not anticipated due to the continued high levels of homes coming onto the market through the foreclosure process. Indeed, the correction in house prices is expected to continue through the end of 2010 with a cumulative 20% peak- to-trough decline in the FHFA purchase-only home price index. 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 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 remains a plus for growth from an accounting sense as imports also decline 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 gradual recovery of domestic demand induces an increase in the rate of growth of imports. 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 inflation is at first negative as the effects of the recent sharp declines in energy and other commodity prices show through into prices paid by consumers. Core inflation is very low in the first half of 2009 reflecting the quite abrupt decline in final demand. In particular, prices of non-food, non-energy goods decline relatively steeply as businesses aggressively cut prices to reduce excess inventories. Thereafter, both total and core inflation gradually increase back into the mandate consistent range as final demand firms within the context of anchored inflation expectations.

The risks to our central projection for real activity are substantial and are skewed to the downside. In the near-term, the key risks are that the credit channels remain impaired, business and consumer confidence erodes and weakness in external demand persists longer than 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. Finally, an important risk over the medium term is the uncertainty surrounding our assumption of the economys potential growth rate.

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, 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 a banking and financial crisis, 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.

Forecast Narratives (continued)
4(b). Please describe the key judgements and assumptions affecting your economic projections in the final projection year.

Respondent 1:
Due to the severity of the recession, the economy will not have returned to its longer-term trend growth rate by the final projection year (2011). This period is characterized by higher than trend growth and a declining unemployment rate. Also, the inflation rate remains below my price stability goal in the final year of the projection.

Respondent 2:
Given extent of near-term weakness, both unemployment and inflation remain far from steady-state values. Growth is above potential rate, reflecting rebound from situation with large output gap — though I expect a somewhat slower rebound than does the Greenbook.

Respondent 3:
Expect slower, but still some, resumption toward trend.

Respondent 4:
I assumed that NAIRU will be 5 percent, the growth of potential will be 2-1/2 percent, and that the FOMC would seek to anchor inflation at 2 percent on the PCE chain price index overtime.

Respondent 5:
The economy will still be recovering from the recession in 2011. Unemployment will be above average, even though real GDP growth will be moderately above trend. With appropriate monetary policy, which includes announcing a numerical objective for inflation next month, I believe we can bring inflation very close to 1.5 percent, in the absence of shocks.

Respondent 6:
I assume that financial turmoil has subsided and extraordinary lending programs are no longer needed. Even though some policy accommodation has been removed, monetary policy and fiscal policy will likely remain stimulative through at least 2010. As a result, I expect real GDP growth will be above potential in 2011. However, continued slack will act as a moderating factor on inflation, causing core PCE inflation to be below desired levels in 2011.

Respondent 7:
As noted above, we do not think that growth and sentiment towards hiring in 2010 and 2011 will be sufficient to close resource gaps. We also assume that inflation expectations in be 1-1/2 to 2 percent range.

Respondent 8:
By 2011, the U.S. economy will benefit from stronger growth overseas, improvement in households finances, and the lagged effects of stimulative policy. The financial system will have largely completed its consolidation and recapitalization, and risk aversion will abate. The U.S. expansion must be driven by export growth to an unusual degree, if global imbalances are not to re-emerge.

Respondent 9:
Growth still above its steady-state value an inflation at target. Unemployment still adjusting back to its steady-state value.

Respondent 10:
Year-over-year GDP growth returns to its trend rate of 2.5 percent late in 2011. The combination of lower potential growth and accommodative policy allows inflation to gradually move back toward the longer-term

target of 2.0 percent.

Respondent 11:
Potential GDP is 2.5 percent, the NAIRU is 4.75 percent. The target for core PCE inflation is 2 percent. The Federal funds rate is held flat at 0.25 percent. The fiscal stimulus package amounts to roughly 800 billion over the forecast horizon.

Respondent 12:
N/A

Respondent 13:
See 4 (a)

Respondent 14:
In 2011, the forecasted PCEPI inflation rate is 0.8 percent, below my long-run inflation objective of 2.0 percent. The unemployment rate ends the year at 6.9 percent, still above my estimate of the natural rate of 4.8 percent. The stance of monetary policy remains accommodative–with a funds rate of close to zero at the end of 2011–in order to foster a reduction in the unemployment rate. Economic growth in 2011 is well above potential.

