Minutes of the Federal Open Market Committee
June 19–20, 2012

A meeting of the Federal Open Market Committee was held in the offices of the Board of Governors of the Federal Reserve System in Washington, D.C., on Tuesday, June 19, 2012, at 11:00 a.m. and continued on Wednesday, June 20, 2012, at 8:30 a.m.

PRESENT:
Ben Bernanke, Chairman
William C. Dudley, Vice Chairman
Elizabeth Duke
Jeffrey M. Lacker
Dennis P. Lockhart
Sandra Pianalto
Jerome H. Powell
Sarah Bloom Raskin
Jeremy C. Stein
Daniel K. Tarullo
John C. Williams
Janet L. Yellen

James Bullard, Christine Cumming, Charles L. Evans, Esther L. George, and Eric Rosengren, Alternate Members of the Federal Open Market Committee

Richard W. Fisher, Narayana Kocherlakota, and Charles I. Plosser, Presidents of the Federal Reserve Banks of Dallas, Minneapolis, and Philadelphia, respectively

William B. English, Secretary and Economist
Deborah J. Danker, Deputy Secretary
Matthew M. Luecke, Assistant Secretary
David W. Skidmore, Assistant Secretary
Michelle A. Smith, Assistant Secretary
Scott G. Alvarez, General Counsel
Richard M. Ashton,[1] Assistant General Counsel
Steven B. Kamin, Economist
David W. Wilcox, Economist

David Altig, Thomas A. Connors, Michael P. Leahy, William Nelson, Simon Potter, David Reifschneider, Mark S. Sniderman, William Wascher, John A. Weinberg, and Kei-Mu Yi, Associate Economists

Brian Sack, Manager, System Open Market Account

Nellie Liang, Director, Office of Financial Stability Policy and Research, Board of Governors

Jon W. Faust and Andrew T. Levin, Special Advisors to the Board, Office of Board Members, Board of Governors

Linda Robertson, Assistant to the Board, Office of Board Members, Board of Governors

Seth B. Carpenter, Senior Associate Director, Division of Monetary Affairs, Board of Governors; Timothy P. Clark, Senior Associate Director, Division of Banking Supervision and Regulation, Board of Governors

Thomas Laubach, Senior Adviser, Division of Research and Statistics, Board of Governors; Ellen E. Meade, Stephen A. Meyer, and Joyce K. Zickler, Senior Advisers, Division of Monetary Affairs, Board of Governors

Daniel M. Covitz, Eric M. Engen, Michael T. Kiley,[2] David E. Lebow, and Michael G. Palumbo, Associate Directors, Division of Research and Statistics, Board of Governors

David Bowman, Deputy Associate Director, Division of International Finance, Board of Governors

Steven A. Sharpe and John J. Stevens, Assistant Directors, Division of Research and Statistics, Board of Governors

David H. Small, Project Manager, Division of Monetary Affairs, Board of Governors

Francisco Covas and Jennifer E. Roush, Senior Economists, Division of Monetary Affairs, Board of Governors; Andrea De Michelis, Senior Economist, Division of International Finance, Board of Governors

Sarah G. Green, First Vice President, Federal Reserve Bank of Richmond

[1] Attended Tuesday's morning session only.
[2] Attended Tuesday's session only.

Loretta J. Mester and Harvey Rosenblum, Executive Vice Presidents, Federal Reserve Banks of Philadelphia and Dallas, respectively

Troy Davig, Geoffrey Tootell, and Christopher J. Waller, Senior Vice Presidents, Federal Reserve Banks of Kansas City, Boston, and St. Louis, respectively

John Fernald, Group Vice President, Federal Reserve Bank of San Francisco

Lorie K. Logan and Anna Paulson, Vice Presidents, Federal Reserve Banks of New York and Chicago, respectively

Organizational Matters

By unanimous vote, Simon Potter was selected to serve at the pleasure of the Committee as Manager, System Open Market Account, effective June 30, 2012, on the understanding that his selection was subject to being satisfactory to the Federal Reserve Bank of New York.

> Secretary's note: Advice subsequently was received that the selection of Mr. Potter as Manager was satisfactory to the Federal Reserve Bank of New York.

By unanimous vote, the Committee selected James J. McAndrews to serve as Associate Economist, effective June 30, 2012, until the selection of his successor at the first regularly scheduled meeting of the Committee in 2013.

By unanimous vote, the Committee amended the FOMC Policy on External Communications of Federal Reserve System Staff to clarify some specific aspects of the policy.[3]

Discussion of Communications regarding Economic Projections

Meeting participants discussed several possibilities for enhancing the clarity and transparency of the Committee's economic projections and their role in policy decisions and policy communications. In particular, participants noted that while the Summary of Economic Projections (SEP) provides information about their individual projections of key macroeconomic variables and about the path of monetary policy that each sees as appropriate and consistent with his or her projections, the SEP does not provide guidance about how those diverse views come together in the Committee's collective judgment about the outlook and appropriate policy as expressed in its postmeeting statement. Many participants indicated that if it were possible to construct a quantitative economic projection and associated path of appropriate policy that reflected the collective judgment of the Committee, such a projection could potentially be helpful in clarifying how the outlook and policy decisions are related. Participants discussed examples of the economic and policy projections published by a number of foreign central banks. Participants generally indicated a willingness to explore adjustments to the SEP, while highlighting the importance of communicating not only the Committee's collective judgment but also the diversity of their views regarding the economic outlook and monetary policy. Many participants noted that developing a quantitative forecast that reflects the Committee's collective judgment could be challenging, given the range of their views about the economy's structure and dynamics. Several participants judged that the incremental gains in transparency that would result from developing and presenting such a consensus projection would be modest, given the breadth of information already provided in the Committee's policy statements, the minutes of Federal Open Market Committee (FOMC) meetings, and the Chairman's press briefings. Participants agreed to continue to explore ways to increase clarity and transparency in the Committee's policy communications; many noted that the Committee had introduced a number of changes in its communications over the past year or so, and emphasized that further changes should be considered carefully. At the end of the discussion, the Chairman asked the subcommittee on communications to explore the feasibility and workability of potential approaches to developing an FOMC consensus forecast.

Developments in Financial Markets and the Federal Reserve's Balance Sheet

The Manager of the System Open Market Account (SOMA) reported on developments in domestic and foreign financial markets during the period since the FOMC met on April 24–25, 2012. He also reported on System open market operations, including the ongoing reinvestment into agency-guaranteed mortgage-backed securities (MBS) of principal payments received on SOMA holdings of agency debt and agency-guaranteed MBS as well as the operations related to the maturity extension program authorized at the September 20–21, 2011, FOMC meeting. By unanimous vote, the Committee ratified the Desk's domestic transactions over

[3] The policy is available at www.federalreserve.gov/monetarypolicy/files/FOMC_ExtCommunicationStaff.pdf .

the intermeeting period. There were no intervention operations in foreign currencies for the System's account over the intermeeting period.

By unanimous vote, the Authorization for Domestic Open Market Operations was amended to include the authority to conduct small-value operations for the purposes of routine testing of operational readiness. In addition, the Authorization was amended to include the authority to conduct intraday repurchase agreement (repo) transactions with foreign and international accounts to prevent daylight overdrafts in those accounts.[4]

Staff Review of the Economic Situation

The information reviewed at the June 19–20 meeting suggested that economic activity was expanding at a somewhat more modest pace than earlier in the year. Improvements in labor market conditions slowed in recent months, and the unemployment rate remained elevated. Consumer price inflation declined, primarily reflecting reductions in the prices of crude oil and gasoline, and measures of long-run inflation expectations continued to be stable.

Private nonfarm employment rose at a slower pace in April and May than in the first quarter of the year, while total government employment continued to trend down. The unemployment rate stood at 8.2 percent in May, essentially the same as its average in the first quarter. The rate of long-duration unemployment remained very high, and the share of workers employed part time for economic reasons was little changed in recent months. Indicators of job openings and firms' hiring plans were mixed, while initial claims for unemployment insurance were essentially unchanged over the intermeeting period at a level consistent with modest net job gains in the coming months.

Manufacturing production edged up, on net, in April and May after rising at a robust pace in the first quarter. Meanwhile, the rate of manufacturing capacity utilization remained about the same as earlier in the year. In recent months, the output of motor vehicles and parts increased further, on balance, although at a slower rate than in the first quarter, while factory output outside of the motor vehicle sector only inched up. Motor vehicle assemblies were scheduled to hold steady in the coming months, and broader indicators of manufacturing production, such as the diffusion indexes of new orders from the national and regional manufacturing surveys, were generally at levels consistent with modest increases in output in the near term.

Real personal consumption expenditures increased solidly in the first quarter. In April and May, however, nominal retail sales excluding purchases of motor vehicles declined while sales of motor vehicles slowed from their brisk pace in the first quarter. Factors that tend to support households' expenditures were, on balance, a little softer in recent months. The estimated level of households' real disposable income was revised down for the fourth quarter of last year. Moreover, real disposable income rose at a subdued pace in the first quarter of this year, though it received some boost from lower energy prices in April. Households' net worth increased in the first quarter, but the decline in equity prices during the intermeeting period suggested that net worth may have fallen more recently. Consumer sentiment was lower in early June than earlier in the year, and it continued to be subdued.

Activity in the housing sector generally improved in recent months, but it was still restrained by tight credit standards for mortgage loans and the substantial inventory of foreclosed and distressed properties. Both starts and permits of new single-family homes rose in April and May but remained at low levels. Although starts of new multifamily units ran at a somewhat lower pace, on average, in April and May than in the first quarter, permits increased in recent months, likely pointing to further gains in multifamily construction. Home prices rose for the fourth consecutive month in April. Sales of existing homes were a little higher in April than their monthly average in the first quarter, but the pace of new home sales was roughly unchanged.

Real business expenditures on equipment and software increased moderately in the first quarter. In April, nominal shipments and orders of nondefense capital goods excluding aircraft decreased. Recent forward-looking indicators, such as surveys of business conditions and capital spending plans, pointed toward continued moderate increases in outlays for business equipment in subsequent months. Nominal business spending for nonresidential construction was essentially flat in April relative to the first quarter. Meanwhile, inventories in most industries looked to be roughly aligned with sales in recent months.

Real federal government purchases fell markedly in the first quarter, led by a sharp decrease in defense spending. Data for federal government spending in April and May pointed to a slower pace of decline in defense

[4] The authorization is available at www.federalreserve.gov/monetarypolicy/files/FOMC_DomesticAuthorization.pdf .

outlays in the second quarter. Real state and local government purchases also decreased in the first quarter. Moreover, the payrolls of state and local governments contracted in April and May after edging up in the first quarter, and nominal construction spending by these governments continued to decline in April.

The U.S. international trade deficit widened in March and then narrowed in April to a level near its average in the first quarter. Both imports and exports rose strongly in March before receding a bit in April. In particular, exports to the euro area, which had increased strongly in the first quarter on a seasonally adjusted basis despite the weakness in economic activity in the region, fell back in April.

