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

Percent

| Variable | Central tendency[1] | | | | Range[2] | | | |
|---|---|---|---|---|---|---|---|---|
| | 2009 | 2010 | 2011 | Longer Run | 2009 | 2010 | 2011 | Longer Run |
| Change in real GDP | -1.5 to -1.0 | 2.1 to 3.3 | 3.8 to 4.6 | 2.5 to 2.7 | -1.6 to -0.6 | 0.8 to 4.0 | 2.3 to 5.0 | 2.4 to 2.8 |
| April projection | -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 |
| Unemployment rate | 9.8 to 10.1 | 9.5 to 9.8 | 8.4 to 8.8 | 4.8 to 5.0 | 9.7 to 10.5 | 8.5 to 10.6 | 6.8 to 9.2 | 4.5 to 6.0 |
| April projection | 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 |
| PCE inflation | 1.0 to 1.4 | 1.2 to 1.8 | 1.1 to 2.0 | 1.7 to 2.0 | 1.0 to 1.8 | 0.9 to 2.0 | 0.5 to 2.5 | 1.5 to 2.1 |
| April projection | 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 |
| Core PCE inflation[3] | 1.3 to 1.6 | 1.0 to 1.5 | 0.9 to 1.7 | | 1.2 to 2.0 | 0.5 to 2.0 | 0.2 to 2.5 | |
| April projection | 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 | |

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 April projections were made in conjunction with the FOMC meting on April 28-29, 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 | -3.5 to -3.3 | -4.0 to -3.0 |
| PCE Inflation | 0.2 to 0.6 | -0.1 to 1.0 |
| Core PCE Inflation | 1.8 to 2.0 | 1.5 to 2.0 |

## Participants' Projections

| Projection | Change in Real GDP | PCE Inflation | Core PCE Inflation |
|---|---|---|---|
| **1** | -3.6 | 1.0 | 1.9 |
| **2** | -3.3 | -0.1 | 1.9 |
| **3** | -4.0 | 0.0 | 2.0 |
| **4** | -3.3 | 0.9 | 1.8 |
| **5** | -3.5 | 0.3 | 1.9 |
| **6** | -3.5 | 0.3 | 1.8 |
| **7** | -3.5 | 0.0 | 1.5 |
| **8** | -3.5 | 0.3 | 1.9 |
| **9** | -3.3 | 0.6 | 2.0 |
| **10** | -3.4 | 0.3 | 2.0 |
| **11** | -3.5 | 0.4 | 1.8 |
| **12** | -3.5 | 0.2 | 1.5 |
| **13** | -3.4 | 0.4 | 2.0 |
| **14** | -3.0 | 0.5 | 1.7 |
| **15** | -3.9 | 0.6 | 2.0 |
| **16** | -3.3 | 0.3 | 1.9 |
| **17** | -3.3 | 0.3 | 1.9 |

* 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 | 0.5 to 1.4 | 0.1 to 2.9 |
| PCE Inflation | 1.8 to 2.5 | 1.4 to 3.2 |
| Core PCE Inflation | 0.7 to 1.4 | 0.5 to 2.0 |

## Participants' Projections

| Projection | Change in Real GDP | PCE Inflation | Core PCE Inflation |
|---|---|---|---|
| **1** | 0.4 | 1.4 | 1.3 |
| **2** | 0.1 | 2.9 | 0.9 |
| **3** | 2.9 | 2.0 | 2.0 |
| **4** | 0.9 | 2.1 | 1.0 |
| **5** | 1.0 | 2.5 | 0.5 |
| **6** | 1.4 | 2.5 | 1.0 |
| **7** | 0.5 | 2.0 | 1.5 |
| **8** | 1.6 | 2.1 | 1.3 |
| **9** | 0.7 | 1.8 | 0.8 |
| **10** | 1.7 | 2.3 | 1.4 |
| **11** | 1.2 | 2.8 | 1.4 |
| **12** | 1.0 | 1.8 | 1.1 |
| **13** | 1.3 | 3.2 | 1.8 |
| **14** | 1.0 | 1.9 | 1.3 |
| **15** | 1.0 | 1.4 | 0.6 |
| **16** | 1.4 | 1.7 | 0.7 |
| **17** | 0.5 | 2.5 | 0.7 |

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

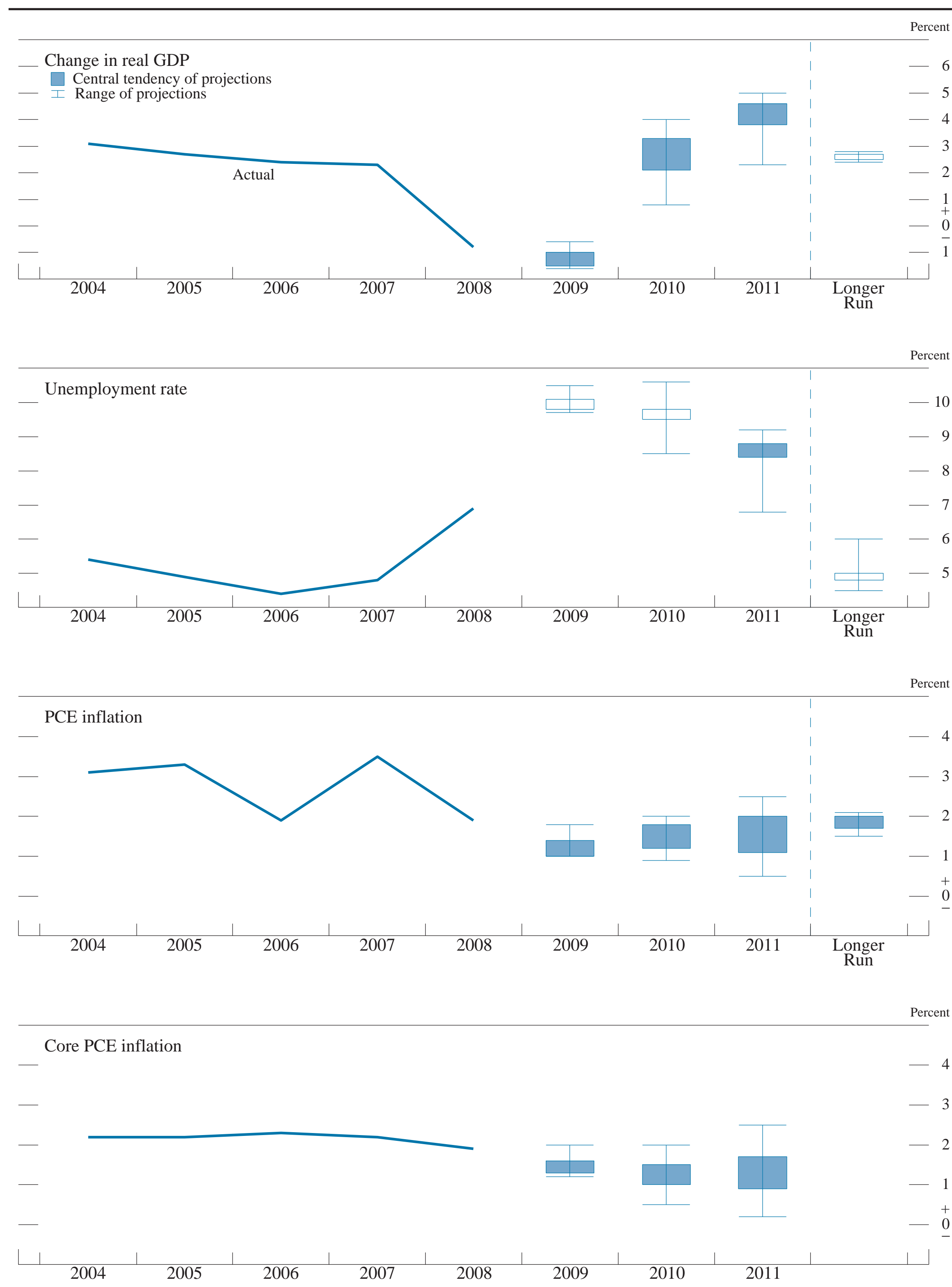
# Table 2: June Economic Projections
# (in percent)

| Projection | Year | Change in Real GDP | Unemployment Rate | PCE Inflation | Core PCE Inflation |
|---|---|---|---|---|---|
| | | | | | |
| 1 | 2009 | -1.6 | 10.3 | 1.2 | 1.6 |
| 2 | 2009 | -1.6 | 10.1 | 1.4 | 1.4 |
| 3 | 2009 | -0.6 | 9.9 | 1.0 | 2.0 |
| 4 | 2009 | -1.2 | 10.0 | 1.5 | 1.4 |
| 5 | 2009 | -1.3 | 10.0 | 1.4 | 1.2 |
| 6 | 2009 | -1.1 | 10.1 | 1.4 | 1.4 |
| 7 | 2009 | -1.5 | 10.0 | 1.0 | 1.5 |
| 8 | 2009 | -1.0 | 9.8 | 1.2 | 1.6 |
| 9 | 2009 | -1.3 | 10.5 | 1.2 | 1.4 |
| 10 | 2009 | -0.9 | 9.8 | 1.3 | 1.7 |
| 11 | 2009 | -1.2 | 9.8 | 1.6 | 1.6 |
| 12 | 2009 | -1.3 | 10.0 | 1.0 | 1.3 |
| 13 | 2009 | -1.1 | 10.0 | 1.8 | 1.9 |
| 14 | 2009 | -1.0 | 9.8 | 1.2 | 1.5 |
| 15 | 2009 | -1.5 | 10.0 | 1.0 | 1.3 |
| 16 | 2009 | -1.0 | 10.0 | 1.0 | 1.3 |
| 17 | 2009 | -1.4 | 9.7 | 1.4 | 1.3 |
| | | | | | |
| 1 | 2010 | 2.2 | 9.8 | 1.0 | 0.8 |
| 2 | 2010 | 0.8 | 10.6 | 1.1 | 0.8 |
| 3 | 2010 | 4.0 | 9.2 | 2.0 | 2.0 |
| 4 | 2010 | 2.9 | 9.8 | 1.4 | 1.0 |
| 5 | 2010 | 3.2 | 9.6 | 0.9 | 0.5 |
| 6 | 2010 | 2.8 | 9.7 | 1.2 | 1.0 |
| 7 | 2010 | 2.0 | 9.8 | 1.5 | 1.0 |
| 8 | 2010 | 3.3 | 9.4 | 1.3 | 1.3 |
| 9 | 2010 | 2.1 | 10.3 | 1.6 | 1.2 |
| 10 | 2010 | 2.9 | 9.5 | 1.8 | 1.5 |
| 11 | 2010 | 3.0 | 9.5 | 1.3 | 1.0 |
| 12 | 2010 | 1.5 | 9.7 | 1.3 | 1.3 |
| 13 | 2010 | 2.4 | 9.8 | 1.6 | 1.5 |
| 14 | 2010 | 3.0 | 8.5 | 2.0 | 2.0 |
| 15 | 2010 | 3.3 | 9.6 | 2.0 | 1.4 |
| 16 | 2010 | 3.3 | 9.6 | 1.2 | 1.1 |
| 17 | 2010 | 2.2 | 9.7 | 1.5 | 1.4 |