Respondent 15:
By 2011 financial market stresses are behind us, business and consumer sentiment has rebounded, and the economy is growing at its trend pace of 2.7 percent. The unemployment rate is somewhat above my estimate of the natural rate, which is 5 percent, and inflation is at my long-term goal of 1.7 percent. The federal funds rate reaches 3.5 percent by year-end.

Respondent 16:
We assume that long-term inflation expectations to be anchored around 2.5% on a CPI basis and the FOMC's inflation objective to be around 2.0% for the PCE deflator and around 2.5% for the CPI. Potential growth is 2.7% (we expect some further delay in the retirement of baby boomers relative to earlier generations), and that the output gap opens in 2008-9 and narrows in 2010-11. Our extended forecast also includes some implicit judgments about the likely ranges for the NAIRU and the neutral policy rate. Those judgments put the neutral policy rate in the region of 3.75% to 4.75% absent the current disruptions in financial markets and the NAIRU between 4.5% to 5%.

Forecast Narratives (continued)

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

Respondent 1:
My outlook for output is broadly similar to the Greenbook in the near-term. However, my path for the recovery of economic growth is relatively muted in the out-years, when compared with the Greenbook. Also, my forecast has anchored inflation expectations which helps to alleviate the downward drift in inflation seen in the Greenbook.

Respondent 2:
Slightly more pessimistic, given the powerful downward momentum of the global economy, delayed fiscal impact, and the likely drag from financial conditions persisting through 2009.

Respondent 3:
N/A

Respondent 4:
Small differences: I see a slightly steeper decline in H1 09 owing to a further erosion of perceived safety and soundness of financial institutions and resulting tightening of credit, but a little faster rebound as additional Federal Reserve efforts to address financial conditions take hold and confidence begins to return. I assume better anchored inflation expectations owing in part to FOMC communication.

Respondent 5:
I believe that under appropriate monetary policy inflation expectations would move steadily toward our announced objective, which I assume is 1.5 percent, and so would diverge in the near term from the trailing four-quarter average of core inflation. Thus I am forecasting higher inflation than in the Greenbook. Because I expect businesses to remain cautious about new investments in the out years, I believe growth will be below that of the Greenbook then.

Respondent 6:
Over the forecast horizon (2009 - 2011), I expect real GDP growth to average 2 1/4 percent, the same as Greenbook. In addition, the general contour of my forecast for real GDP is similar to Greenbook's forecast: real GDP falls in 2009 and grows faster than trend in 2010 and 2011. However, unlike Greenbook, I expect real GDP to decline through the third quarter of this year before beginning to increase in the fourth quarter. I then expect a larger increase in 2010 and a somewhat slower increase in 2011. With regard to the unemployment rate, I expect it to reach 8.7 percent by the end of 2009 before declining at a somewhat slower pace than Greenbook.

Like Greenbook, I expect overall and core PCE inflation to remain below 1.5 percent through the forecast horizon. However, unlike Greenbook, I expect an upward trajectory to inflation while Greenbook expects a downward trajectory. More specifically, I expect core PCE inflation to rise slowly to 1.2 percent in 2011, compared to Greenbook's forecast of a decline to 0.6 percent.

Respondent 7:
We think inflation expectations will run somewhat higher than in the Greenbook baseline.

Respondent 8:
The Greenbook baseline forecast underestimates both the intensity and the duration of financial headwinds.

Respondent 9:

I project somewhat less weakness in economic growth in the first half of 2009 and a quicker recovery of growth in 2010. My projection for inflation in 2009 does not differ materially from that of the Greenbook, though I see inflation most likely rising slightly in future years.

Respondent 10:
The recovery is more protracted than in the Greenbook. Monetary policy is conditioned on achieving PCE inflation near 2 percent over the longer-term.