Overall U.S. consumer prices were flat in April and then fell in May as consumer energy prices declined considerably in both months. Survey data indicated that gasoline prices fell further in the first half of June, in line with continued decreases in crude oil prices. Meanwhile, consumer food prices only edged up in recent months. Consumer prices excluding food and energy increased moderately in April and May. Near-term inflation expectations from the Thomson Reuters/University of Michigan Surveys of Consumers declined in May and held steady in early June, while longer-term inflation expectations in the survey remained stable.

Measures of labor compensation indicated that increases in nominal wages continued to be subdued. Gains in compensation per hour in the nonfarm business sector were quite muted over the year ending in the first quarter, and with small gains in productivity, unit labor costs rose only slightly. The employment cost index increased only a little faster than the compensation per hour measure over the same period. More recently, average hourly earnings for all employees edged up in April and May, and their rate of increase from 12 months earlier continued to be slow.

Recent indicators suggested that overall foreign economic activity was expanding at a below-trend pace in the second quarter. Euro-area economies appeared to be slowing: Industrial production declined in the euro area in April, and the composite purchasing managers index and indicators of business confidence fell in May to their lowest levels in more than two years. In China, data on production and sales in April and May suggested that economic activity was increasing at a less rapid pace than last year. In both advanced and emerging market economies, declining prices for energy and other commodities contributed to decreases in 12-month measures of inflation since late last year.

Staff Review of the Financial Situation

Growing concerns about developments in the euro area and weaker-than-expected economic data in the United States and abroad both weighed on financial markets since the time of the April FOMC meeting. The deterioration in investor sentiment was tempered to an extent by market participants' expectations for further policy accommodation by central banks as well as by the anticipation of additional measures to address European fiscal and banking issues.

Yields on longer-dated nominal and inflation-protected Treasury securities moved down substantially, on net, over the intermeeting period. The yield on nominal 10-year Treasury securities reached a historically low level immediately following the release of the May employment report. A sizable portion of the decline in longer-term Treasury rates over the period appeared to reflect greater safe-haven demands by investors, along with some increase in market participants' expectations of further Federal Reserve balance sheet actions. Indicators of inflation expectations derived from nominal and inflation-protected Treasury securities also fell, apparently responding at least in part to the decline in commodity prices. The expected path for the federal funds rate derived from money market futures quotes shifted down in 2014 and beyond.

There was limited evidence of increased strains in unsecured, short-term dollar funding markets over the intermeeting period despite heightened concerns about the situation in Europe. In secured funding markets, the overnight general collateral Treasury repo rate edged higher. Market participants attributed some portion of the firming in short-term rates over the past several months to a temporary increase in short-dated Treasury securities held by dealers as a result of cumulative net Treasury issuance of such securities and sales of these securities by the Federal Reserve under its maturity extension program.

Broad U.S. stock price indexes declined, and option-implied volatility on the S&P 500 index rose. Equity prices for large domestic banks significantly underperformed the broad indexes amid uncertainty about the situation in Europe and the outlook for the global economy. Disclosure of a large trading loss at a major U.S. bank also contributed to the underperformance. Investors' expectation that five large U.S. banks would have their credit ratings downgraded at the end of June, as part of rating agencies' review of major financial institutions, may also have weighed on the equity prices of those banks.

In the June 2012 Senior Credit Officer Opinion Survey on Dealer Financing Terms (SCOOS), respondents reported that terms in a variety of dealer-intermediated markets were little changed over the past three months. Some respondents reported a decline in the use of leverage by hedge funds across various transaction types.

Yields on investment- and speculative-grade corporate debt remained low by historical standards, but their spreads over comparable-maturity Treasury securities widened a bit. Nonfinancial firms continued to raise funds at a solid pace over the period, with the proceeds primarily used to refinance existing debt. Both commercial and industrial (C&I) loans and nonfinancial commercial paper outstanding increased, on net, during April and May. New syndicated loan issuance also appeared to remain solid, although there were some reports of tighter terms. Gross public equity issuance by nonfinancial firms remained strong in April and into May but then slowed after the poor performance of a prominent initial public offering.

Financing conditions for the commercial real estate sector remained strained over the intermeeting period. Even so, issuance of commercial mortgage-backed securities in April and May outpaced issuance during the first quarter.

Credit conditions in residential mortgage markets continued to be tight. Mortgage refinancing activity rose in April and May but remained subdued despite further declines in mortgage rates to historically low levels. Consumer credit expanded at a solid pace in recent months, as increases in student loans boosted nonrevolving credit while revolving credit was about flat. Delinquency rates for consumer credit remained low, partly reflecting a shift in the composition of borrowers toward those with higher credit scores.

Gross issuance of long-term municipal bonds picked up in April and May, with net issuance turning positive for the first time since the beginning of 2011. However, credit default swap spreads for state governments generally moved higher, and spreads on long-term general obligation municipal bonds over comparable-maturity Treasury securities rose as well.

Bank credit expanded in April and May. Banks' holdings of securities continued to rise, and core loans—C&I, real estate, and consumer loans—also increased modestly. The May Survey of Terms of Business Lending indicated that lending conditions again eased slightly, although perhaps less so for small businesses.

M2 increased at a somewhat slower pace in April and May than in the first quarter of the year. The level of M2 and its largest component—liquid deposits—remained elevated, apparently reflecting investors' continued desire to hold safe and liquid assets.

Heightened financial strains in the euro area and indications of a weaker pace of global economic activity weighed on foreign financial markets during the intermeeting period. Yields on most euro-area peripheral countries' sovereign debt rose, particularly after the May 6 elections in Greece failed to produce a new government. In addition, indicators of the conditions of European banks continued to deteriorate: Rating agencies downgraded major banks in Germany, Italy, Spain, and several other European countries; prices of euro-area bank stocks fell sharply; and credit default swap premiums for many euro-area banks increased. Pressures on Spanish banks led euro-area authorities to agree to provide official aid to the Spanish government for the purpose of recapitalizing the country's troubled banks. Indicators of funding market stresses remained muted, as many banks obtained funds from the European Central Bank (ECB) rather than interbank markets. The spreads of euro London interbank offered rates (or euro LIBOR) over comparable overnight index swap rates, along with implied basis spreads from euro–dollar swaps, were little changed at short maturities, and the amount of dollar swaps outstanding with the ECB declined on balance. The total outstanding amount drawn on the Federal Reserve's dollar liquidity swap lines with foreign central banks dropped to $24.2 billion over the intermeeting period.

Although equity prices in many countries rallied modestly late in the intermeeting period, global equity prices declined, on balance, over the period, with especially large net decreases in Japan and many emerging market economies. Flight-to-safety flows helped push yields on both U.K. and German 10-year sovereign debt to record lows before these rates partly retraced their declines. The staff's broad nominal dollar index ended the intermeeting period up moderately. Signs of a slowdown in global economic growth prompted policy easing by central banks in Brazil, China, and Australia, and the Bank of England announced new lending initiatives.

The risks to the U.S. financial system emanating from strains in Europe appeared to increase over the intermeeting period. Although signs of strains in short-term funding markets were muted, the reliance of some financial firms on these markets remained a potential vulnerability, given that investors could withdraw rapidly in a period of financial stress. Respondents to the June 2012 SCOOS reported that financial institutions and market participants had increased the amount of resources and attention devoted to the management of concentrated exposures to central counterparties and other financial utilities.

Staff Economic Outlook

In the economic projection prepared by the staff for the June FOMC meeting, the forecast for real gross domestic product (GDP) growth in the near term was revised down. The revision reflected data indicating a slower pace of private-sector job gains, more-subdued retail sales, a lower trajectory for personal income, greater restraint in government purchases, and weaker net exports than the staff anticipated at the time of the previous projection. Moreover, recent adverse developments in Europe and tighter domestic financial conditions led the staff to revise down somewhat the medium-term forecast for real GDP growth. With the drag from fiscal policy anticipated to increase next year, the staff projected that the growth rate of real GDP would not materially exceed that of potential output until 2014 when economic activity was expected to accelerate gradually, supported by accommodative monetary policy, further improvements in credit availability, and rising consumer and business sentiment. Increases in economic activity were anticipated to narrow the wide margin of slack in labor and product markets only slowly over the projection period, and the unemployment rate was expected to still be elevated at the end of 2014.

The staff's near-term projection for inflation was revised down from the forecast prepared for the April FOMC meeting, reflecting a greater-than-expected drop in consumer energy prices. However, the staff's projection for inflation over the medium term was essentially unchanged. With the upward pressure from the earlier run-up in crude oil prices on consumer energy prices unwinding and oil prices expected to decline further, long-run inflation expectations anticipated to remain stable, and substantial resource slack persisting over the forecast period, the staff continued to project that inflation would be subdued through 2014.

Participants' Views on Current Conditions and the Economic Outlook

In conjunction with this FOMC meeting, meeting participants—the 7 members of the Board of Governors and the presidents of the 12 Federal Reserve Banks, all of whom participate in the deliberations of the FOMC—submitted their assessments of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2012 through 2014 and over the longer run, under each participant's judgment of appropriate monetary policy. The longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. These economic projections and policy assessments are described in the Summary of Economic Projections, which is attached as an addendum to these minutes.

In their discussion of the economic situation and outlook, participants agreed that the information received since the Committee's previous meeting suggested that the economy had continued to expand moderately, though many noted that a variety of indicators showed smaller gains than had been anticipated. Growth in employment, in particular, appeared to have slowed in recent months, and the unemployment rate remained elevated. Business fixed investment had continued to advance, and household spending appeared to be rising at a somewhat slower pace than earlier in the year. There were further signs of improvement in the housing sector, but the level of activity remained very low. Volatility in financial markets increased over the intermeeting period, and investors' appetite for riskier assets declined, likely in response to heightened fiscal and financial strains in Europe as well as some weaker-than-expected incoming data about the U.S. economy and foreign economies. Inflation had slowed somewhat, mainly reflecting the decline in the prices of crude oil and gasoline in recent months, and longer-term inflation expectations remained stable.

Participants generally interpreted the information that became available during the intermeeting period as suggesting that economic growth would most likely remain moderate over coming quarters and then pick up very gradually. Most participants saw the incoming information as indicating somewhat slower growth in total demand, output, and employment over coming quarters than they had projected in April, and most carried forward some of that downward revision to their projections of medium-term growth. However, some participants judged that the recent weakness in a variety of economic indicators was more likely to prove transitory, and thought that the outlook beyond this year was essentially unchanged. Reflecting the projected moderate pace of growth in production and employment, most participants anticipated that the unemployment rate would decline only slowly. A number of factors continued to be seen as likely to limit the economic expansion to a moderate pace in the near term; these included slow growth or even contraction in some major foreign economies, ongoing and prospective fiscal tightening in the United States, modest growth in household income, and—despite some recent signs of improvement—continued weakness in the housing sector. As in April, participants expected that most of the factors restraining economic expansion would ease over time, and so anticipated that the recovery eventually would gain strength. However, strains in global financial markets, which stemmed primarily from fiscal and banking concerns in Europe, had become more pronounced over the intermeeting period and continued to pose significant downside risks to the economic outlook; the possibility of a sharper-than-anticipated fiscal tightening in the United States also posed a downside risk. Looking beyond the temporary effects on inflation of this year's fluctuations in oil and other commodity prices, almost all participants continued to anticipate that inflation over the medium-term would run at or below the 2 percent rate that the Committee judges to be most consistent with its statutory mandate. In one participant's judgment, appropriate monetary policy would lead to inflation modestly greater than 2 percent for a time in order to bring unemployment down somewhat faster. Some participants indicated that they saw persistent slack in resource utilization as posing downside risks to the outlook for inflation; a few participants judged that the highly accommodative stance of monetary policy posed upside risks to the medium-term inflation outlook.