# Table 2 (continued): June Economic Projections

| Projection | Year | Change in Real GDP | Unemployment Rate | PCE Inflation | Core PCE Inflation |
|---|---|---|---|---|---|
| | | | | | |
| 1 | 2011 | 4.6 | 8.6 | 1.0 | 0.8 |
| 2 | 2011 | 4.3 | 9.2 | 1.0 | 0.5 |
| 3 | 2011 | 3.8 | 8.7 | 2.0 | 2.0 |
| 4 | 2011 | 4.5 | 8.5 | 1.6 | 1.0 |
| 5 | 2011 | 4.0 | 8.6 | 0.5 | 0.2 |
| 6 | 2011 | 4.4 | 8.6 | 1.2 | 1.1 |
| 7 | 2011 | 4.5 | 9.0 | 1.5 | 1.0 |
| 8 | 2011 | 4.5 | 8.7 | 1.2 | 1.2 |
| 9 | 2011 | 5.0 | 8.7 | 1.8 | 1.8 |
| 10 | 2011 | 4.7 | 8.4 | 2.0 | 1.5 |
| 11 | 2011 | 4.4 | 8.5 | 1.5 | 1.0 |
| 12 | 2011 | 2.3 | 8.5 | 1.5 | 1.5 |
| 13 | 2011 | 4.0 | 9.2 | 1.5 | 1.5 |
| 14 | 2011 | 2.7 | 6.8 | 2.5 | 2.5 |
| 15 | 2011 | 3.9 | 8.1 | 2.1 | 1.7 |
| 16 | 2011 | 4.8 | 8.0 | 1.1 | 0.9 |
| 17 | 2011 | 3.6 | 8.8 | 1.6 | 1.6 |
| | | | | | |
| 1 | LR | 2.5 | 4.8 | 2.1 | |
| 2 | LR | 2.8 | 5.0 | 2.0 | |
| 3 | LR | 2.8 | 5.3 | 1.5 | |
| 4 | LR | 2.5 | 4.8 | 2.0 | |
| 5 | LR | 2.5 | 4.8 | 2.0 | |
| 6 | LR | 2.5 | 5.0 | 1.8 | |
| 7 | LR | 2.8 | 5.0 | 1.5 | |
| 8 | LR | 2.4 | 5.0 | 2.0 | |
| 9 | LR | 2.4 | 5.0 | 2.0 | |
| 10 | LR | 2.5 | 5.0 | 2.0 | |
| 11 | LR | 2.5 | 5.0 | 2.0 | |
| 12 | LR | 2.5 | 5.2 | 2.0 | |
| 13 | LR | 2.7 | 5.0 | 1.5 | |
| 14 | LR | 2.7 | 5.0 | 1.7 | |
| 15 | LR | 2.7 | 4.5 | 2.0 | |
| 16 | LR | 2.5 | 5.0 | 2.0 | |
| 17 | LR | 2.5 | 6.0 | 2.0 | |

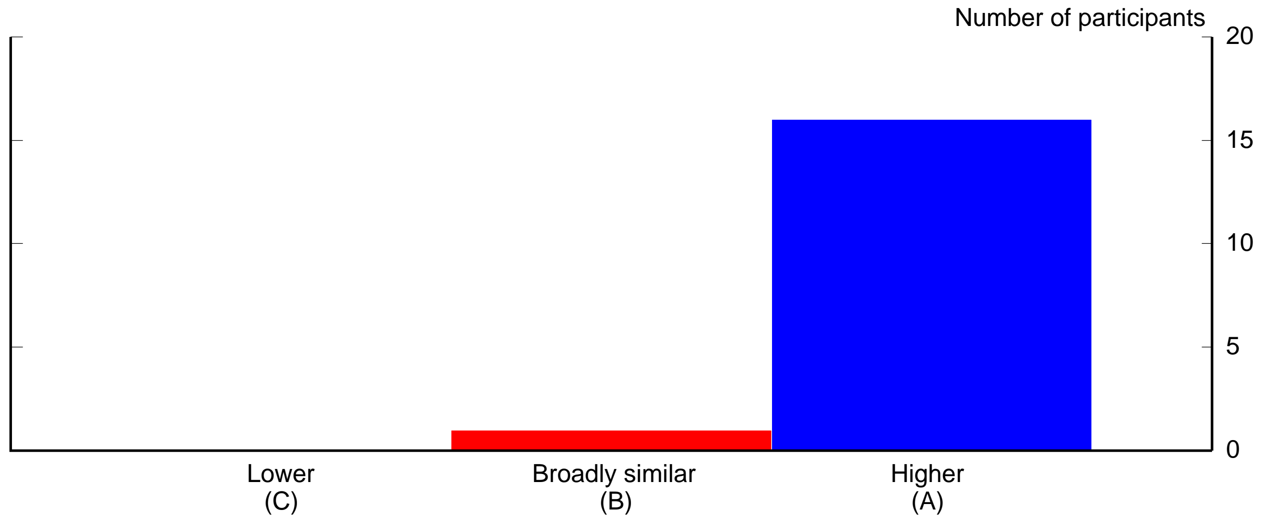
Figure 1. Central tendencies and ranges of economic projections, 2009–11 and over the longer run



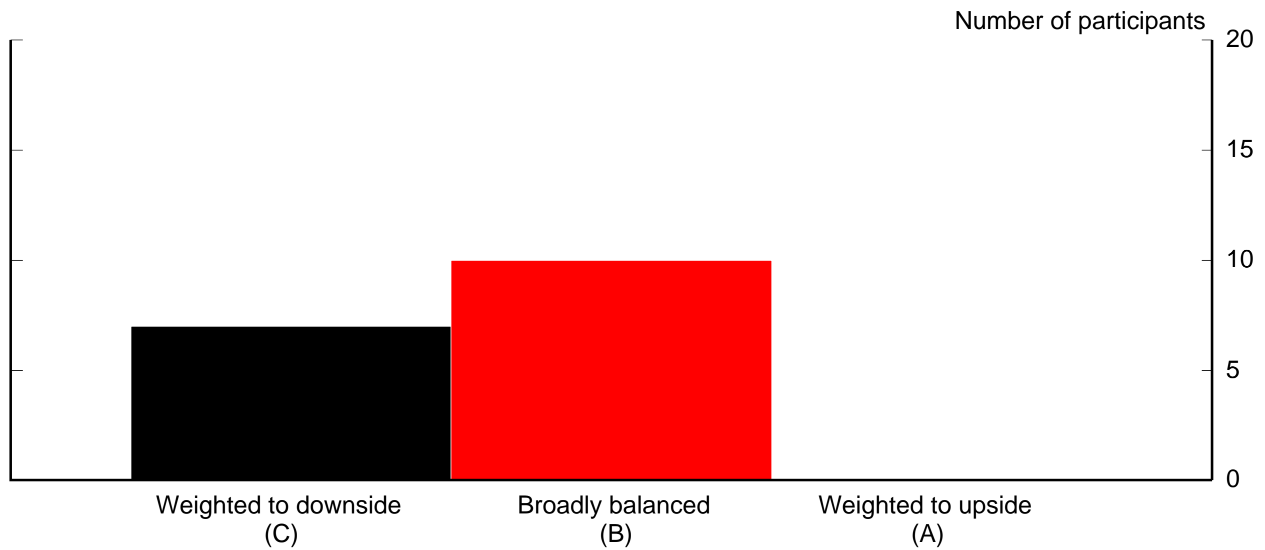

NOTE: Definitions of variables are in the notes to table 1. The data for the actual values of the variables are annual.