Respondent 11:
We see the unemployment rate peaking higher than in the Greenbook. While the downturn is somewhat more severe, the economy rebounds somewhat more quickly than in the Greenbook. However, since our estimate of potential is somewhat higher than the Greenbook's, by the end of the forecast horizon our projected level for the unemployment rate is not too different. 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 12:
N/A

Respondent 13:
Relative to the Greenbook, I have a deeper contraction this year and a more rapid snap-back in 2010. I also have a higher unemployment rate at the end of the forecast period.

Respondent 14:
The broad contours of my forecast are similar to Greenbook, although I assume a bit faster recovery in response to additional unconventional monetary policy actions and a slightly stronger response to the fiscal stimulus package.

Respondent 15:
I do not expect the economy to be as weak as the Greenbook in 2009 and 2010. As my inflation forecast is less influenced by the degree of resource utilization in the economy, I expect inflation running at a higher pace in 2010 and 2011 than in the Greenbook. Given the strength of the economy in my forecast relative to the Greenbook, the monetary policy path is less accommodative beginning in 2009H2.

Respondent 16:
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 difference for the outlook in 2009-10 this implies a 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 2010-11 under the assumption of well-anchored inflation expectations

Forecast Narratives (continued)

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

Respondent 1:
Since October, we have seen a dramatic worsening in the financial sector and credit markets. Incoming data has been exceptionally weak, especially the rapid deterioration in nonfarm payrolls and the consumer spending. This has led me to dramatically revise down my forecast since the last submitted. Notably, I am assuming a marked contraction in BFI. Given the international nature of the credit crisis, along with incoming data and anecdotal reports, I have revised down my projection for foreign sector growth as well. Near-term headline inflation dips very low as a result of the overall weakness in the economy and the retrenchment in energy prices. While a considerable amount of slack builds during the forecast period, its effects on core inflation are tempered by a reappearance of global competition for resources and stable inflation expectations. That said, core inflation remains uncomfortably low throughout the balance of my forecast.

Respondent 2:
Continued financial stress (TARP injections did not eliminate serious concerns about banks), much weaker than expected data outside the United States, data confirming broad-based deterioration in the US (labor markets, production).

Respondent 3:
Significant further breakdown in business and consumer confidence and significant further weakening of financial institutions.

Respondent 4:
The weakness in the financial sector and the pull back in spending have proven deeper and more persistent than I had anticipated.

Respondent 5:
Data on real activity has been much weaker than I expected since the last projections, especially for employment, consumer spending and housing. Commodity prices have fallen more than I expected, and so inflation has been lower than I expected as well.

Respondent 6:
Incoming data has been weaker than expected, the impact of financial turmoil has been larger than expected, and foreign growth has been weaker than expected. In addition, we are continuing to see heightened problems with credit availability and greater caution on the part of consumers and businesses. Inflation data has also been much weaker than expected. As a result, I have revised down my forecast for growth and inflation.

Respondent 7:
Economic activity has been much weaker than we had anticipated and full scale recessionary dynamics are now in train. Household net worth has declined significantly. Growth abroad is weaker than we had expected as well. While we have experienced some improvements in short-term credit markets, the balance sheet conditions of many major financial intermediaries have deteriorated more than we had expected. Fiscal policy is set to become more expansionary than we had assumed.

Respondent 8:
The downturn has developed new momentum as concerns about the solvency of financial institutions have intensified, and as weakness has spread across sectors and around the world. Sharp declines in wealth and a related increase in risk aversion have restrained consumer spending. Policy uncertainty has frozen deci-

sion making. There is some evidence of a "run" on banks–a run led not by depositors but by borrowers: Businesses are rushing to draw on lines of credit even if they have no immediate need for cash, partly in anticipation of future bargains and partly out of fear that funds will be unavailable later.

Respondent 9:
Substantially weaker data plus continuing financial market trumoil in recent months.

Respondent 10:
Recent indicators imply considerably greater near-term growth weakness than projected in October. The speed and breadth of the disinflation process has been greater than earlier assumed.

Respondent 11:
The current forecast for real activity and inflation reflects the fact that economic conditions on the real side have deteriorated much more than expected. Recent inflation data, too, have surprised on the downside.

Respondent 12:
N/A

Respondent 13:
Incoming evidence has suggested that the recession will be more severe than earlier anticipated and the moderation in inflation will be more pronounced. I have raised my forecast for growth in 2011 on the basis of a re-reading of historical experience.