In discussing the household sector, meeting participants noted that real personal consumption expenditures had continued to expand despite weak growth in real disposable income, but that the pace of expansion appeared to have slowed since earlier this year. A few participants expressed concern that slow growth in employment and low levels of consumer confidence would further restrain consumer spending. Many participants, however, said that business contacts had reported that consumer spending was holding up. Several observed that recent declines in gasoline prices would increase households' real incomes and could boost consumer spending in coming quarters. More broadly, improving household balance sheets and a diminishing drag from household deleveraging were seen as likely to help support rising household expenditures over time.

Indicators of home sales, construction, and prices suggested some improvement in the housing sector. However, not all regions shared in the gains, and the sector remained depressed overall. Most participants anticipated that housing markets were likely to recover only slowly over time, in part because tight credit standards in mortgage lending meant that low mortgage rates were now generating less of a pickup in home sales and construction than had been the case during the recoveries from earlier recessions. A few participants were more sanguine about the potential for a sizable upturn in housing activity. Still, with residential investment currently a much smaller share of real GDP than during past recoveries, the housing sector seemed unlikely to contribute substantially to a stronger economic recovery.

Anecdotal evidence from business contacts indicated that activity in the energy and agriculture sectors continued to advance in recent months. Information from manufacturing and transportation firms was generally less optimistic than earlier in the year. There were a number of reports of slowing sales to Europe and Asia. Contacts in some parts of the country also indicated that firms had become more cautious in their hiring and investment decisions, with most capital investment being undertaken to improve productivity and reduce costs rather than to expand capacity. Some participants cited examples of business contacts saying that heightened uncertainty about future tax and regulatory policies had led them to put potential investment projects on hold until the uncertainty is resolved.

Participants expected that fiscal policy would continue to be a drag on economic growth over coming quarters. They generally also saw the federal budget situation as a downside risk to the economic outlook: If an agreement was not reached to address the expiring tax cuts and scheduled spending reductions in current law, a sharp tightening of fiscal policy would occur at the start of 2013. A few participants reported hearing that defense contractors were making contingency plans to reduce their workforces if potential spending cuts go into effect; one reported that some firms already had begun to make such reductions. In contrast, it was noted that an agreement on a credible longer-term plan that put the federal budget on a sustainable path over the medium run in a way that removes the near-term fiscal risks to the recovery would help alleviate uncertainty, likely would have positive effects on consumer and business sentiment, and so could spur an increase in business investment and hiring.

Exports helped support U.S. economic growth during the early months of this year. However, recent reports from some business contacts pointed to slowing exports to Europe and China, and several participants noted the risk that economic weakness in Europe or a more significant slowing in the pace of expansion in emerging markets in Asia could damp exports further. A couple of participants expressed the view that the direct effects on the U.S. economy stemming from slower economic growth abroad—effects that would be manifested through declining U.S. exports—would be noticeable but not large. However, another participant noted that recent appreciation of the dollar in foreign exchange markets would also contribute to reduced exports.

The pace of improvement in labor market conditions diminished in recent months; in particular, growth in employment slowed. Job growth late last year and early this year was boosted by unusually mild winter weather; some slowing had been expected as weather became more normal during the spring, but the reported slowing was more substantial than many participants had anticipated. One participant noted that the apparent tension between strong employment growth and moderate output growth seen earlier in the year had been resolved more recently by slower job growth rather than faster output growth. Even so, average monthly growth in payrolls from January through May was in line with last year's pace.

Meeting participants again discussed the extent of slack in labor markets. Some participants judged that the unemployment rate was being substantially boosted by structural factors such as mismatches between the skills of unemployed workers and those required for available jobs, a view that would imply less slack in labor markets than suggested by a simple comparison of the current unemployment rate to participants' estimates of its longer-run normal level. A couple of participants said they would have expected inflation to slow noticeably if there were substantial and persistent slack. One implication of the view that there is relatively little slack is that providing more monetary stimulus would be likely to raise inflation above the Committee's objective. Some other participants acknowledged that structural factors were contributing to unemployment, but said that, in their view, slack remained high and weak aggregate demand was the major reason that the unemployment rate was still elevated. These participants cited a range of evidence to support their judgment: the still-high fraction of workers who report working part-time jobs because they cannot find full-time work; research showing that job-finding rates among the long-term unemployed were somewhat higher in the recent past than a year earlier; anecdotal evidence to the effect that employers do not see long spells of unemployment as making applicants less attractive for most jobs; and reports that employers were receiving large numbers of applications for each opening and were being especially discriminating when filling vacant positions. Another participant pointed to research showing that, in many countries, inflation is less responsive to downward pressure from labor market slack when inflation is already low than when inflation is elevated, and to evidence that firms in the United States have been reluctant to cut nominal wages in recent years, as indications that sizable slack might not cause inflation to decline from its already low level. These arguments imply that slack in labor markets remains considerable and therefore that a reduction in the unemployment rate toward its longer-run normal level would not have much effect on inflation.

Measures of consumer price inflation declined over the intermeeting period, mainly reflecting reductions in oil and gasoline prices since earlier in the year. Several participants noted that they saw little if any evidence of price pressures, commenting that increases in labor costs continued to be subdued and that non-energy commodity prices had declined of late. With longer-run inflation expectations well anchored and the unemployment rate elevated, almost all participants anticipated that inflation in coming quarters and over the medium run would be at or below the 2 percent rate that the Committee judges to be most consistent with its mandate; several had revised down their inflation forecasts. Most participants viewed the risks to their inflation outlook as being roughly balanced. Some participants, however, saw persistent slack in resource utilization as weighting the risks to the outlook for inflation to the downside. In contrast, a few saw inflation risks as tilted to the upside; they generally were skeptical of models that rely on economic slack to forecast inflation and were concerned that maintaining the current highly accommodative stance of monetary policy over the medium run risked eroding the stability of inflation expectations, with a couple noting that large long-run fiscal imbalances also posed a risk.

Many FOMC participants judged that overall financial conditions had become somewhat less supportive of growth in demand for goods and services. Investors' concerns about the sovereign debt and banking situation in the euro area reportedly intensified during the intermeeting period, leading to higher risk spreads and lower prices for riskier assets including equities and to broad-based appreciation of the U.S. dollar on foreign exchange markets. In contrast, a few participants observed that the marked drop in yields on longer-term U.S. Treasury securities could provide some impetus to growth. Focusing more narrowly on the banking sector in the United States, it was noted that measures of credit quality for bank loans generally had continued to improve, that bank capital levels were quite high, and that banks had ample liquidity. Consumer and business loans were increasing, although credit standards remained tight and commercial and residential real estate lending were relatively weak. A few participants indicated that they were seeing signs that very low interest rates might be inducing some investors to take on imprudent risks in the search for higher nominal returns. Participants discussed the risk that strains in global financial markets and pressures on European financial institutions could worsen and spill over to parts of the domestic financial sector, and some noted the importance of undertaking adequate preparations to address such spillovers if they were to occur; it also was recognized that investor sentiment could improve and strains in global markets might ease. Several participants commented that it would be desirable to explore the possibility of developing new tools to promote more-accommodative financial conditions and thereby support a stronger economic recovery.

Committee Policy Action

Committee members saw the information received over the intermeeting period as suggesting that the economy had been expanding moderately. However, growth in employment had slowed in recent months, and almost all members saw the unemployment rate as still elevated relative to levels that they viewed as consistent with the Committee's mandate. Members generally expected growth to be moderate over coming quarters and then to pick up very gradually, with the unemployment rate declining only slowly. Most projected somewhat slower growth through next year, and a smaller reduction in unemployment, than they had projected in April. Furthermore, strains in global financial markets, which largely stemmed from the sovereign debt and banking situation in Europe, had increased during the intermeeting period and continued to pose significant downside risks to economic activity both here and abroad, making the outlook quite uncertain. The possibility that U.S. fiscal policy would be more contractionary than anticipated was also cited as a downside risk. Inflation had slowed, mainly reflecting the decline in the prices of crude oil and gasoline in recent months. Averaging through its recent fluctuations, inflation appeared to be running near the Committee's 2 percent longer-run objective; with longer-term inflation expectations stable, members anticipated that inflation over the medium run would be at or below that rate. Some members judged that persistent slack in resource utilization posed downside risks to the outlook for inflation. In contrast, one member thought that maintaining the current highly accommodative stance of monetary policy well into 2014 would pose upside risks to inflation.

In their discussion of monetary policy for the period ahead, members agreed that it would be appropriate to keep the target range for the federal funds rate at 0 to ¼ percent in order to support a stronger economic recovery and to help ensure that inflation, over time, is at the 2 percent rate that the Committee judges most consistent with its mandate. In addition, all members but one agreed that it would be appropriate to continue through the end of this year the Committee's program to extend the average maturity of the Federal Reserve's holdings of securities; specifically, they agreed to continue purchasing Treasury securities with remaining maturities of 6 years to 30 years at the current pace of about $44 billion per month while selling or redeeming an equal amount of Treasury securities with remaining maturities of approximately 3 years or less. These steps would increase the Federal Reserve's holdings of longer-term Treasury securities by about $267 billion while reducing its holdings of shorter-term Treasury securities by the same amount. Members also agreed to maintain the Committee's existing policy regarding the reinvestment of principal payments from Federal Reserve holdings of agency securities into agency MBS. Members generally judged that continuing the maturity extension program would put some downward pressure on longer-term interest rates and help make broader financial conditions more accommodative. Some members noted the risk that continued purchases of longer-term Treasury securities could, at some point, lead to deterioration in the functioning of the Treasury securities market that could undermine the intended effects of the policy. However, members generally agreed that such risks seemed low at present, and were outweighed by the expected benefits of the action. Several members noted that the downward pressure on longer-term rates from continuing the Committee's maturity extension program was likely to be modest. One member anticipated little if any effect on economic growth and unemployment and did not agree that the outlook for economic activity and inflation called for further policy accommodation.

With respect to the statement to be released following the meeting, members agreed that only relatively small modifications to the first two paragraphs were needed to reflect the incoming economic data and the changes to the economic outlook. In light of their assessment of the economic situation, almost all members again agreed to indicate that the Committee expects to maintain a highly accommodative stance for monetary policy and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014. Some Committee members indicated that their policy judgment reflected in part their perception of significant downside risks to growth, especially since the Committee's ability to respond to weaker-than-expected economic conditions would be somewhat limited by the constraint imposed on monetary policy when the policy rate is at or near its effective lower bound. Members again noted that the forward guidance is conditional on economic developments and that the date given in the statement would be subject to revision should there be a significant change in the economic outlook.