## 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.**

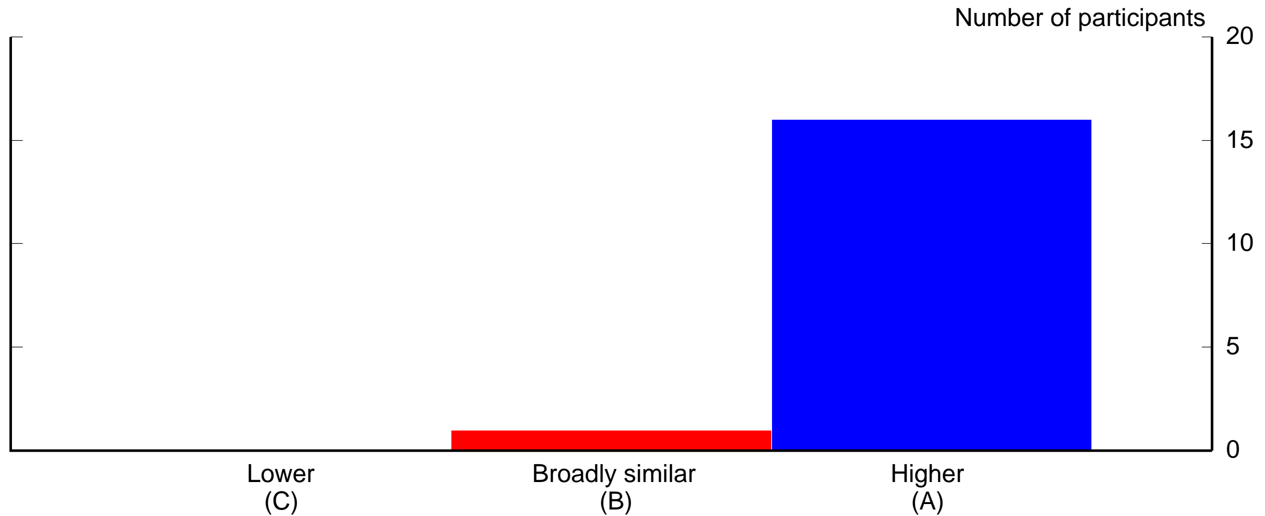



**Individual Responses**

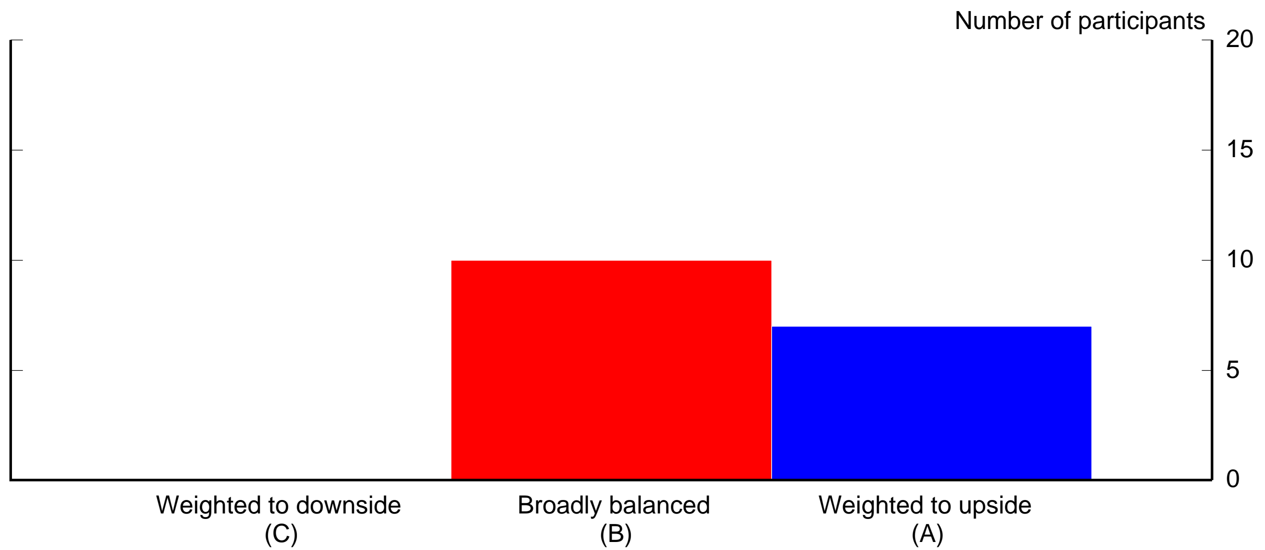
| Respondent | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2(a) | A | A | A | A | A | A | A | A | A | A | A | A | B | A | A | A | A |
| 2(b) | B | B | B | B | C | C | C | B | C | B | C | C | B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

## Uncertainty and Risks - Unemployment Rate

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




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

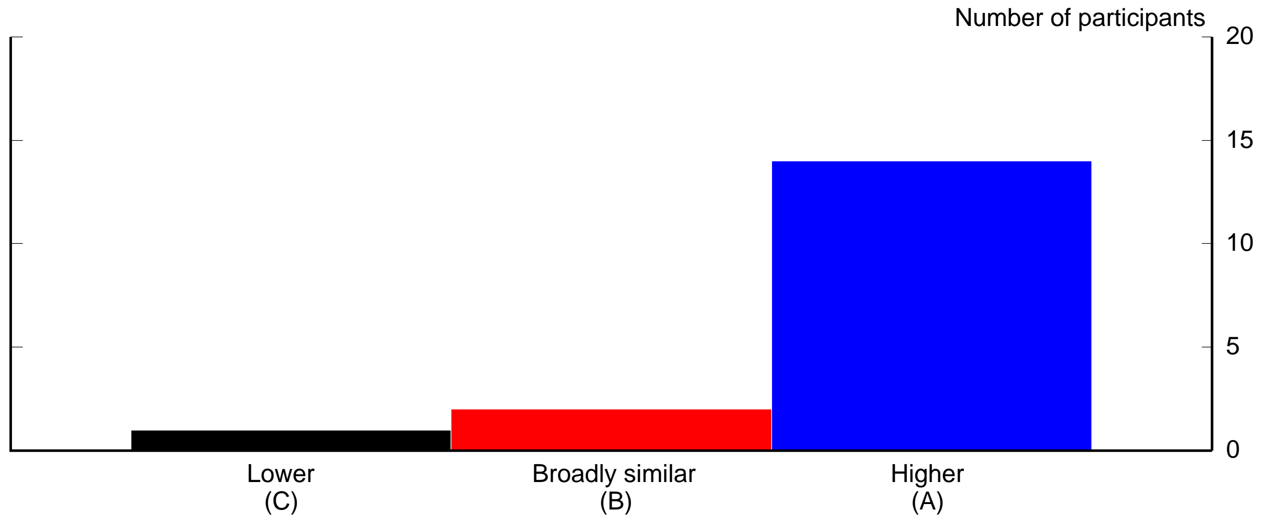



**Individual Responses**

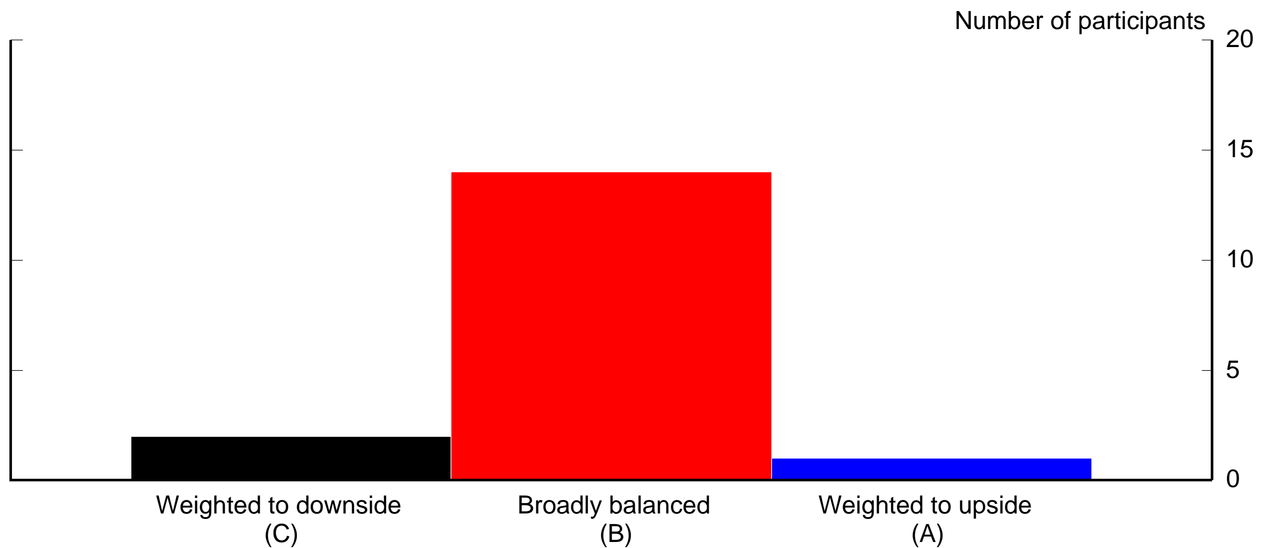
| Respondent | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2(a) | A | A | A | A | A | A | A | A | A | A | A | A | B | A | A | A | A |
| 2(b) | B | B | B | B | A | A | A | B | A | B | A | A | B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