Respondent 14:
Since October, economic data, both for the U.S. and foreign economies, have been much worse than expected and the global financial and banking crisis has intensified. This has caused me to lower my forecast for economic activity over the next few quarters. The forthcoming fiscal stimulus and accommodative monetary policy induces a slightly stronger recovery. Recent inflation data, the fall in oil and other commodity prices, and the increase in the forecast for labor market slack has caused me to lower my forecast for inflation.

Respondent 15:
The key factors that have caused me to revise down my forecast are the generally weaker-than-expected data over the past few months. In addition, financial market conditions are not much improved from last time and growth abroad appears to be deteriorating more than expected.

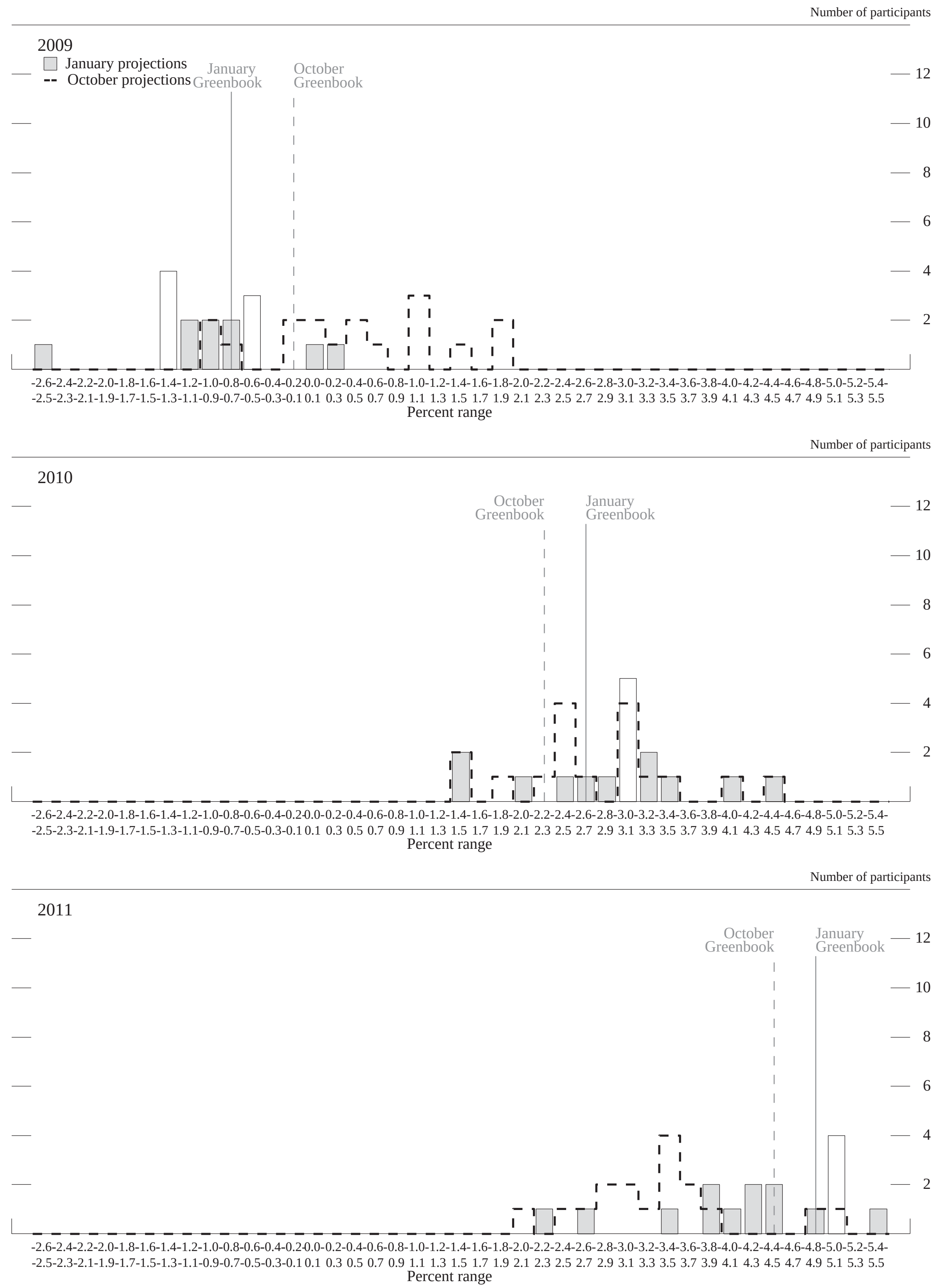
Respondent 16:
In October we judged it likely that the US economy would experience a recession of intensity similar to 1990-1. Incoming labor market data, the synchronized decline in the pace of global economic activity and increasing evidence of restricted credit flows produced large downward revisions in our projections for 2009H1. We view the continued decline in energy and other commodity prices as primarily a result of lowered expectations for global growth, partially offsetting the net boost to real disposable income. The additional fiscal measures likely to be introduced in the next few weeks are viewed as mainly mitigating downside risks in this worsened macroeconomic environment.