A few members expressed the view that further policy stimulus likely would be necessary to promote satisfactory growth in employment and to ensure that the inflation rate would be at the Committee's goal. Several others noted that additional policy action could be warranted if the economic recovery were to lose momentum, if the downside risks to the forecast became sufficiently pronounced, or if inflation seemed likely to run persistently below the Committee's longer-run objective. The Committee agreed that it was prepared to take further action as appropriate to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability. A few members observed that it would be helpful to have a better understanding of how large the Federal Reserve's asset purchases would have to be to cause a meaningful deterioration in securities market functioning, and of the potential costs of such deterioration for the economy as a whole.

At the conclusion of the discussion, the Committee voted to authorize and direct the Federal Reserve Bank of New York, until it was instructed otherwise, to execute transactions in the System Account in accordance with the following domestic policy directive:

> "The Federal Open Market Committee seeks monetary and financial conditions that will foster price stability and promote sustainable growth in output. To further its long-run objectives, the Committee seeks conditions in reserve markets consistent with federal funds trading in a range from 0 to ¼ percent. The Committee directs the Desk to continue the maturity extension program it began in September to purchase, by the end of June 2012, Treasury securities with remaining maturities of 6 years to 30 years with a total face value of $400 billion, and to sell Treasury securities with remaining maturities of 3 years or less with a total face value of $400 billion. Following the conclusion of these purchases, the Committee directs the Desk to purchase Treasury securities with remaining maturities of 6 years to 30 years with a total face value of about $267 billion by the end of December 2012, and to sell or redeem Treasury securities with remaining maturities of approximately 3 years or less with a total face value of about $267 billion. For the duration of this program, the Committee directs the Desk to suspend its current policy of rolling over maturing Treasury securities into new issues. The Committee directs the Desk to maintain its existing policy of reinvesting principal payments on all agency debt and agency mortgage-backed securities in the System Open Market Account in agency mortgage-backed securities. These actions should maintain the total face value of domestic securities at approximately $2.6 trillion. The Committee directs the Desk to engage in dollar roll transactions as necessary to facilitate settlement of the Federal Reserve's agency MBS transactions. The System Open Market Account Manager and the Secretary will keep the Committee informed of ongoing developments regarding the System's balance sheet that could affect the attainment over time of the Committee's objectives of maximum employment and price stability."

The vote encompassed approval of the statement below to be released at 12:30 p.m.:

> "Information received since the Federal Open Market Committee met in April suggests that the economy has been expanding moderately this year. However, growth in

employment has slowed in recent months, and the unemployment rate remains elevated. Business fixed investment has continued to advance. Household spending appears to be rising at a somewhat slower pace than earlier in the year. Despite some signs of improvement, the housing sector remains depressed. Inflation has declined, mainly reflecting lower prices of crude oil and gasoline, and longer-term inflation expectations have remained stable.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects economic growth to remain moderate over coming quarters and then to pick up very gradually. Consequently, the Committee anticipates that the unemployment rate will decline only slowly toward levels that it judges to be consistent with its dual mandate. Furthermore, strains in global financial markets continue to pose significant downside risks to the economic outlook. The Committee anticipates that inflation over the medium term will run at or below the rate that it judges most consistent with its dual mandate.

To support a stronger economic recovery and to help ensure that inflation, over time, is at the rate most consistent with its dual mandate, the Committee expects to maintain a highly accommodative stance for monetary policy. In particular, the Committee decided today to keep the target range for the federal funds rate at 0 to ¼ percent and currently anticipates that economic conditions—including low rates of resource utilization and a subdued outlook for inflation over the medium run—are likely to warrant exceptionally low levels for the federal funds rate at least through late 2014.

The Committee also decided to continue through the end of the year its program to extend the average maturity of its holdings of securities. Specifically, the Committee intends to purchase Treasury securities with remaining maturities of 6 years to 30 years at the current pace and to sell or redeem an equal amount of Treasury securities with remaining maturities of approximately 3 years or less. This continuation of the maturity extension program should put downward pressure on longer-term interest rates and help to make broader financial conditions more accommodative. The Committee is maintaining its existing policy of reinvesting principal payments from its holdings of agency debt and agency mortgage-backed securities in agency mortgage-backed securities. The Committee is prepared to take further action as appropriate to promote a stronger economic recovery and sustained improvement in labor market conditions in a context of price stability."

Voting for this action: Ben Bernanke, William C. Dudley, Elizabeth Duke, Dennis P. Lockhart, Sandra Pianalto, Jerome H. Powell, Sarah Bloom Raskin, Jeremy C. Stein, Daniel K. Tarullo, John C. Williams, and Janet L. Yellen.

Voting against this action: Jeffrey M. Lacker.

Mr. Lacker dissented because he opposed continuation of the maturity extension program. He did not believe that further monetary stimulus at this time would make a substantial difference for economic growth and employment without also increasing inflation by more than would be desirable. In Mr. Lacker's view, the outlook for economic growth had clearly weakened of late, but he questioned whether the maturity extension program would have much effect in current circumstances. Should inflation fall substantially and persistently below the Committee's 2 percent goal, however, he felt that monetary stimulus might then be appropriate to ensure the return of inflation toward target.

It was agreed that the next meeting of the Committee would be held on Tuesday–Wednesday, July 31–August 1, 2012. The meeting adjourned at 11:05 a.m. on June 20, 2012.

Notation Vote

By notation vote completed on May 15, 2012, the Committee unanimously approved the minutes of the FOMC meeting held on April 24–25, 2012.

William B. English
Secretary

Summary of Economic Projections

In conjunction with the June 19–20, 2012, Federal Open Market Committee (FOMC) meeting, meeting participants—the 7 members of the Board of Governors and the 12 presidents of the Federal Reserve Banks, all of whom participate in the deliberations of the FOMC—submitted their assessments, under each participant's judgment of appropriate monetary policy, of real output growth, the unemployment rate, inflation, and the target federal funds rate for each year from 2012 through 2014 and over the longer run. These assessments were based on information available at the time of the meeting and participants' individual assumptions about the factors likely to affect economic outcomes. The longer-run projections represent each participant's judgment of the rate to which each variable would be expected to converge, over time, under appropriate monetary policy and in the absence of further shocks to the economy. "Appropriate monetary policy" is defined as the future path of policy that participants deem most likely to foster outcomes for economic activity and inflation that best satisfy their individual interpretations of the Federal Reserve's objectives of maximum employment and stable prices.

Overall, the assessments that FOMC participants submitted in June indicated that, under appropriate monetary policy, the pace of economic expansion over the 2012−14 period would likely continue to be moderate and inflation would remain subdued (see table 1 and figure 1). Participants judged that the growth rate of real gross domestic product (GDP) would pick up gradually and that the unemployment rate would edge down very slowly. Participants projected that inflation, as measured by the annual change in the price index for personal consumption expenditures (PCE), would run close to or below the FOMC's longer-run inflation objective of 2 percent.

As shown in figure 2, most participants judged that highly accommodative monetary policy was likely to be warranted over the forecast period. In particular, 13 participants thought that it would be appropriate for the first increase in the target federal funds rate to occur during 2014 or later. A majority of participants judged that appropriate monetary policy would involve an extension of the maturity extension program (MEP) through the end of 2012.

Overall, participants judged the uncertainty associated with the outlook for real activity and the unemployment rate to be unusually high relative to historical norms, with the risks weighted mainly toward slower economic growth and a higher unemployment rate. Many participants also viewed the uncertainty surrounding their projections for inflation to be greater than normal, but most saw the risks to inflation to be broadly balanced.

The Outlook for Economic Activity

Conditional upon their individual assumptions about appropriate monetary policy, participants judged that

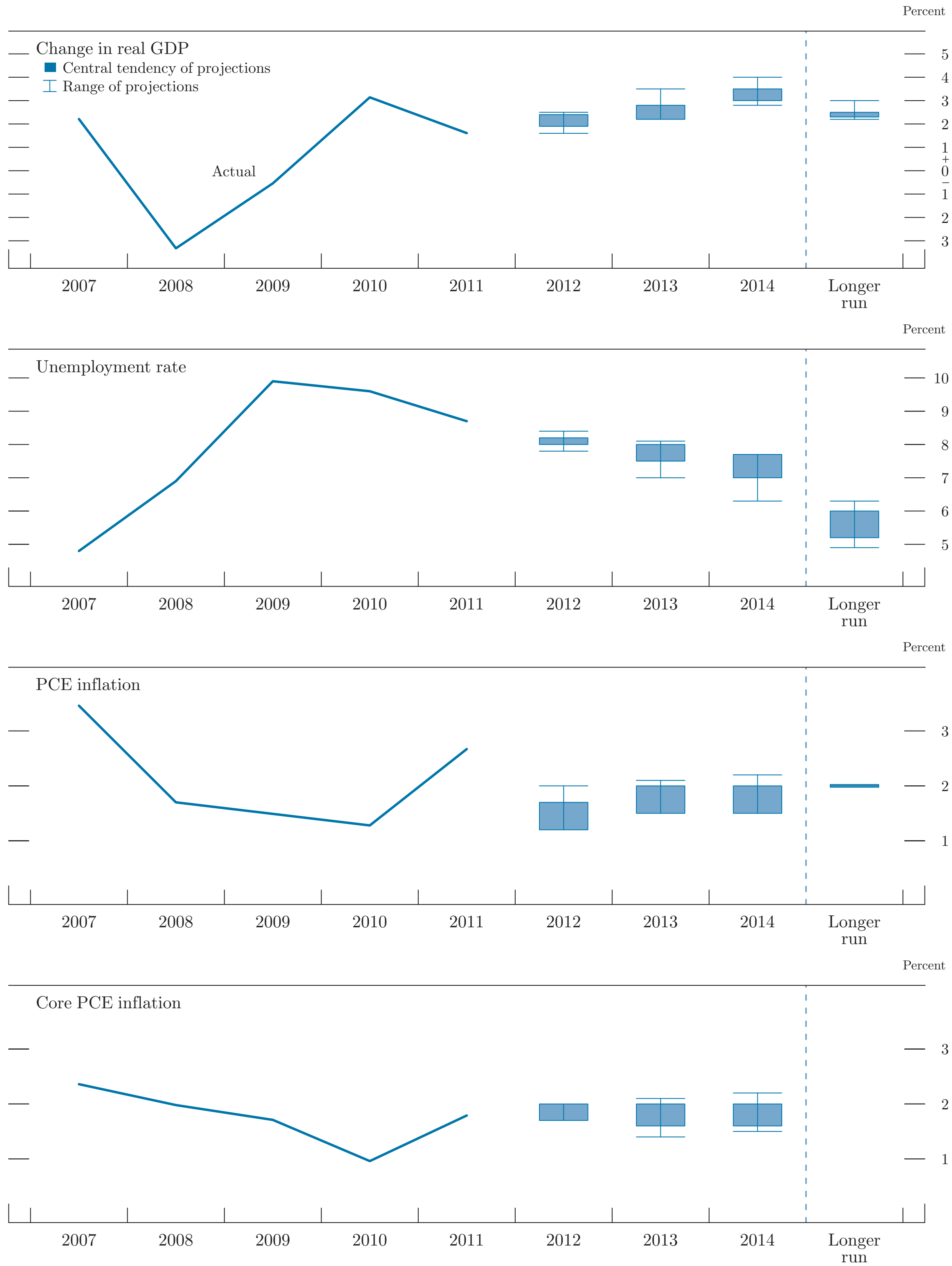
Table 1. Economic projections of Federal Reserve Board members and Federal Reserve Bank presidents, June 2012
Percent