## Uncertainty and Risks - PCE Inflation

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




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

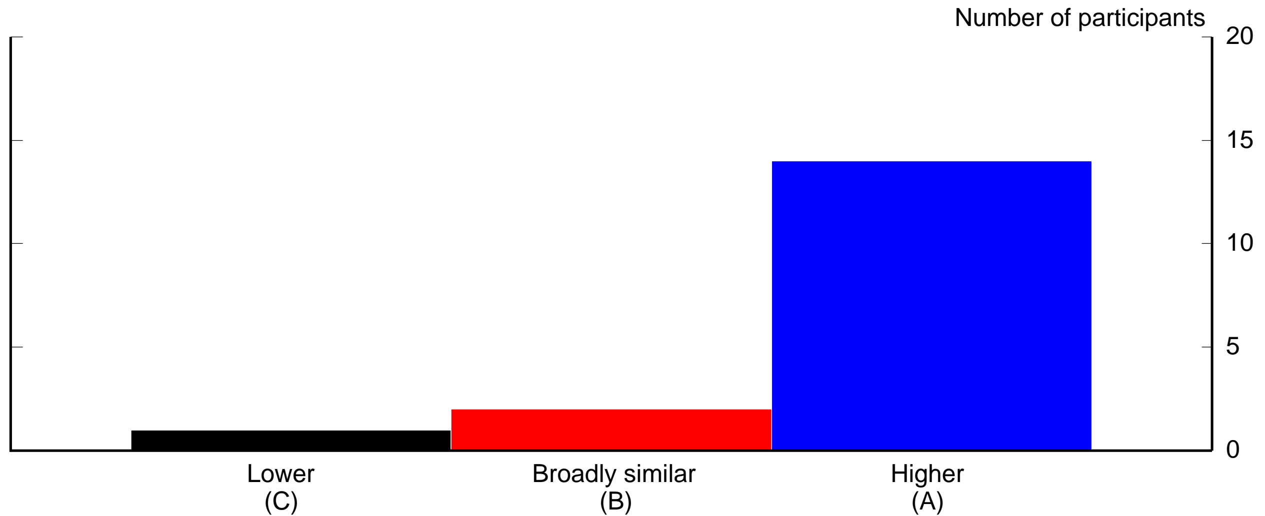



**Individual Responses**

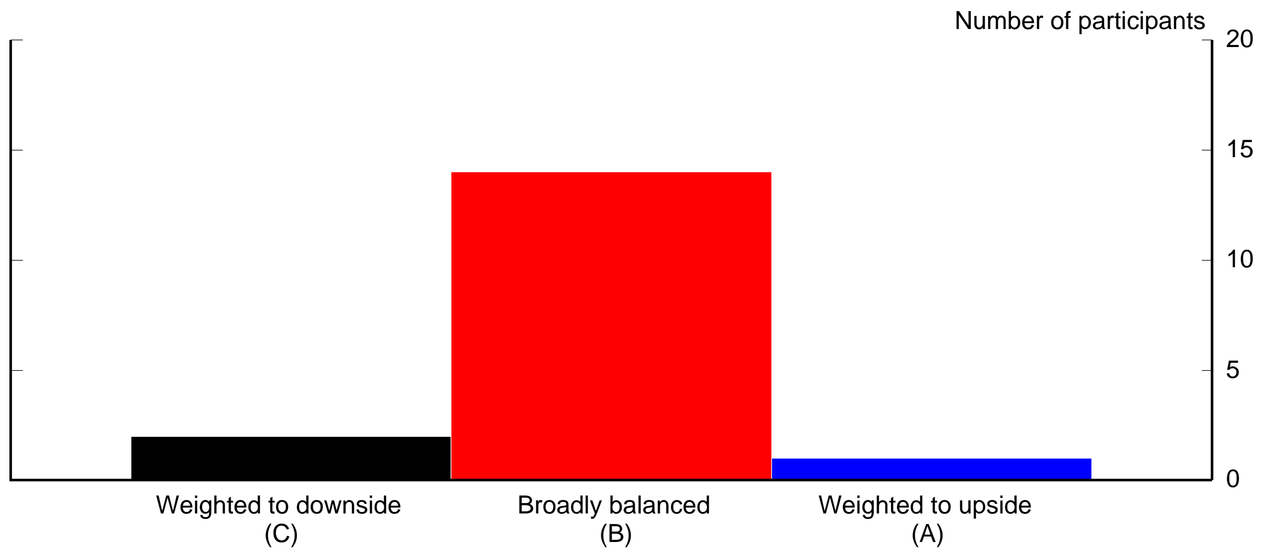
| Respondent | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2(a) | A | A | A | B | A | A | A | B | A | A | A | A | C | A | A | A | A |
| 2(b) | B | B | B | B | C | B | B | B | B | B | C | B | B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

# Uncertainty and Risks - Core PCE Inflation

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




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




**Individual Responses**

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

# Longer-run Projections

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

**Respondent 1:**
In light of the severity and breadth of shocks to the economy and the continuing, though reduced, risk of more to come, the convergence process may well extend beyond five or six years to something closer to eight years.

**Respondent 2:**
N/A

**Respondent 3:**
I anticipate that the convergence process for real GDP growth and inflation will substantially shorter than 5-6 years, perhaps on the order of three years for real growth (with a period of overshoot of real growth in the interim during recovery.) and an overshoot in the interim in inflation as a consequence of significant near term growth in the monetary base supported by longer term asset purchases that cannot be sold off over a very short time period. I anticipate that the decline in the unemployment rate will lag behind the recovery of real growth.

**Respondent 4:**
N/A

**Respondent 5:**
Convergence to the real economy's equilibrium and to the inflation objective within five years requires considerably lower long-term interest rates in the near-term than what is assumed in the baseline outlook. Absent such a reduction in long-term rates, it is unlikely that the dual mandate's objectives will be achieved within a five-year horizon.

**Respondent 6:**
If appropriate policy is followed, I would expect convergence to occur within 5 to 6 years. However, I am concerned that delaying the removal of policy accommodation and shrinkage of our balance sheet could result in higher inflation and correspondingly take a longer time to reach a desired inflation rate of 1.8 percent.

**Respondent 7:**
Between 4 and 6 years, and possibly longer given the damage to the financial sector, the depth of the recession, and the difficult domestic and global adjustments required.

**Respondent 8:**
N/A

**Respondent 9:**
By 2015 potential growth is 2.4%, down from our current estimate of 2.5-2.7%, as the babyboomers retire and there are some lingering effects from the present contraction of 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, unemployment to be in this range and the output gap to be around zero by 2015.

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 10:**
N/A

**Respondent 11:**
I expect that the economy will take about seven years to converge fully because of the magnitude of the forecasted degree of slack and the limits on monetary stimulus resulting from the zero lower bound on interest rates.

**Respondent 12:**
N/A

**Respondent 13:**
N/A

**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:**
N/A

**Respondent 17:**
Convergence process is likely to take meaningfully longer

# Uncertainty and Risks

## 2(a). (Optional) If you have any explanatory comments regarding your judgment of the uncertainty attached to your projections relative to levels of uncertainty over the past 20 years, you may enter them below.

**Respondent 1:**
N/A

**Respondent 2:**
N/A

**Respondent 3:**
N/A

**Respondent 4:**
N/A

**Respondent 5:**
N/A

**Respondent 6:**
N/A

**Respondent 7:**
N/A

**Respondent 8:**
The uncertainty associated with my projections of growth and unemployment is high relative to the past 20 years because reduced household wealth, strained credit conditions, and the severity of the recession make anticipating the nature of the recovery more difficult than usual. On the other hand, given appropriate monetary policy, I expect inflation to remain relatively low.

**Respondent 9:**
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 10:**
Despite continuing improvements, it is uncertain how long the drag from credit markets will last. Adding to this uncertainty is how much an extremely weak labor market, low levels of wealth and volatile energy prices will impact consumption. The ultimate impact of the Federal fiscal stimulus is also a source of uncertainty. Exactly how states and localities address their unusually stressed budgets increases the fiscal uncertainty. The different potential sources for the increase in long-term yields–improved sentiment; worries over future deficits; or higher inflation expectations–also add a range of uncertainties to the outlook.

**Respondent 11:**
The global financial and economic crisis and uncertainty about the effects of fiscal policy and unconventional monetary policies increase uncertainty regarding the outlook for economic activity. Heightened risks to the outlook for economic activity and employment, as well as elevated variability of commodity prices, raise uncertainty regarding the outlook for inflation.

**Respondent 12:**
N/A

**Respondent 13:**
My judgment of uncertainty around inflation projections being low relative to levels over the last twenty years is based on expectations being well anchored under appropriate policy.

**Respondent 14:**
Though financial market conditions are improving, stresses remain that lead to greater uncertainty about the pace of economic recovery. In addition, traditional monetary policy is likely to be constrained by the zero bound for some time and the precise impact of quantitative easing on the economy is uncertain. For these reasons, I view forecast uncertainty as higher than usual.

**Respondent 15:**
N/A

**Respondent 16:**
With conditions in the economy and financial markets–both here and abroad–still without previous precedent in the past-war period, uncertainty about the outlook for asset prices, economic activity and inflation is quite elevated. Among the elements contributing to heightened uncertainty are the speed of financial market repair, the response of spending–especially household spending– to previous declines in wealth and changing financial conditions, and the effect of persistent elevated output gaps on inflation and inflation expectations.

**Respondent 17:**
N/A

# 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:**
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.

**Respondent 4:**
N/A

**Respondent 5:**
N/A

**Respondent 6:**
In the near-term, I believe there are some downside risks to overall and core inflation. However, in the longer run, I believe there are significant upside risks if we delay removing accommodation and shrinking our balance sheet.

**Respondent 7:**
N/A

**Respondent 8:**
N/A

**Respondent 9:**
Quantitative judgment based on the difference between projection and expected value from FRBNY forecast distribution. For inflation, risks are to the downside in the near term and to the upside in the medium term.

**Respondent 10:**
The dire scenarios that previously were a source of downside risk to growth now seem less likely. However, there is a new downside risk that the increases in long-term interest rates reflect crowding out of credit to the private sector due to high budget deficits as opposed to improved expectations of higher future growth. There is an upside risk that aggressive inventory control and pent-up demand will generate a more pronounced cyclical recovery.

The downside risks to inflation in the near term seem to have abated somewhat, but are still present due to the substantial slack in the economy. Rising energy prices are a source of upside risk to inflation over the near term. Over the longer term, there is a risk that actual or perceived difficulties in unwinding the large expansion of the Fed's balance sheet will boost inflationary expectations.

**Respondent 11:**

The continuing possibility of further financial market disruptions represents a significant downside risk to the outlook for growth. For example, the looming problem in commercial real estate poses additional downside risks to financial stability and the outlook for economic activity. The sizable downside risks to the outlook for economic activity imply greater downside risks to the outlook for inflation. In addition, the large degree of slack in labor and product markets could put more downward pressure on inflation than currently anticipated.

**Respondent 12:**
N/A

**Respondent 13:**
N/A

**Respondent 14:**
Incoming data have led me to revise down my near-term path for growth and raise my path for the unemployment rate compared to my April forecast. I view the risks to growth and the unemployment rate as roughly balanced. Over the longer term, inflation risk is tilted to the upside reflecting uncertainty about the Fed's ability to reduce the size of its balance sheet at the appropriate time.

**Respondent 15:**
N/A

**Respondent 16:**
The persistent stability of consumer spending and housing demand along with the abatement of risk aversion suggest that the risks around the central tendency for activity are now roughly balanced, after having been skewed to the downside for some time. That is, the possibility of a faster return to more normal market functioning and a positive feedback into economic growth now balances the still significant odds on a financial or economic accident that significantly slows or forestalls the recovery . The risks of inflation falling faster in response to very high output gaps globally is balanced by the risk of inflation expectations staying stable or even rising a bit with the recent rise in commodity prices and concerns about long-term interactions of fiscal and monetary policies.