Core inflation data surprised to the downside relative to our October forecast for three months in a row. Many of our coincident measures of underlying inflation moved down sharply as we have added in the new price data. Along with the large increase in economic slack this produced a large decline in the core inflation forecast for 2009.

The downside risks to our central scenario projection have increased since October. The additional deterioration in the labor market along with the decline in pace of global activity have increased the stress on an already fragile financial system. This has lead us to put more weight on the likelihood of a continued adverse feedback loop between real activity and financial stress. The magnification of this risk has also produced an overall downside risk to our inflation forecast, notwithstanding the weight we still place on inflation above the mandate consistent range if the global economy does prove resilient.

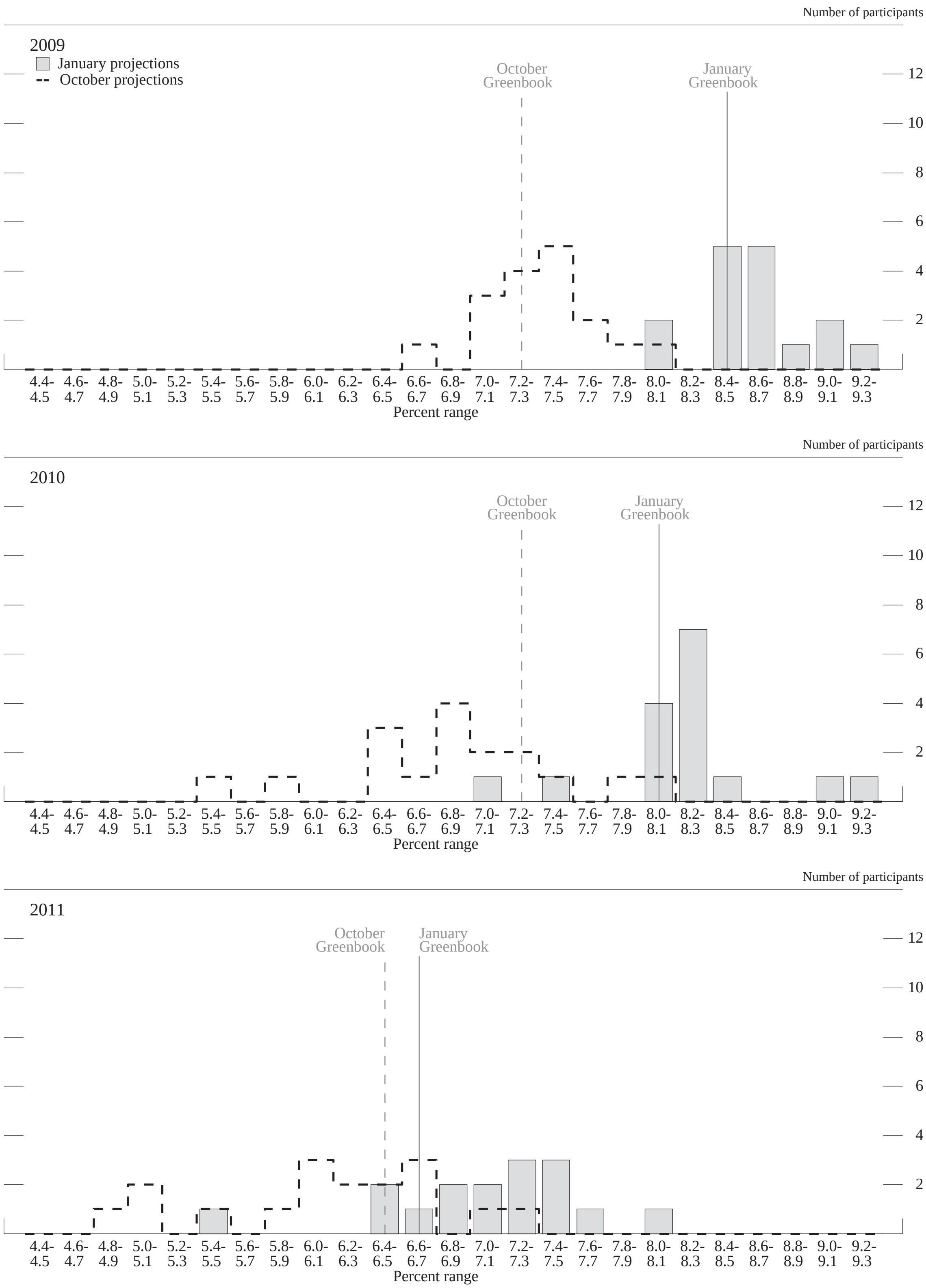
In October the policy assumption underlying our central projection was a renormalization of the policy rate in 2010-11. The large change in our forecast for real activity, the abrupt decline in inflation pressures and the zero bound has led us to push back the start of the renormalization of the policy rate to 2011. Further, we assume an extension of the scope and size of the TALF and more official communication on the link between policy rate renormalization and the Committee's mandate for price stability. Given the realization of the zero bound we have pushed up our assessment of the inflation rate consistent with the dual mandate to 2% for the PCE deflator.