Variable	Central tendency[1]				Range[2]			
	2012	2013	2014	Longer run	2012	2013	2014	Longer run
Change in real GDP	1.9 to 2.4	2.2 to 2.8	3.0 to 3.5	2.3 to 2.5	1.6 to 2.5	2.2 to 3.5	2.8 to 4.0	2.2 to 3.0
April projection	2.4 to 2.9	2.7 to 3.1	3.1 to 3.6	2.3 to 2.6	2.1 to 3.0	2.4 to 3.8	2.9 to 4.3	2.2 to 3.0
Unemployment rate	8.0 to 8.2	7.5 to 8.0	7.0 to 7.7	5.2 to 6.0	7.8 to 8.4	7.0 to 8.1	6.3 to 7.7	4.9 to 6.3
April projection	7.8 to 8.0	7.3 to 7.7	6.7 to 7.4	5.2 to 6.0	7.8 to 8.2	7.0 to 8.1	6.3 to 7.7	4.9 to 6.0
PCE inflation	1.2 to 1.7	1.5 to 2.0	1.5 to 2.0	2.0	1.2 to 2.0	1.5 to 2.1	1.5 to 2.2	2.0
April projection	1.9 to 2.0	1.6 to 2.0	1.7 to 2.0	2.0	1.8 to 2.3	1.5 to 2.1	1.5 to 2.2	2.0
Core PCE inflation[3]	1.7 to 2.0	1.6 to 2.0	1.6 to 2.0		1.7 to 2.0	1.4 to 2.1	1.5 to 2.2	
April projection	1.8 to 2.0	1.7 to 2.0	1.8 to 2.0		1.7 to 2.0	1.6 to 2.1	1.7 to 2.2	

NOTE: Projections of change in real gross domestic product (GDP) and projections for both measures of inflation are from the fourth quarter of the previous year to the fourth quarter of the year indicated. PCE inflation and core PCE inflation are the percentage rates of change in, respectively, the price index for personal consumption expenditures (PCE) and the price index for PCE excluding food and energy. Projections for the unemployment rate are for the average civilian unemployment rate in the fourth quarter of the year indicated. Each participant's projections are based on his or her assessment of appropriate monetary policy. Longer-run projections represent each participant's assessment of the rate to which each variable would be expected to converge under appropriate monetary policy and in the absence of further shocks to the economy. The April projections were made in conjunction with the meeting of the Federal Open Market Committee on April 24–25, 2012.

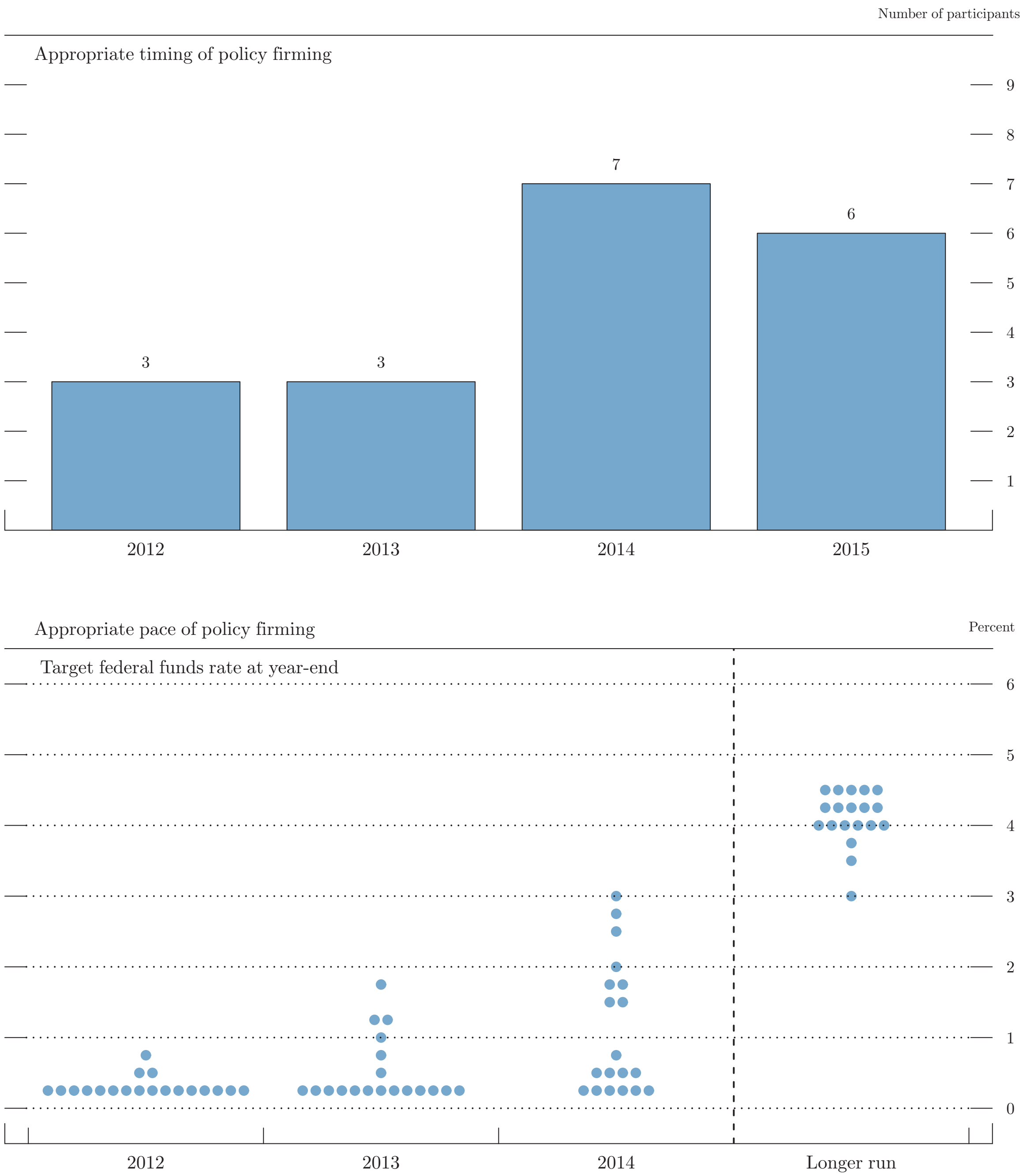
1. The central tendency excludes the three highest and three lowest projections for each variable in each year.
2. The range for a variable in a given year includes all participants' projections, from lowest to highest, for that variable in that year.
3. Longer-run projections for core PCE inflation are not collected.

Figure 1. Central tendencies and ranges of economic projections, 2012–14 and over the longer run



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

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



Note: In the upper panel, the height of each bar denotes the number of FOMC participants who judge that, under appropriate monetary policy, the first increase in the target federal funds rate from its current range of 0 to 1/4 percent will occur in the specified calendar year. In April 2012, the numbers of FOMC participants who judged that the first increase in the target federal funds rate would occur in 2012, 2013, 2014, and 2015 were, respectively, 3, 3, 7, and 4. In the lower panel, each shaded circle indicates the value (rounded to the nearest 1/4 percentage point) of an individual participant's judgment of the appropriate level of the target federal funds rate at the end of the specified calendar year or over the longer run.

the economy would continue to expand at a moderate pace in 2012 and 2013 before picking up in 2014 to a pace somewhat above what participants view as the longer-run rate of output growth. The central tendency of their projections for the change in real GDP in 2012 was 1.9 to 2.4 percent, lower than in April. Many participants characterized the incoming data—especially for household spending and the labor market—as having been weaker than they had anticipated in April. In addition, most noted that the worsening situation in Europe was leading to a slowdown in global economic growth and greater volatility in financial markets. Compared with their April submissions, most participants lowered their medium-run projections of economic activity somewhat. The central tendencies of participants' projections of real economic growth in 2013 and 2014 were 2.2 to 2.8 percent and 3.0 to 3.5 percent, respectively. The central tendency for the longer-run rate of increase of real GDP was 2.3 to 2.5 percent, little changed from April. Participants cited several headwinds that were likely to hold back the pace of economic expansion over the forecast period, including the difficult fiscal and financial situation in Europe, a still-depressed housing market, tight credit for some borrowers, and fiscal restraint in the United States.

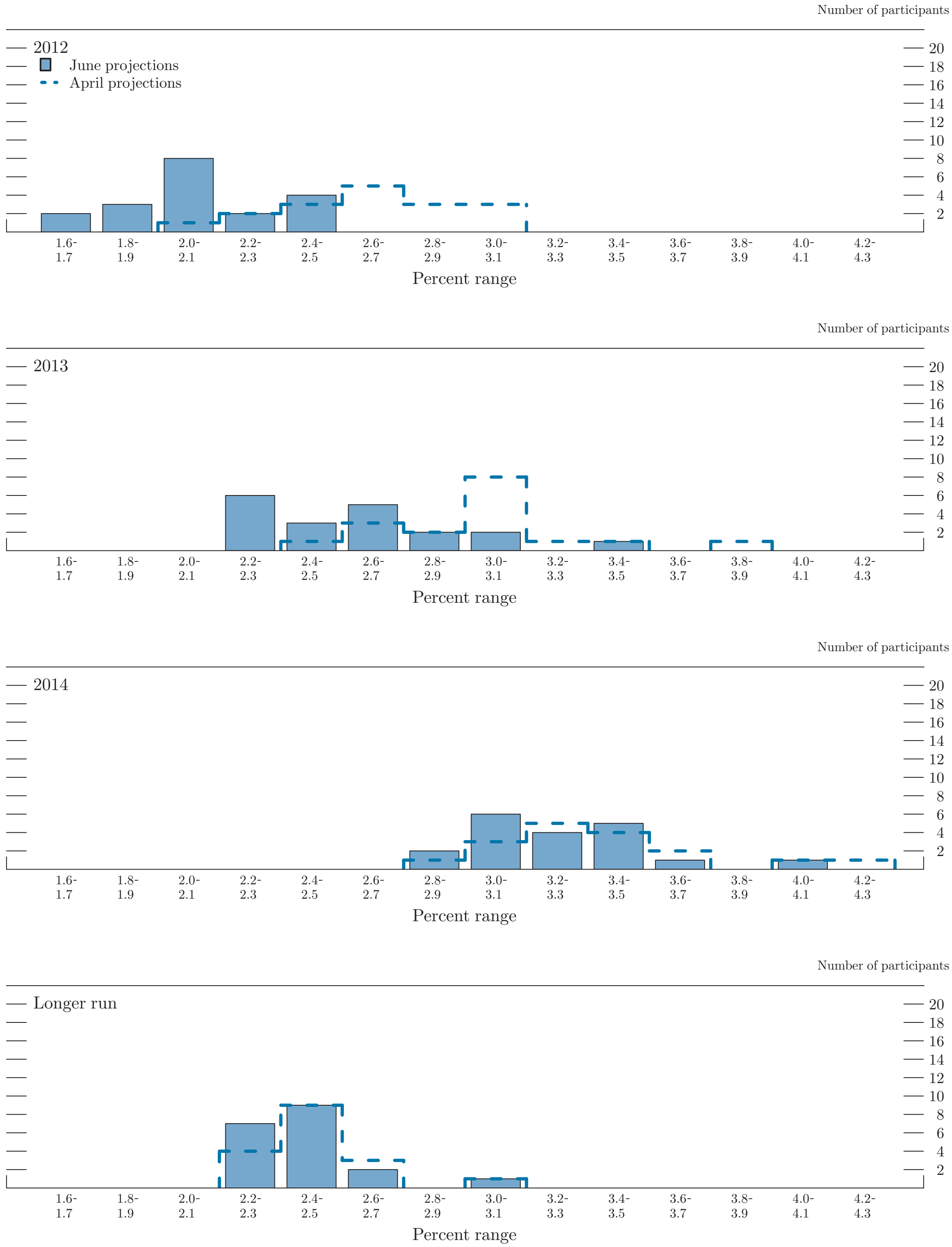
Consistent with the downward revisions to their projections for real GDP growth in 2012 and 2013, nearly all participants marked up their assessments for the rate of unemployment. Participants projected the unemployment rate at the end of 2012 to remain at or slightly below recent levels, with a central tendency of 8.0 to 8.2 percent, somewhat higher than their April submissions. Participants anticipated gradual improvement in labor market conditions by 2014, but even so, they generally thought that the unemployment rate at the end of that year would still lie well above their individual estimates of its longer-run normal level. The central tendencies of participants' forecasts for the unemployment rate were 7.5 to 8.0 percent at the end of 2013 and 7.0 to 7.7 percent at the end of 2014. The central tendency of participants' estimates of the longer-run normal rate of unemployment that would prevail under the assumption of appropriate monetary policy and in the absence of further shocks to the economy was 5.2 to 6.0 percent, unchanged from April. Most participants projected that the gap between the current unemployment rate and their estimates of its longer-run normal rate would be closed in five or six years, a couple judged that less time would be needed, and one thought more time would be necessary because of the persistent headwinds impeding the economic expansion.