**Respondent 17:**
N/A

# 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 |
|---|---|
| 9 | 8 |

**Respondent 1:** No
N/A

**Respondent 2:** No
N/A

**Respondent 3:** Yes
While the exact timing and pattern of recovery from the current recession is highly uncertain, I believe that under appropriate monetary policy to maintain price stability we will have to move away from the current target range for the funds rate as part of the process of withdrawing from quantitative easing much sooner than assumed in the Greenbook forecast.

**Respondent 4:** No
N/A

**Respondent 5:** No
The forecast is conditioned on roughly the same short- and long-term interest rates assumptions as in the Greenbook. But this path for the interest rates is not consistent with optimal monetary policy.

**Respondent 6:** Yes
Like Greenbook, I assume the funds rate target will be maintained in the range of 0 to 1/4 percent through at least the middle of 2010. However, I expect it will be necessary to start raising the funds rate in late 2010 or early 2011.

In my judgement, appropriate policy also involves reducing the size of our balance sheet in a timely manner.

**Respondent 7:** No
N/A

**Respondent 8:** Yes
I continue to expect the Federal funds rate to begin to increase sometime in the second half of 2010 or early 2011.

**Respondent 9:** 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 10:** Yes
We assume the funds rate will follow a path near that expected by futures markets. We also assume that the Fed will take active measures to reduce the size of our balance sheet and not just let it run down passively as assets mature.

**Respondent 11:** No

N/A

**Respondent 12:** No
N/A

**Respondent 13:** Yes
I believe that under an appropriate monetary policy the committee would announce a numerical inflation objective. Further, the committee would need to communicate its strategy for shrinking the Fed's balance sheet in a timely manner to meet that objective. I also believe that it is likely to be necessary to raise the funds rate well before the end of the forecast horizon.

**Respondent 14:** Yes
My forecast continues to assume a less accommodative federal funds rate than in the Greenbook baseline. I view the appropriate policy as rasing the funds rate toward the end of 2009 or early 2010 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 15:** Yes
Yes. In my projection, the federal funds rate begins to increase gradually in the second half of 2010, due to a stronger inflation profile in my forecast.

**Respondent 16:** No
N/A

**Respondent 17:** Yes
Expect policy to normalize materially sooner than under Greenbook base case

# Forecast Narratives

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

**Respondent 1:**
The pace of deterioration of most important economic indicators has clearly decelerated and, in some cases, stabilized. Thus a bottom is now at least in sight, even if not yet realized. However, I continue to believe that important parts of capital markets will remain unusually encumbered for some time to come, that the housing sector will take a considerable time to recover, and that structural changes in important economic sectors will retard employment growth well beyond the end of the recession.

**Respondent 2:**
I chose the slower recovery scenario from the greenbook. This assumption is based on a concern that credit availability will be constrained for some time. Given my choice of a fairly pessimistic scenario, I view the risks as roughly balanced.

**Respondent 3:**
The unfolding path of economic activity in the first half of 2009 is consistent with my earlier expectation of slowing contraction in the first half with output bottoming out in the middle of the year and recovery in the second half. Hence I have not revised my previous forecast for real growth. In 2010 and 2011 I anticipate that real growth will occur at greater than steady-state rates, reflecting normal cyclical patterns reinforced by a modest impact of the fiscal stimulus package and the impact of the substantial monetary stimulus that has been in train since last fall. Core PCE inflation from the fourth quarter of last year through the most recently released data is in the range of 2.0 percent at an annual rate – higher than I previously expected. I do not see this rate of inflation abating in the near future. While headline PCE inflation since the fourth quarter of last year through the most recently released data is essentially zero, the recent increases in energy prices leads me to expect that the headline rate will approach the core rate as 2009 progresses. Subsequently, under appropriate monetary policy, inflation should approach my preferred long-run rate of 1.5 percent. I do not believe that future energy shocks can be forecasted, so with available information I expect that core and headline inflation will be roughly equal in the out years of the projection period.

**Respondent 4:**
The data suggest either stabilization or a much slower rate of decline in final sales both here and abroad. As a result, further progress in the inventory cycle should lead to positive growth later this year, strengthening next year as the recovery begins to gather steam and the fiscal package kicks in. Financial markets have improved notably, including markets for short-term and long-term credit, and the successful stress tests have increased confidence in the banking system. Higher interest rates and oil prices are risks but I view these mostly as endogenous responses to the improved outlook. Despite the improving picture, final demand is unlikely to grow quickly: consumers are dealing with wealth loss and rising unemployment, housing will be hit by higher mortgage rates, capital investment (both equipment and structures) is still declining, and net exports are unlikely to strengthen much. Unemployment has risen surprisingly quickly and seems likely to remain high for a while, though any increase in the natural rate is likely to be modest. Energy and commodity prices, some increase in inflation expectations will prevent increasing slack from generating too great a decline in inflation. Risks around growth and inflation are more balanced, as the likelihood of a major financial crisis has receded and the possibility of a more vigorous rebound, similar to that seen in earlier recessions, cannot be discounted. Imbalances, including those related to bank and household balance sheets, fiscal policy, labor allocation, and the current account will continue to complicate the return to sustainable growth.

**Respondent 5:**
Incoming data continue to be consistent with the view that the deterioration in economic activity is now

levelling off. We expect the economy to return to mild positive growth in the second half of this year. There is considerable uncertainty about the ultimate strength of the recovery, but several factors point to a subpar recovery. In the near term, continued deterioration in the labor market will make for subdued consumer spending. The high level of the unemployment rate will raise the number of foreclosures and put further downward pressure on house prices. The decline in households' net worth requires consumers to increase their savings out of disposable income, and the need to repair balance sheets will restrain spending this year and next. Continued disruptions to credit supply should also play an important role, as credit-constrained consumers will have to postpone the purchase of big-ticket items. The recent increase in mortgage rates will reduce even further residential investment's contribution to the recovery. Credit supply constraints will also hamper a faster turnaround in capital spending. The foreign sector, too, should provide little support as several of our foreign partners will experience, at best, very modest growth as a result of limited support from monetary and fiscal policy and continued difficulties in their financial sectors.

In all, these factors point to a shallow recovery in the second half of this year and in 2010. The unemployment rate is still very 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. Conditions at many financial institutions will continue to worsen as a result of the sharp increase in the unemployment rate, thus raising the likelihood of further restrictions to credit supply. 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 6:**
My outlook for economic activity has not changed materially since our last meeting. While the economy is likely to contract in the second quarter, we are seeing signs that the pace of decline is slowing and financial stress is diminishing. As a result, I am more confident that we are closer to a bottom and that we are likely to see positive growth in the second half of this year. Overall, I expect accommodative monetary policy, stimulative fiscal policy, and less financial stress will lead to a slow recovery in the second half of this year and stronger growth in 2010 and 2011. The recent increase in energy prices and longer-term interest rates may limit the strength of the recovery, but are unlikely to derail it.

While some downside risks to the outlook remain, they have diminished. A continued deterioration in commercial real estate and C&I loans at banks could lead to a reduction in credit extension and credit availability, which poses a downside risk to the economy. However, an improvement in real economic activity and a reduction in financial stress has somewhat reduced the downside risks.

The recent increase in core inflation appears largely due to special factors, and economic weakness will likely keep core rates low for some time. Downside inflation risks in the near-term have diminished. However, over the longer-term, there are significant upside risks to inflation if we maintain an overly accommodative monetary policy for an extended period of time.

**Respondent 7:**
Despite encouraging developments, we are very far from being out of the woods. Wage and salary income is now falling (for the first time in 50 years), putting intense strain on household finances. The deteriorating performance of consumer and commercial real estate loans could put new pressure on the financial system if the economy does not gain meaningful traction soon. Fiscal stimulus and a slowing rate of inventory liquidation will carry us only so far. The banking outlook, especially for global banks that are too big to fail, is the wild card impacting the transmission of monetary policy. And the plethora of new economic and

regulatory initiatives is creating uncertainty among business decision makers–uncertainty that might retard commitments to expansion of employment and CAPEX.

**Respondent 8:**
Monetary and fiscal policy remain basically stimulative. Credit conditions continue to improve, the inventory correction ends, and housing stabilizes and begins to move up. The dollar declines on net, contributing to growth in exports and risking an acceleration in inflation.

**Respondent 9:**
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 2 $\frac{1}{2}$% below the NBER peak, only modestly less than the most severe recessions of that period. By the second half of 2009 a 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 $\frac{1}{2}$ % above its potential rate in 2011. Barring a significant decline in the economy's potential growth rate, this point forecast implies that a large output gap will persist over this entire period. At the trough, the unemployment rate is expected to be around 10%, an increase of 5 percentage points above the level at the peak. The unemployment rate is expected to continue rising over the first year of recovery, with a peak of around 10.5%, as growth remains relatively sluggish. Thereafter, the unemployment rate moves down only gradually. The risks to this modal forecast are 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 sluggish, as households boost saving in response to a massive decline in their net worth and credit conditions that while gradually easing, remain relatively tight. The correction in housing production is expected to be largely completed by mid-2009, bringing to an end the large drag that was exerted on growth for the past four years. Thereafter, housing production is likely to improve, but the surge of residential investment experienced in the early stages of most post WWII recoveries is unlikely. Mortgage underwriting standards are expected to remain relatively tight. Moreover, high volumes of existing homes will continue to come 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 peak- to-trough decline in the Case-Shiller 10 city composite home price index of around 40 percent. Through 2009Q1 that index was down 31% from its 2006Q2 peak. Business investment in new equipment and software and new structures is expected to decline sharply in 2009, as capacity utilization rates remain at historic lows and retail and office 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, with persistent weak demand, businesses pare inventories over the course of 2009, but the rate of decline slows such that inventories provide a modest boost to growth in the second half of the year. In 2010, as growth of final demand becomes somewhat better established, businesses begin to build inventories once again. Exports, which plunged from 2008Q4 through mid 2009, are expected to rise modestly in the second half of 2009 and then grow more rapidly in 2010 as global growth recovers. Imports also begin increasing again in the second half of 2009, and are likely to increase considerably faster than exports, reflecting the high income elasticity of demand for imports and the fact that the business cycle in the US is proceeding somewhat ahead of that of many of our major trading partners. Accordingly, net exports exert a drag on growth in the second half of 2009 and in 2010. 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 final demand is the expectation that financial market functioning returns to more normal conditions, that consumer and business confidence is gradually restored, and that the appetite for risk gradually improves.