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



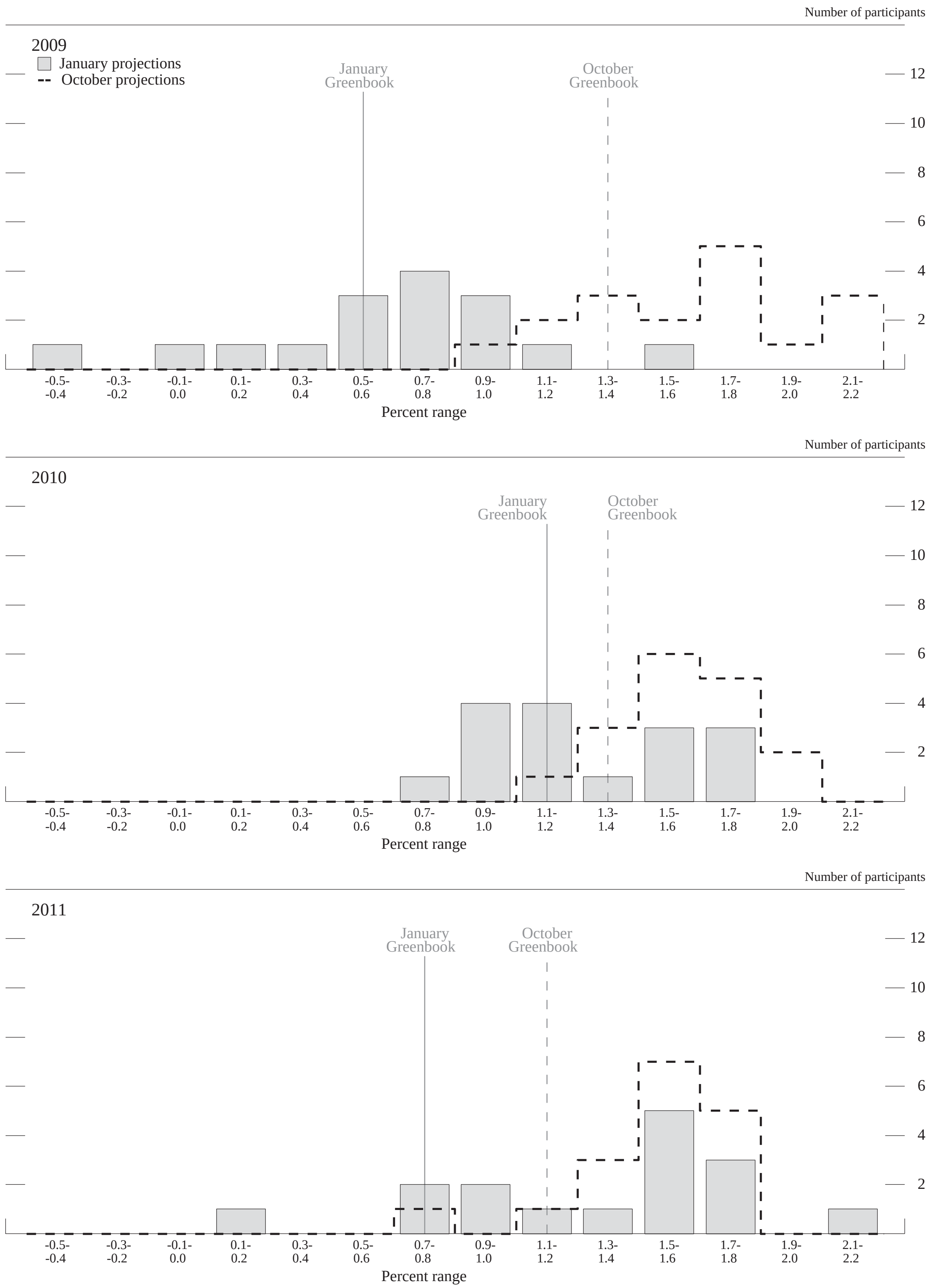
NOTE: Definitions of variables are in the general note to table 1.