Figures 3.A and 3.B provide details on the diversity of participants' views regarding the likely outcomes for real GDP growth and the unemployment rate over the next three years and over the longer run. The dispersion in these projections reflects differences in participants' assessments of many factors, including appropriate monetary policy and its effects on the economy, the underlying momentum in economic activity, the spillover effects of the fiscal and financial situation in Europe, the prospective path for U.S. fiscal policy, the extent of structural dislocations in the labor market, and the likely evolution of credit and financial market conditions. Compared with their April assessments, the range of participants' forecasts for the change in real GDP in 2012 and 2013 shifted lower, while the dispersion of individual forecasts for growth in 2014 was about unchanged. Consistent with the downward shift in the distribution of forecasts for economic growth, the distribution of projections for the unemployment rate shifted up in 2012 and 2013 and, to a lesser extent, in 2014. As in April, the dispersion of estimates for the longer-run rate of output growth was fairly narrow, generally in a range of 2.2 to 2.7 percent. In contrast, participants' views about the level to which the unemployment rate would converge in the longer run were more diverse, reflecting, among other things, different views on the outlook for labor supply and the structure of the labor market.

The Outlook for Inflation

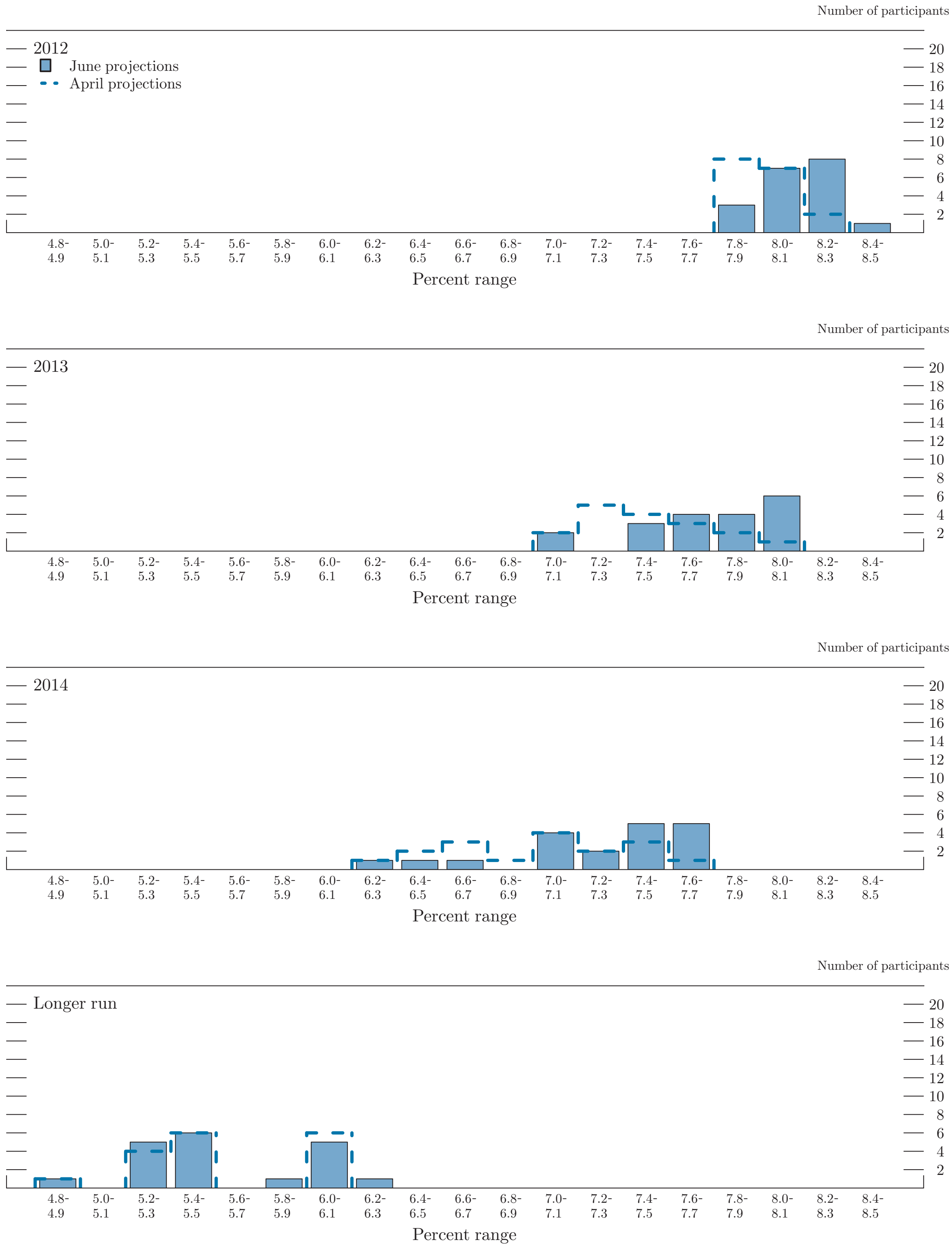
Participants' views about the medium-run outlook for inflation under the assumption of appropriate monetary policy were little changed from April. However, nearly all of them marked down their assessment of headline inflation in the near term, pointing to recent declines in the prices of crude oil and gasoline that were sharper than previously projected. Almost all participants judged that both headline and core inflation would remain subdued over the 2012−14 period, running at rates at or below the FOMC's longer-run objective of 2 percent. Some participants noted that inflation expectations had remained stable, and several pointed to resource slack and moderate increases in labor compensation as sources of restraint on prices. Specifically, the central tendency of participants' projections for inflation, as measured by the PCE price index, moved down in 2012 to 1.2 to 1.7 percent and was little changed in 2013 and 2014 at 1.5 to 2.0 percent. The central tendencies of the forecasts for core inflation

Figure 3.A. Distribution of participants' projections for the change in real GDP, 2012–14 and over the longer run



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

Figure 3.B. Distribution of participants' projections for the unemployment rate, 2012–14 and over the longer run



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

were broadly the same as those for the headline measure in 2013 and 2014.

Figures 3.C and 3.D provide information about the diversity of participants' views about the outlook for inflation. Relative to the assessments compiled in April, the projections for headline inflation shifted down in 2012, reflecting the declines in energy prices. The distributions of participants' projections for headline and core inflation in 2013 and 2014 were slightly lower than those reported in April.

Appropriate Monetary Policy

As indicated in figure 2, most participants judged that exceptionally low levels of the federal funds rate would remain appropriate at least until late 2014. In particular, seven participants thought that it would be appropriate to commence policy firming in 2014, while another six participants thought that the first increase in the target federal funds rate would not be warranted until 2015 (upper panel). Eleven participants indicated that the appropriate federal funds rate at the end of 2014 would be 75 basis points or lower (lower panel), and those who judged that policy liftoff would not occur until 2015 thought the federal funds rate would be 1½ percent or lower at the end of that year. As in April, six participants judged that economic conditions would warrant an increase in the target federal funds rate in either 2012 or 2013 in order to achieve the Committee's statutory mandate. Those participants judged that the appropriate value for the federal funds rate would range from 1½ to 3 percent at the end of 2014.