In this central scenario, total consumer price inflation is close to zero 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, which was somewhat volatile over the second half of 2008 and first half of 2009, is expect to remain relatively low over the second half of 2009 and first half of 2010, reflecting the significant slack in the US economy. But by the second half of 2010 core inflation gradually increases 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. We expect continued volatility in total inflation driven by large fluctuations in energy prices.

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 considerable concern that with the weakness of business investment and the reallocation of labor and capital that needs to occur, the economy's potential growth rate has slowed significantly. Yet, over the past year productivity growth has been well maintained at roughly 2 percent. Moreover, in recent months the labor force participation rate has moved significantly higher, suggesting more labor supply going forward than previous estimates. These trends indicate that the economy's potential growth rate has not declined, and may in fact have moved higher.

The risks around the central scenario for inflation are relatively balanced. Clearly, the significant downside risk to the growth projection combined with the possibility of no meaningful decline in potential implies downside risk to the inflation projection. In contrast, with the aggressive global monetary and fiscal policy response to the ongoing financial crisis, there is some risk of higher inflation if the economy proves more resilient than in our central scenario while potential does indeed slow.

The heightened uncertainty associated with periods of banking and financial crisis as well as 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 10:**
Monetary accommodation, fiscal policy stimulus, private sector financial adjustments, and the economy's natural cyclical adjustment dynamics will result in a resumption of growth in the second half of 2009. Growth will remain below potential for some time, reflecting financial headwinds, weak foreign demand, and a hesitancy of households and businesses to spend in the current environment. As these factors diminish, growth should increase above potential in late 2010 and 2011. However, the growth will not be sufficient to close resource gaps by the end of the projection period.

Our inflation forecast balances the forces of domestic resource gaps against the possibility that persistently large fiscal deficits and the Fed's balance sheet will have upside consequences for inflation expectations. Our forecast assumes that these forces will roughly cancel so that inflation will settle into a range consistent with our dual mandate.

**Respondent 11:**
Signs of stabilization of the economy have emerged. In particular, consumer spending and housing may have reached a bottom and business inventory investment is poised to rebound strongly. However, labor markets

continue to deteriorate, business spending is falling sharply, and other major economies are contracting.

Financial conditions have improved overall, although recent increases in some longer-term interest rates could impede recovery. The process of healing the banking and financial sectors will proceed slowly and impaired financial intermediation will interfere with the pace of recovery for some time. In addition, households are in the midst of a lengthy process of repairing their balance sheets that have been weakened by massive stock and housing market losses.

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 12:**
Ongoing financial market dysfunction, rising household savings rates, and lingering economic uncertainty are likely to significantly inhibit the recovery process. I have incorporated only a modest boost from fiscal and monetary policy.

While the downside risks to my growth outlook have lessened some, the potential for an adverse shock to the financial system, an accelerated decline in foreign growth, or a further deterioration in consumer confidence continue to tilt the balance of risk around my growth projection to the downside.

I assume that forces adversely affecting economic growth are also weighing on the economy's growth potential.

**Respondent 13:**
I believe that the recession will end in the next few months and that the economy will then begin to grow slowly. I believe that business investment is likely to be quite weak this year and that fiscal policy effects will be smaller than generally expected, as appears to have been the case last year. My outlook is not heavily dependent on the amount and timing of fiscal actions.

**Respondent 14:**
The recent data on labor markets have been weaker than what I anticipated in my April forecast. I expect continued weakness in the housing sector, the poor state of household balance sheets, tight credit market conditions and weak economic conditions 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 or beginning of 2010.

**Respondent 15:**
The rapid and uneven deterioration in employment and job openings suggests that unemployment will continue to rise into early 2010. The extensive reallocation of workers and other resources required in the wake of the recession points to a lengthy period of high unemployment.

My forecast assumes that inflation expectations will be "anchored" near current levels of roughly 2% throughout the forecast period. Despite worries of both rising inflation and lingering fears of deflation, available measures of inflation expectations have stayed remarkably stable. However, considerable uncertainty continues to surround the level of inflation expectations.

**Respondent 16:**

The near-term stability of key components of private final demand and increases in government spending along with inventories of goods and houses coming into better balance with sales spark a turnaround in production that sets in motion a rise in economic activity. Demand is further enhanced over time by past and continued improvements in financial markets that better allow the effects of monetary policy stimulus to show through to a lower cost of capital. the pace of recovery continues to be held back by cautious households rebuilding wealth and coping with weak labor markets, and by the slow pace of financial market normalization as bank capital builds and a significant amount of previously securitized borrowing finds new channels of intermediation.

**Respondent 17:**
Expect less medium-term benefit from fiscal stimulus. Expect higher NAIRU, lower productivity and lower growth rates throughout forecast period. Finding new equilibrium will take somewhat longer than a typical recovery.

# Forecast Narratives (continued)

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

**Respondent 1:**
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 2:**
N/A

**Respondent 3:**
Relative to the Greenbook my projection is for slightly slower real growth in 2009H1; about the same rate of growth for 2009H2 and a faster recovery in 2010 with growth slowing in 2011 such that my projection for the average growth rate over the two years 2010-2011 is essentially the same as that of the Greenbook. I project higher headline and core PCE inflation than the Greenbook in 2009H2 and in 2010-2011. Finally my projection is for unemployment to peak at the level forecast in the Greenbook, but to decline at a more steady rate than the Greenbook forecast over 2010 and 2011.

**Respondent 4:**
Slightly more worried about final demand, including consumption, investment, and housing, none of which has stabilized in a convincing fashion. See some upside risk in global commodity prices, which could slow US growth and increase US inflation.

**Respondent 5:**
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 6:**
My outlook for economic activity and inflation is similar to the Greenbook outlook. However, our assumed policy paths are quite different. Whereas Greenbook assumes the funds rate remains in the current range of 0 to 1/4 percent through 2011, I assume we will begin raising the funds rate in late 2010 or early 2011 at the latest.

**Respondent 7:**
The Greenbook baseline forecast underestimates the continuing drag on the economy from damage to the financial sector, uncertainty created by new economic and regulatory initiatives, and, increasingly, deteriorating household cash flow. It also assumes a too-rapid response of the unemployment rate to reductions in the output gap when these reductions finally do take hold. By 2011, the world economy recovers sufficiently to begin putting upward pressure on commodity prices.

**Respondent 8:**
The forecasts are reasonably congruent at this point.

**Respondent 9:**
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 higher peak to the unemployment rate than the GB. We also project an overall drag from net exports over 2009- 10. 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 10:**
We think inflation expectations will run higher than in the Greenbook baseline. Resource gaps could reduce inflation expectations somewhat in the near term. But, over a longer horizon we think some active adjustment of our balance sheet will be necessary to keep longer run expectations from rising above rates consistent with our dual mandate.

**Respondent 11:**
My forecast for core inflation is higher than in the Greenbook, reflecting persistent under-forecasts of inflation and my view that inflation expectations will remain well anchored.

**Respondent 12:**
I am continuing to project considerably slower real growth in 2010 and 2011 relative to the Greenbook. I expect the recovery of the financial sector will proceed very slowly, and the weakened balance sheet of households will restrain consumer spending well into 2010. These factors, combined with other structural adjustments are likely to keep the rate of unemployment elevated several years into the recovery.

**Respondent 13:**
I believe that under appropriate monetary policy, inflation expectations would be well anchored and the inflation path would be higher than in the Greenbook. I do not share the Greenbook's view that core inflation would fall significantly while energy prices are rising. I expect the initial stage of the recovery to be a bit weaker than in the Greenbook, due in part to weaker investment in residential and nonresidential structures.

**Respondent 14:**
My inflation forecast is less influenced by the degree of resource utilization in the economy and so I project a higher pace of inflation in 2010 and 2011 than does the Greenbook. Given the strength of economic growth in my forecast and the higher inflation path, the monetary path is less accommodative beginning in late 2009 or early 2010.

**Respondent 15:**
My outlook has more core PCE inflation in 2010 and 2011. Because the current recession is generating a substantial amount of worker dislocation, the quantity of unemployment that is considered "natural" is necessarily larger than some months ago. Moreover, my forecast is likely to imply a smaller reaction of inflation to changes in the unemployment gap. My inflation outlook also assumes that inflation expectations remain anchored near current levels in the neighborhood of 2% which helps to keep core PCE inflation near my longer term objective. Furthermore, a much anticipated deceleration in core consumer prices has yet to materialize. As a consequence of the stronger inflation profile, the federal funds rate begins to rise in the second half of 2010 in my forecast, whereas the Greenbook forecast maintains a near-zero federal funds rate throughout the forecast period.

**Respondent 16:**
N/A

**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:**
Shifts in 2009 inflation expectations influenced by factors mentioned in the Greenbook. Greenbook has now shifted unemployment expectations for 2009 and 2010 close to my April forecast. Factors mentioned by Greenbook add to my already more pessimistic outlook on jobs.

**Respondent 2:**
N/A

**Respondent 3:**
Real economic activity appears to be evolving in 2009 as I had expected in my projections from last quarter, hence I have not revised my projected path of real output. The most recent data on the unemployment rate is slightly higher than I expected, so I have shifted my projected path for the unemployment rate up by a small amount over the projection period. The data on inflation since the fourth quarter of 2008 has been somewhat stronger than I had previously projected, hence I have raised my projection on near term core inflation. Recent data on energy prices has been stronger than I anticipated, so I have raised my near-term projection of headline inflation relative to my projection for core inflation.