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



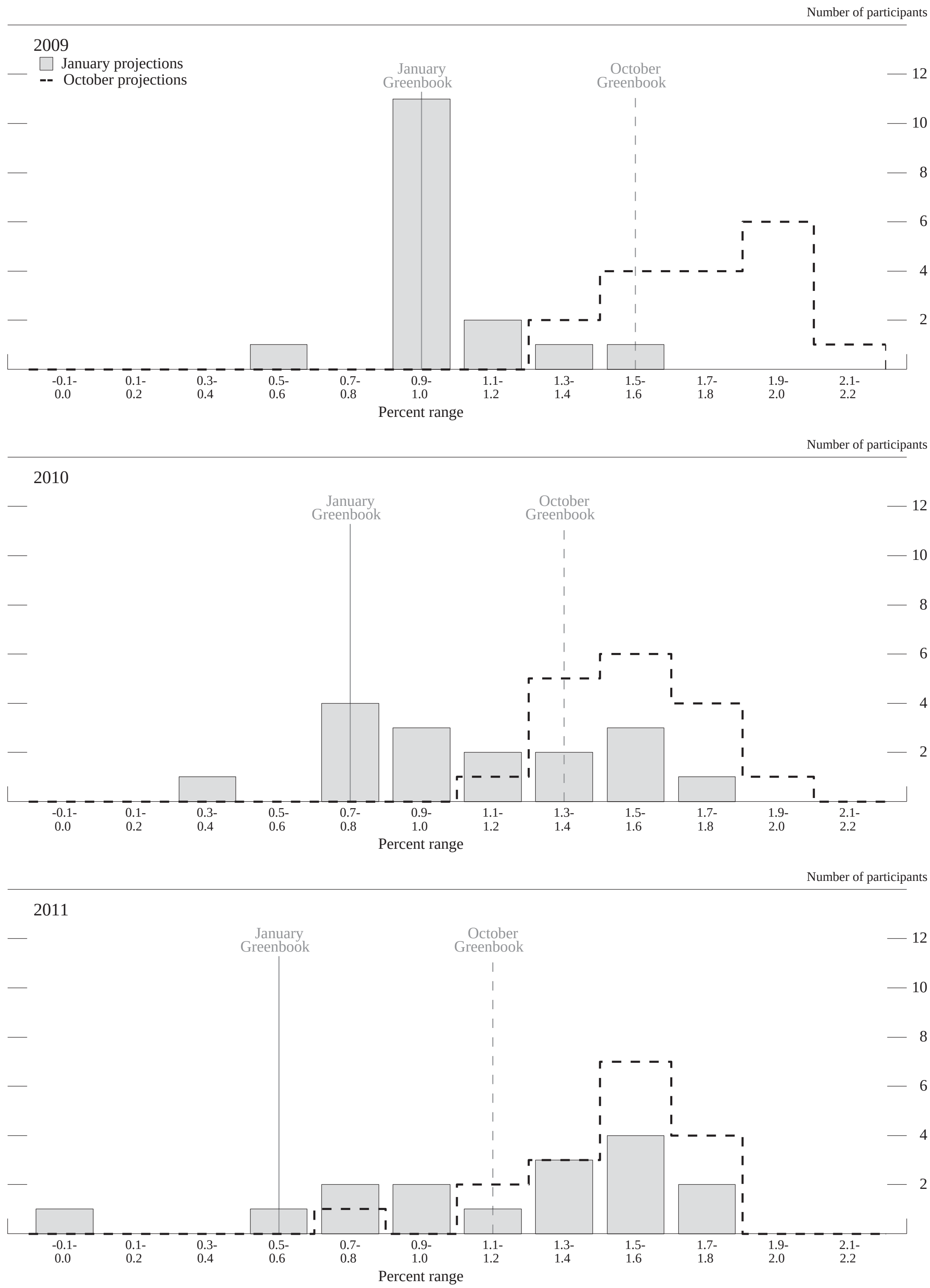
NOTE: Definitions of variables are in the general note to table 1.