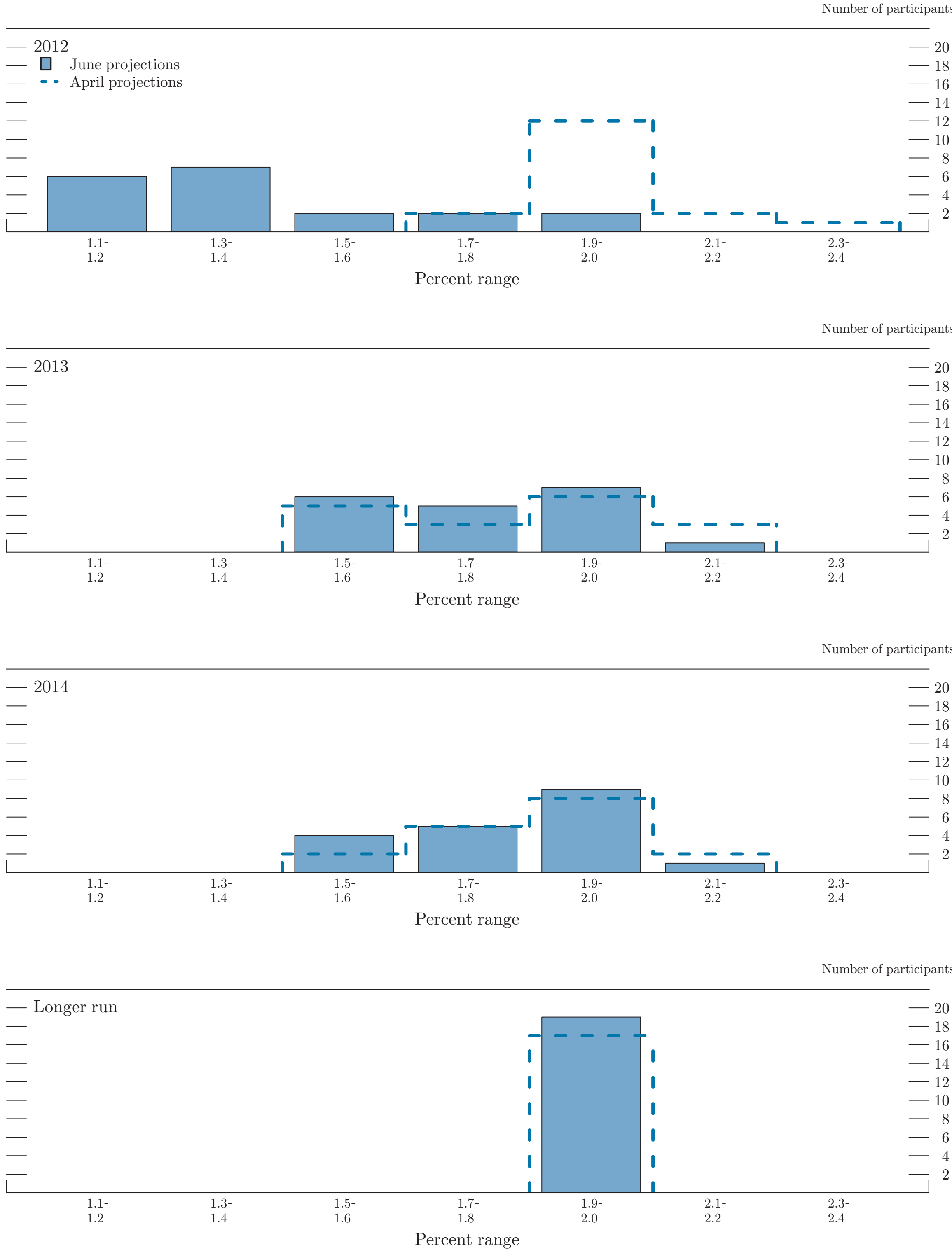
All participants reported levels for the appropriate target federal funds rate at the end of 2014 that were well below their estimates of the level expected to prevail in the longer run. Estimates of the longer-run target federal funds rate ranged from 3 to 4½ percent, reflecting the Committee's inflation objective of 2 percent and participants' judgments about the longer-run equilibrium level of the real federal funds rate.

Participants also provided qualitative information on their views regarding the appropriate path of the Federal Reserve's balance sheet. Of the 12 participants whose assessments of appropriate monetary policy included additional balance sheet policies, 11 indicated that their assumptions incorporated an extension through the end of 2012 of the MEP, and 2 participants conditioned their economic forecasts on a new program of securities purchases. Two indicated that they would consider such purchases in the event that the economy did not make satisfactory progress in improving labor market conditions or in the event of a significant deterioration in the economic outlook or a further increase in downside risks to that outlook. Almost all participants assumed that the Committee would carry out the normalization of the balance sheet according to the principles approved at the June 2011 FOMC meeting. That is, prior to the first increase in the federal funds rate, the Committee would likely cease reinvesting some or all principal payments on securities in the System Open Market Account (SOMA), and it would likely begin sales of agency securities from the SOMA sometime after the first rate increase, aiming to eliminate the SOMA's holdings of agency securities over a period of three to five years. In general, participants linked their preferred start dates for the normalization process to their views for the appropriate timing for the first increase in the target federal funds rate. One participant who thought that the liftoff of the federal funds rate should occur relatively soon indicated that the reinvestment of maturing securities should continue for a time after liftoff.

The key factors informing participants' individual assessments of the appropriate setting for monetary policy included their judgments regarding the maximum level of employment, the extent to which current conditions had deviated from mandate-consistent levels, and participants' projections of the likely time horizon necessary to return employment and inflation to such levels. Several participants noted that their assessments of appropriate monetary policy reflected the subpar pace of the economic expansion and the persistent shortfall in aggregate demand since the 2007–09 recession, and two commented that the neutral level of the federal funds rate was likely somewhat below its historical norm. One participant expressed concern that a protracted period of very accommodative monetary policy could lead to a buildup of risks in the financial system. Participants also noted that because the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time, their assessments of the appropriate future path of the federal funds rate and the balance sheet could change if economic conditions were to evolve in an unexpected manner.

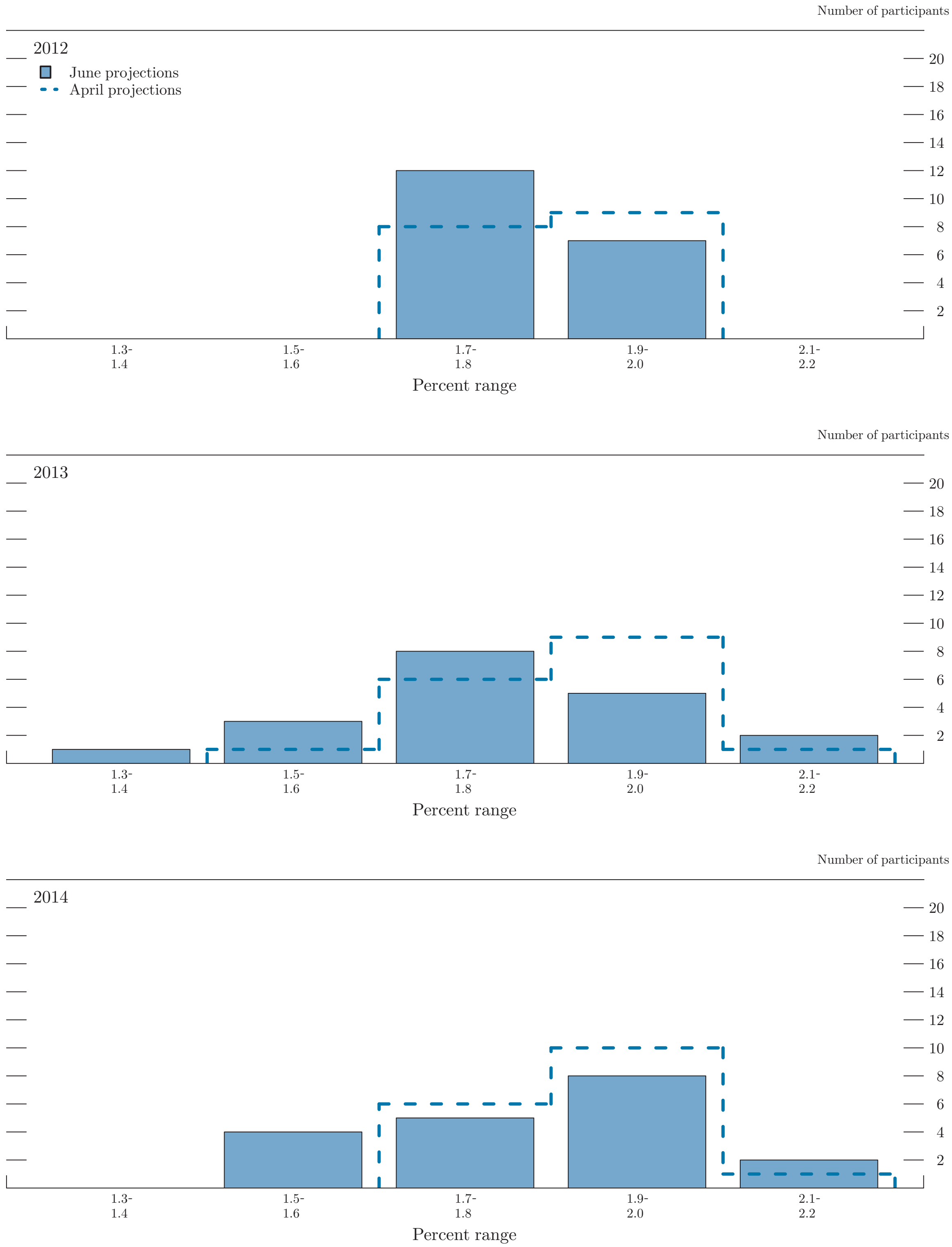
Figure 3.E details the distribution of participants' judgments regarding the appropriate level of the target federal funds rate at the end of each calendar year from 2012 to 2014 and over the longer run. Most participants judged that economic conditions would warrant maintaining the current low level of the federal funds rate through the end of 2013. Views on the appropri-

Figure 3.C. Distribution of participants' projections for PCE inflation, 2012–14 and over the longer run



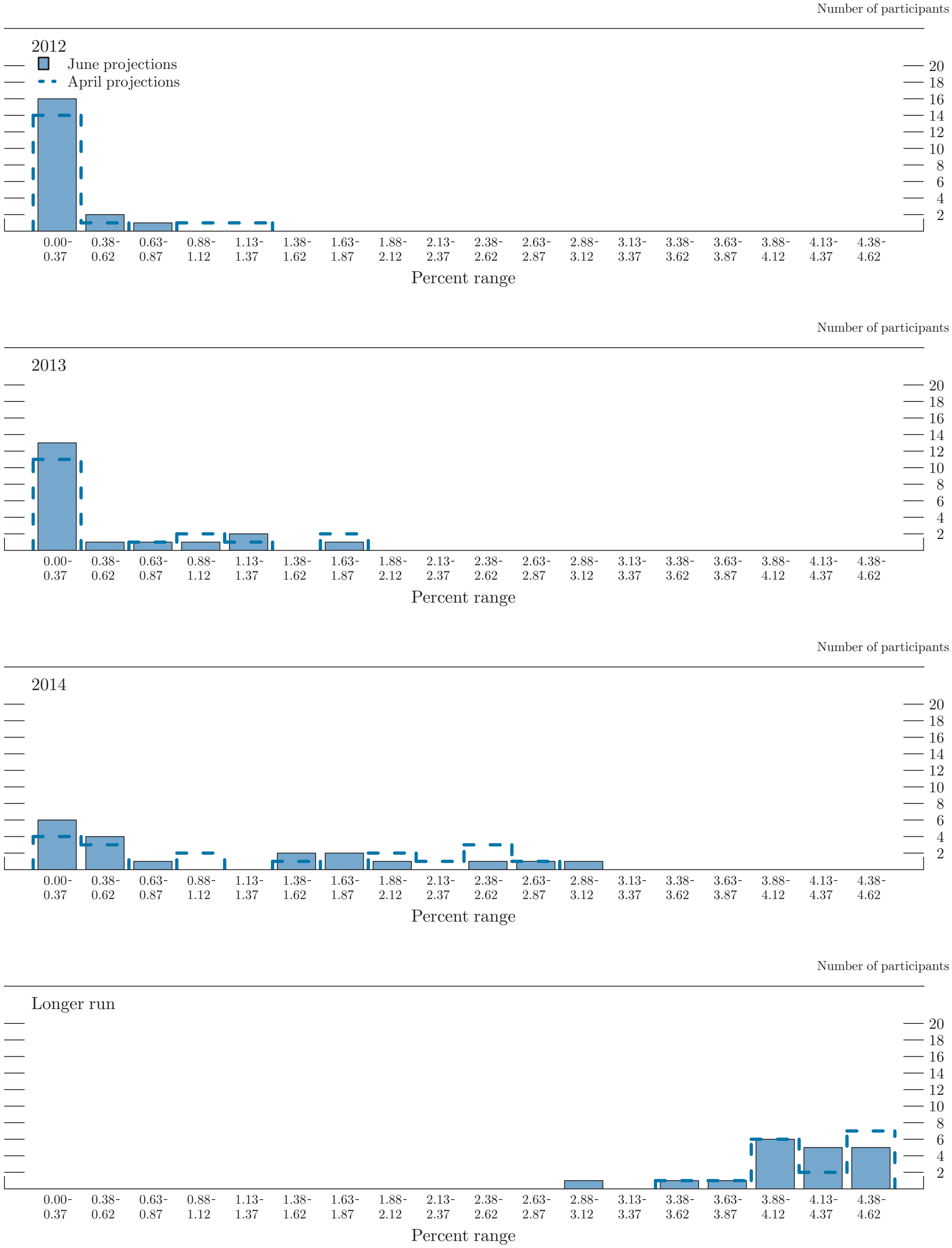
Note: Definitions of variables are in the general note to table 1.