**Respondent 4:**
Main outlines have not changed: consumption stabilization, tentative improvement in housing, progress in the inventory adjustment. Most important is continuing significant progress in financial markets and in confidence in banks, although this is to some extent contingent on macroeconomic conditions continuing to improve. Higher oil prices and interest rates are both a drag on the economy and an indicator of greater confidence in the outlook, so on net their effect on the projection is modest.

**Respondent 5:**
The current forecast is conditioned on a higher path for the unemployment rate. The higher unemployment rate, together with higher mortgage rates and oil prices, would call for a weaker forecast. These negative factors are offset to some extent by higher stock market wealth and a lower dollar, and as a result the real forecast has not changed materially. As concerns prices, the higher path for the unemployment rate would call for lower inflation over the forecast horizon. However, the starting point for inflation is somewhat more elevated than what we were previously projecting. As a result, the inflation outlook remains the same.

**Respondent 6:**
My forecast for growth and inflation over the longer term is not materially different from the previous quarter's projection. However, recent data releases caused me to revise up my near-term outlook for growth and inflation. In addition, the surprising increase in unemployment has led me to revise up my forecast for unemployment over the forecast horizon.

**Respondent 7:**
Unwinding of flight-to-quality on a global basis has set the stage for improved macro performance possibly sooner than previously thought, but the many initiatives being put forth by Congress and the administration, however meritorious, are palpably impacting business confidence.

**Respondent 8:**
The unemployment rate has risen more rapidly than expected, and the forecast has been adjusted for this development. The near-term inflation forecast is higher than formerly as the probability of deflation has diminished.

**Respondent 9:**
In April we judged it likely that the US economy would start a sluggish recovery in the second half of 2009. Incoming data and improved functioning in financial markets has been broadly consistent with this projection. While there are some tentative signs of stabilization in the labor market both the April and May unemployment rates surprised to the upside as labor force participation rebounded contrary to our assumption in April. We have assumed that little of this rebound in participation is transitory. Thus, our profile for the unemployment rate is about 1 percentage point higher than in April. We have also reduced our GDP growth forecast for 2010 to reflect a larger projected drag from net exports after re-estimating our trade model.

Core inflation data surprised to the upside again in April, raising our 2009Q2 projection but we continue to view recent upside surprises as transitory and have not carried them forward into future quarters.

The downside risks to our central scenario projection have decreased since April. The source of this risk mitigation is continued evidence that the wide range of policy actions are starting to gain traction. On the other hand, we have added some upside risk to our inflation forecast in 2010-11 to reflect concerns over the size of the fiscal deficit and its possible effects on inflation expectations.

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

**Respondent 10:**
Our forecast has not changed substantially since the data have come in about as expected.

**Respondent 11:**
Since April, economic data have come in somewhat better than anticipated, and financial conditions have eased overall, causing me to raise my forecast for real GDP growth in 2009 and 2010. Recent inflation data have been somewhat higher than expected, some measures of inflation expectations edged up, and commodity prices have risen, causing me to raise my forecast of inflation, especially this year, despite the higher path for the unemployment rate.

**Respondent 12:**
Incoming data have indicated more stability in the economy and I have marginally boosted my 2009:H2 growth projection. However, the rate of unemployment has been tracking higher than my April projection and I have marked up my estimate of the unemployment rate over the forecast horizon accordingly. We have also increased our PCE inflation forecast in 2009 to reflect the recent run-up in oil prices.

**Respondent 13:**
We have raised our forecast for real growth in response to positive news on consumer spending, housing starts and home sales,leading indicators of manufacturing activity, initial unemployment claims, equity prices, foreign economic activity, and corporate bond yields.

**Respondent 14:**
The key factors that have caused me to revise down my near-term forecast are the weaker-than-expected labor market data over the past few months.

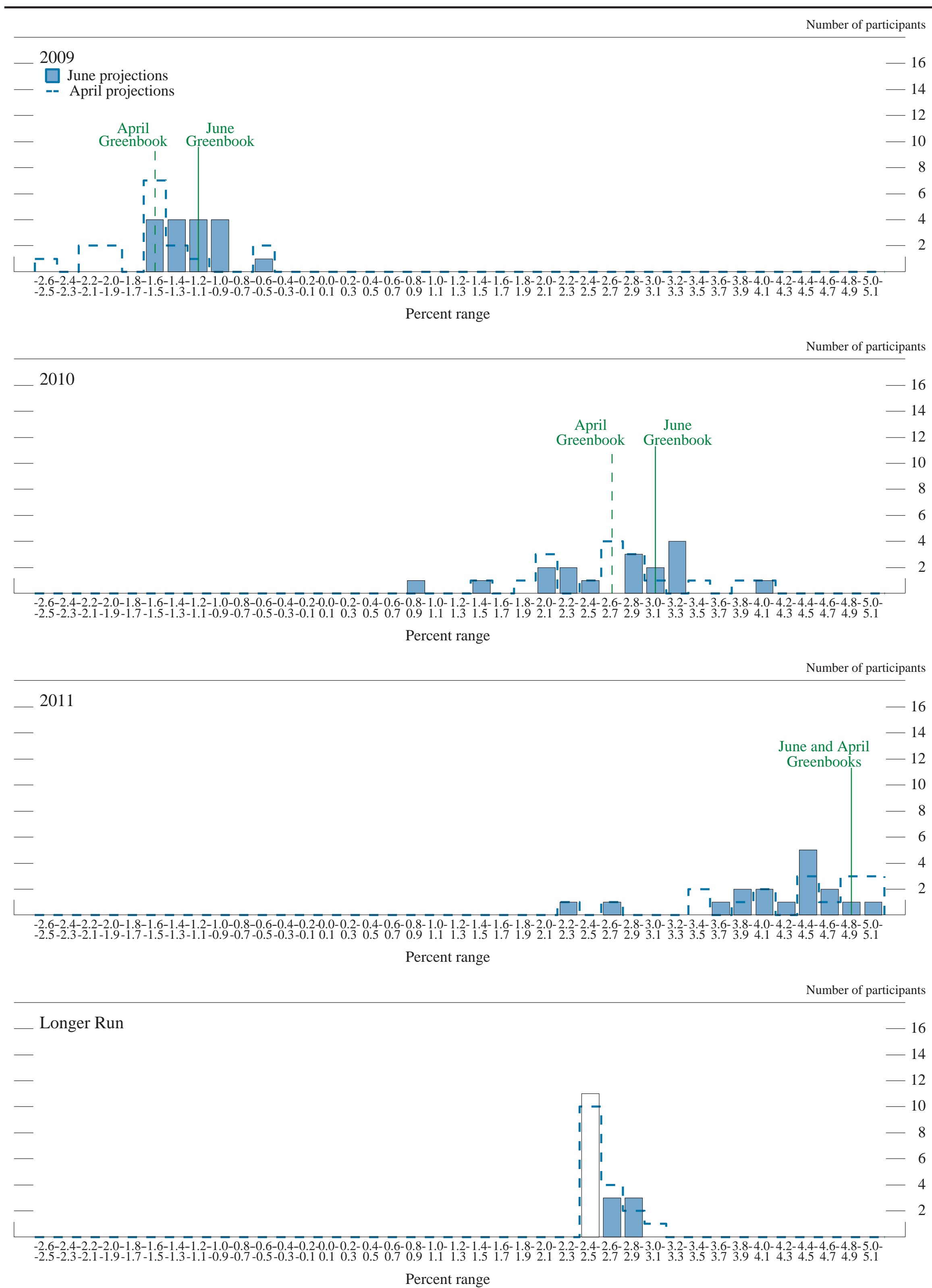
**Respondent 15:**
The incoming data indicate a nascent bottoming-out process, bumping up my near-term growth projections slightly. Also, the anticipated deceleration in core consumer prices has yet to materialize, leading me to raise

the inflation profile throughout the forecast period. Furthermore, a reconsideration of the dynamics between the unemployment gap and inflation dynamics also led me to raise my inflation projection.

**Respondent 16:**
The outlook for activity is a little stronger and the pace of disinflation a little slower owing to incoming data suggesting slightly stronger final demand and faster inventory correction and somewhat less disinflation than expected.