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



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.

Table 3
Longer-run Projections

Central Tendencies and Ranges

	Central Tendency	Range
Real GDP Growth	2.5 to 2.7	2.4 to 3
Unemployment Rate	4.8 to 5	4.5 to 5.5
Total PCE Inflation	1.7 to 2	1.5 to 2

Participants' Projections

Projection	Real GDP Growth	Unemployment Rate	Total PCE Inflation
1	2.7	4.5	2.0
2	2.4	4.8	2.0
3	2.5	5.5	2.0
4	2.5	5.0	2.0
5	2.7	5.0	1.5
6	2.5	5.0	1.8
7	2.5	5.0	2.0
8	3.0	5.0	1.5
9	2.7	5.5	1.5
10	2.5	5.5	2.0
11	2.5	4.8	2.0
12	2.8	5.0	2.0
13	2.4	5.0	2.0
14	2.5	4.8	2.0
15	2.7	5.0	1.7
16	2.5	4.7	2.0

Longer-run Projections

(Optional) Please include any explanatory comments regarding your longer-run projections that you think would be helpful.

Respondent 1:
Given typical cyclical patterns, the unemployment rate would likely not converge to 4.5 percent for at least seven to eight years.

Respondent 2:
N/A

Respondent 3:
N/A

Respondent 4:
N/A

Respondent 5:
N/A

Respondent 6:
N/A

Respondent 7:
N/A

Respondent 8:
N/A

Respondent 9:
N/A

Respondent 10:
N/A

Respondent 11:
It takes longer than 5 years to reach the steady-state outcomes due to the bleak initial conditions of the economy and the likely practical limitations that prevent monetary and fiscal policy from achieving steady-state outcomes within 5 years.

Respondent 12:
N/A

Respondent 13:
N/A

Respondent 14:
These numbers represent my best assessment of the rates to which the variables below would converge over the longer run in the absence of shocks and assuming appropriate monetary policy. However, given the size of the shocks buffeting the economy, I anticipate that the convergence process would likely take longer than five or six years and may last up to eight or nine years.

Respondent 15:

N/A

Respondent 16:
These are New York's best estimates for the values requested in the trial run of the long-run projections. Given current circumstances we have only limited confidence in the estimates of long-run gdp growth and "natural rate" of unemployment. We have increased our view of the long-run rate of inflation consistent with the dual mandate in light of higher estimated likelihood of hitting the zero bound on nominal rates with our previous desired long-run rate of inflation.

Figure 3. Distribution of participants’ longer-run projections for change in real GDP, unemployment, and PCE inflation