Figure 3.D. Distribution of participants' projections for core PCE inflation, 2012–14



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

Figure 3.E. Distribution of participants' projections for the target federal funds rate, 2012–14 and over the longer run



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

ate level of the federal funds rate at the end of 2014 were more widely dispersed, with 11 participants seeing the appropriate level of the federal funds rate as ¾ percentage point or lower and 4 of them seeing the appropriate rate as 2 percent or higher. Those who judged that a longer period of very accommodative monetary policy would be appropriate generally projected that the unemployment rate would remain further above its longer-run normal level at the end of 2014. In contrast, the 6 participants who judged that policy firming should begin in 2012 or 2013 indicated that the Committee would need to act soon to keep inflation near the FOMC's longer-run objective of 2 percent and to prevent a rise in inflation expectations.

Uncertainty and Risks

Nearly all participants judged that their current level of uncertainty about GDP growth and unemployment was higher than was the norm during the previous 20 years (figure 4).[1] About half of all participants judged the level of uncertainty associated with their inflation forecasts to be higher as well, while another eight participants viewed uncertainty about inflation as broadly similar to historical norms. The main factors cited as underlying the elevated uncertainty about economic outcomes were the ongoing fiscal and financial situation in Europe, the outlook for fiscal policy in the United States, and a general slowdown in global economic growth, including the possibility of a significant slowdown in China. As in April, participants noted the difficulties associated with forecasting the path of the U.S. economic recovery following a financial crisis and recession that differed markedly from recent historical experience. Several commented that in the aftermath of the financial crisis, they were more uncertain about the level of potential output and its trend rate of growth.

A majority of participants reported that they saw the risks to their forecasts of real GDP growth as weighted toward the downside and, accordingly, the risks to their projections of the unemployment rate as tilted to the upside. The most frequently identified sources of risk were the situation in Europe, which many participants thought had the potential to slow global economic activity, particularly over the near term, and the fiscal situation in the United States.

Most participants continued to judge the risks to their projections for inflation as broadly balanced, with several highlighting the recent stability of inflation expectations. However, five participants saw the risks to inflation as tilted to the downside, a larger number than in April; a couple of them noted that slack in resource markets could turn out to be greater or could put more downward pressure on inflation than they were anticipating. Two participants saw the risks to inflation as weighted to the upside, in light of concerns about U.S. fiscal imbalances, the current highly accommodative stance of monetary policy, or the Committee's ability to effectively remove policy accommodation when it becomes appropriate to do so.

Table 2. Average historical projection error ranges
Percentage points

Variable	2012	2013	2014
Change in real GDP[1]	±1.0	±1.6	±1.7
Unemployment rate[1]	±0.4	±1.2	±1.7
Total consumer prices[2]	±0.8	±1.0	±1.1

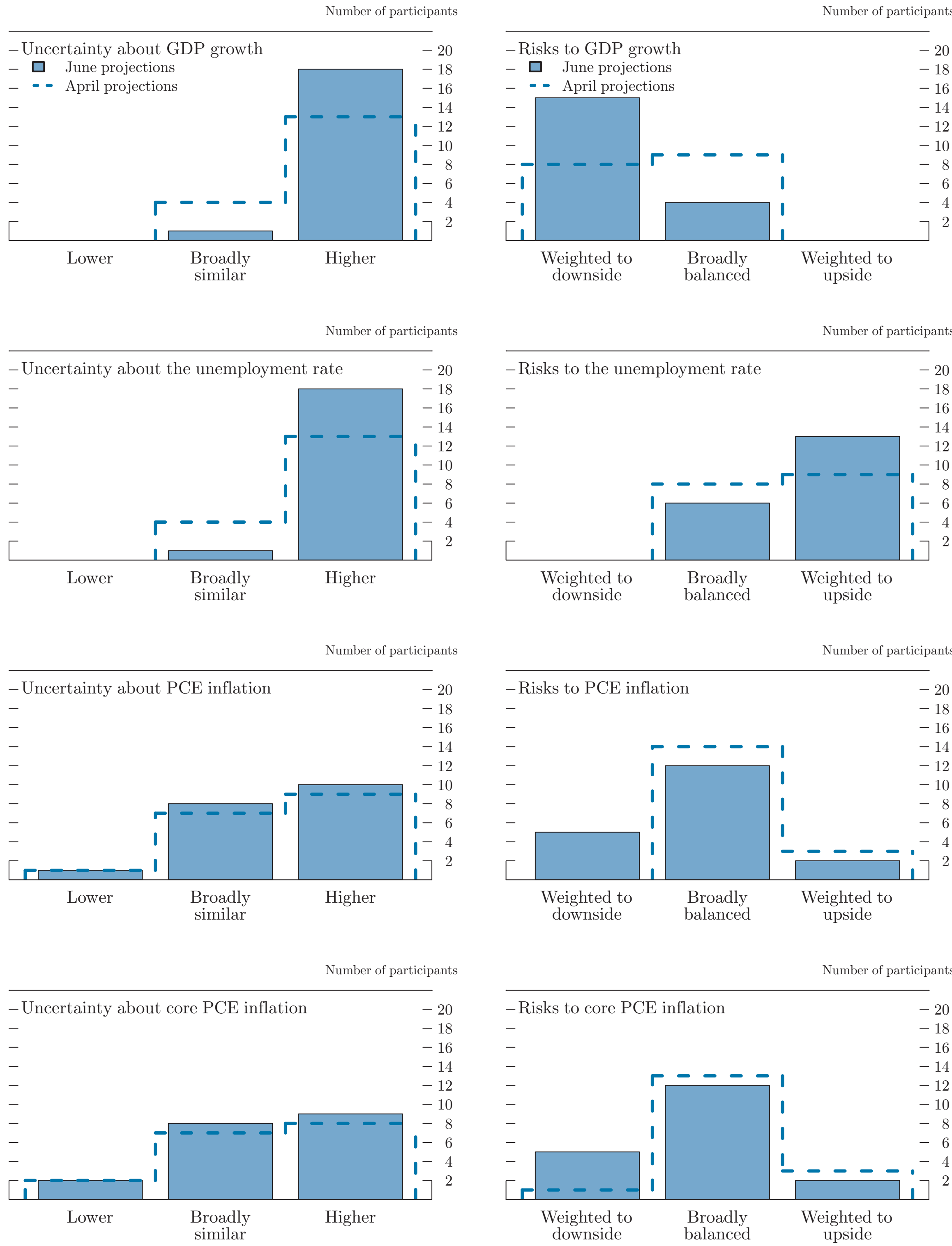
NOTE: Error ranges shown are measured as plus or minus the root mean squared error of projections for 1992 through 2011 that were released in the summer by various private and government forecasters. As described in the box "Forecast Uncertainty," under certain assumptions, there is about a 70 percent probability that actual outcomes for real GDP, unemployment, and consumer prices will be in ranges implied by the average size of projection errors made in the past. Further information is in David Reifschneider and Peter Tulip (2007), "Gauging the Uncertainty of the Economic Outlook from Historical Forecasting Errors," Finance and Economics Discussion Series 2007-60 (Washington: Board of Governors of the Federal Reserve System, November).

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

2. Measure is the overall consumer price index, the price measure that has been most widely used in government and private economic forecasts. Projection is percent change, fourth quarter of the previous year to the fourth quarter of the year indicated.

[1] Table 2 provides estimates of the forecast uncertainty for the change in real GDP, the unemployment rate, and total consumer price inflation over the period from 1992 to 2011. At the end of this summary, the box "Forecast Uncertainty" discusses the sources and interpretation of uncertainty in the economic forecasts and explains the approach used to assess the uncertainty and risks attending the participants' projections.

Figure 4. Uncertainty and risks in economic projections



Note: For definitions of uncertainty and risks in economic projections, see the box "Forecast Uncertainty." Definitions of variables are in the general note to table 1.

Forecast Uncertainty

The economic projections provided by the members of the Board of Governors and the presidents of the Federal Reserve Banks inform discussions of monetary policy among policymakers and can aid public understanding of the basis for policy actions. Considerable uncertainty attends these projections, however. The economic and statistical models and relationships used to help produce economic forecasts are necessarily imperfect descriptions of the real world, and the future path of the economy can be affected by myriad unforeseen developments and events. Thus, in setting the stance of monetary policy, participants consider not only what appears to be the most likely economic outcome as embodied in their projections, but also the range of alternative possibilities, the likelihood of their occurring, and the potential costs to the economy should they occur.

Table 2 summarizes the average historical accuracy of a range of forecasts, including those reported in past *Monetary Policy Reports* and those prepared by the Federal Reserve Board's staff in advance of meetings of the Federal Open Market Committee. The projection error ranges shown in the table illustrate the considerable uncertainty associated with economic forecasts. For example, suppose a participant projects that real gross domestic product (GDP) and total consumer prices will rise steadily at annual rates of, respectively, 3 percent and 2 percent. If the uncertainty attending those projections is similar to that experienced in the past and the risks around the projections are broadly balanced, the numbers reported in table 2 would imply a probability of about 70 percent that actual GDP would expand within a range of 2.0 to 4.0 percent in the current year, 1.4 to 4.6 percent in the second year, and 1.3 to 4.7 percent in the third year. The corresponding 70 percent confidence intervals for overall inflation would be 1.2 to 2.8 percent in the current year, 1.0 to 3.0 percent in the second year, and 0.9 to 3.1 percent in the third year.

Because current conditions may differ from those that prevailed, on average, over history, participants provide judgments as to whether the uncertainty attached to their projections of each variable is greater than, smaller than, or broadly similar to typical levels of forecast uncertainty in the past, as shown in table 2. Participants also provide judgments as to whether the risks to their projections are weighted to the upside, are weighted to the downside, or are broadly balanced. That is, participants judge whether each variable is more likely to be above or below their projections of the most likely outcome. These judgments about the uncertainty and the risks attending each participant's projections are distinct from the diversity of participants' views about the most likely outcomes. Forecast uncertainty is concerned with the risks associated with a particular projection rather than with divergences across a number of different projections.

As with real activity and inflation, the outlook for the future path of the federal funds rate is subject to considerable uncertainty. This uncertainty arises primarily because each participant's assessment of the appropriate stance of monetary policy depends importantly on the evolution of real activity and inflation over time. If economic conditions evolve in an unexpected manner, then assessments of the appropriate setting of the federal funds rate would change from that point forward.