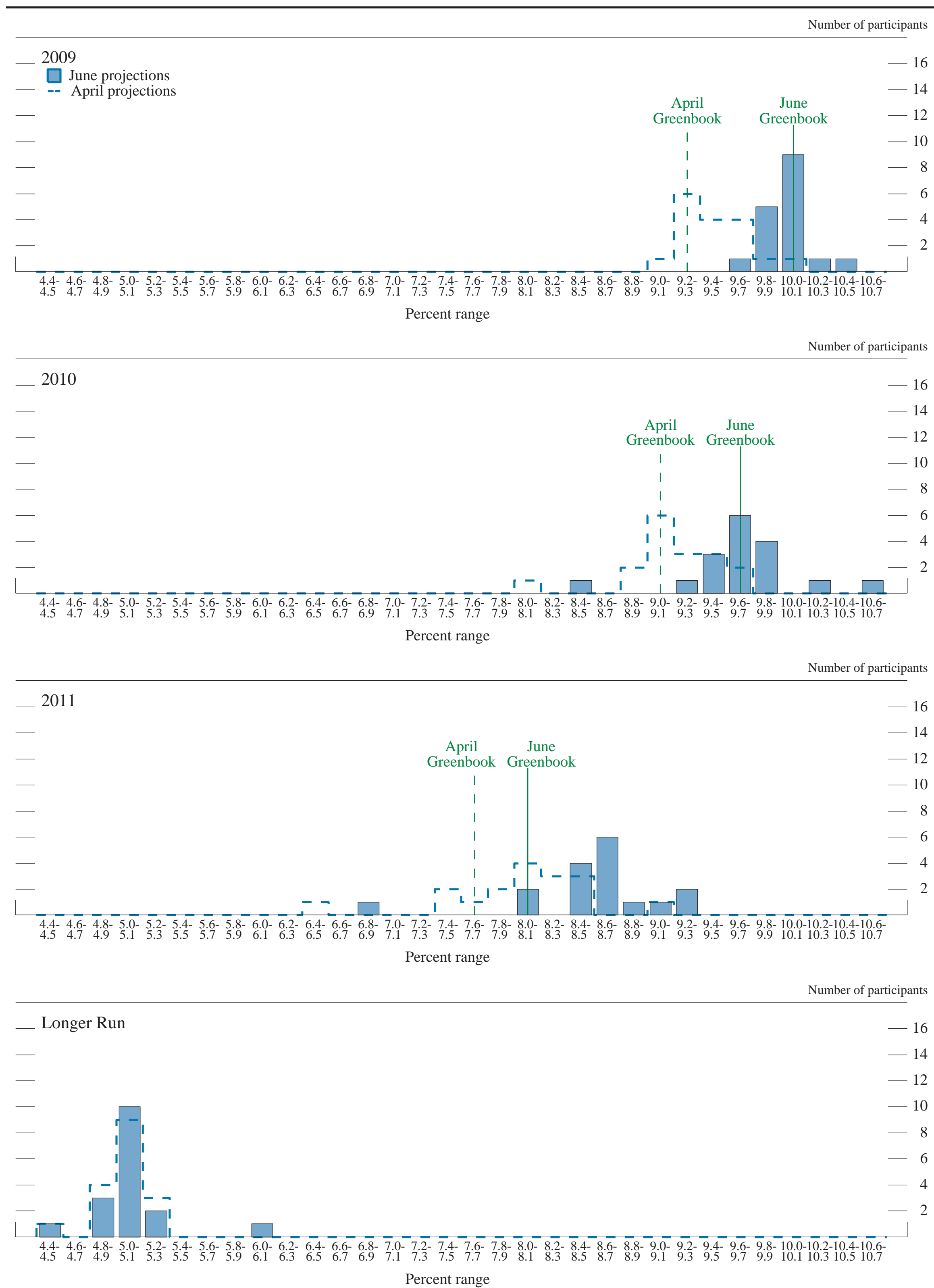
**Respondent 17:**
N/A

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



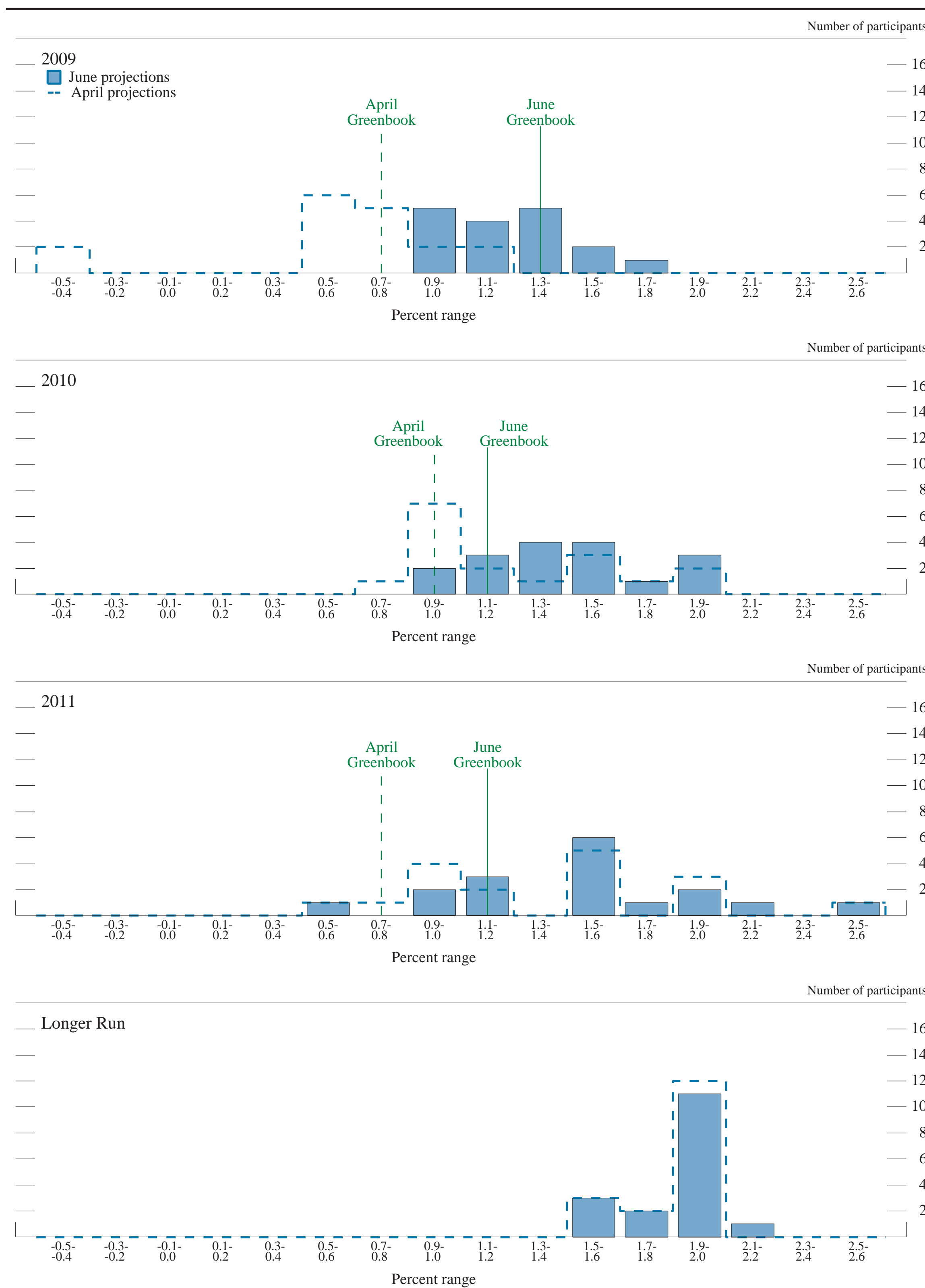

NOTE: Definitions of variables are in the general note to table 1.

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



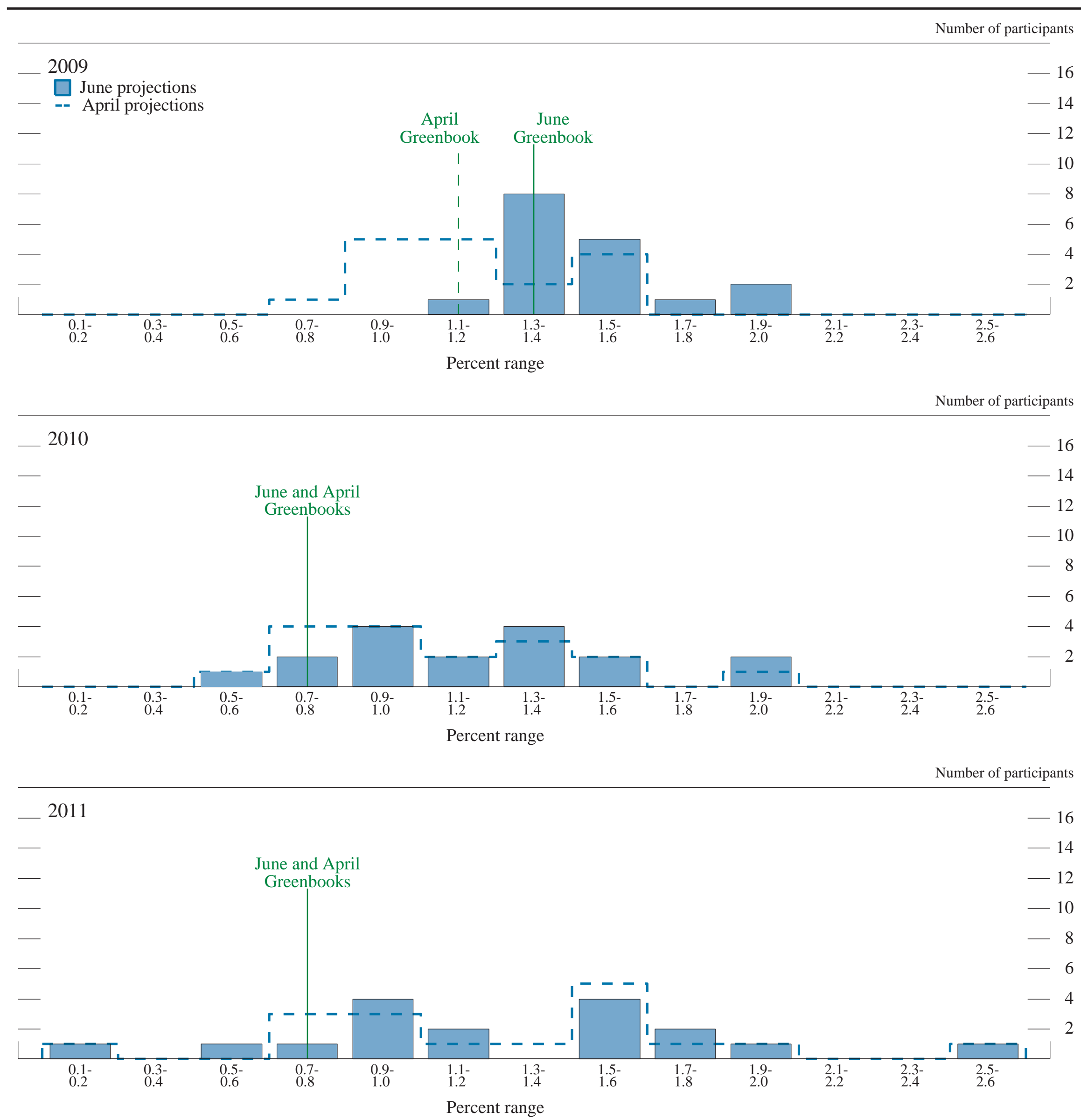

Note: Definitions of variables are in the general note to table 1.

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.